Summary of Products

General Purpose

Metallized Polyester Film Capacitor					
Series Name	Operating Temp	Rated Voltage(V)	Rated Capacitance(μF)	Feature	Page
MPE	-40~105℃	100Vdc~1250Vdc 125Vac, 250Vac, 275Vac	0.001μF~10μF	• Epoxy resin coating • Wide capacitance range	22
BMPE	-40~105℃	100Vdc~1000Vdc	0.001μF~10μF	• Plastic case(UL94 V-0) Epoxy resin sealing • Wide capacitance range	36
BMPE (P=5&7.5)	-40~105℃	63Vdc~1000Vdc	0.001μF~1.0μF	• Plastic case(UL94 V-0) Epoxy resin sealing • Wide capacitance range	46
FMPE	-40~105℃	450Vdc, 500Vdc	0.1μF~4.7μF	• Epoxy resin coating • Safe construction.	54
BFMPE	-40~105℃	450Vdc, 500Vdc	0.1μF~4.7μF	• Plastic case(UL94 V-0) Epoxy resin sealing • Safe construction.	58
MPE-R	-40~105℃	250Vdc~630Vdc	0.01μF~10μF	• Excellent moisture resistance	62
MPE-V	-40~105℃	100Vdc~630Vdc	0.18μF~10μF	• High frequency / high current • Epoxy resin coating	70

Metallized Polypropylene Film Capacitor					
Series Name	Operating Temp	Rated Voltage(V)	Rated Capacitance(μF)	Feature	Page
MPP	-40~105℃	100Vdc~630Vdc	0.01μF~10μF	• Epoxy resin coating • Low D.F	76
BMPP	-40~105℃	100Vdc~630Vdc	0.0015μF~10μF	• Plastic case(UL94 V-0) Epoxy resin sealing • Low D.F	84
BMPP (P=7.5)	-40~105℃	100Vdc~630Vdc	0.001μF~0.018μF	• Plastic case(UL94 V-0) Epoxy resin sealing • Low D.F	92
FMPP	-40~105℃	450, 500V	0.01μF~4.7μF	• Epoxy resin coating • Safe construction. • Low D.F	98
BFMPP	-40~105℃	450, 500V	0.01μF~4.7μF	• Plastic case(UL94 V-0) Epoxy resin sealing • Safe construction. • Low D.F	102
RMPP ※Old Series Name : MPP®	-40~105℃	100Vdc~630Vdc	0.01μF~10μF	• Epoxy resin coating • ROUND TYPE • Low D.F	106
RFMPP ※Old Series Name : FMPP®	-40~105℃	450, 500V	0.01μF~4.7μF	• Epoxy resin coating • Safe construction. • ROUND TYPE • Low D.F	114
MPPS	-40~105℃	1000Vdc~2000Vdc	0.0027μF~0.68μF	• Epoxy resin coating • Low D.F	118
BMPS	-40~105℃	1000Vdc~2500Vdc	0.0027μF~0.82μF	• Plastic case(UL94 V-0) Epoxy resin sealing • Low D.F	126
MPP-R	-40~105℃	400V, 630V	0.01μF~2.4μF	• Epoxy resin coating • Low D.F • Excellent moisture resistance	136
MPP-V	-40~105℃	250V, 450V, 630V	0.047μF~10μF	• Epoxy resin coating • Low D.F • High frequency / high current	142

Summary of Products

General Purpose Resonant pulse

Film/Foil Construction					
Series Name	Operating Temp	Rated Voltage(V)	Rated Capacitance(μF)	Feature	Page
NPP	-40~105℃	100Vdc~800Vdc	0.01μF~2.4μF	• Epoxy resin coating • Low D.F • Excellent moisture resistance	148
BNPP	-40~105℃	250V, 450V, 630V	0.047μF~10μF	• Epoxy resin coating • Low D.F	156

Polypropylene Pulse / High Frequency

Film/Foil Construction					
Series Name	Operating Temp	Rated Voltage(V)	Rated Capacitance(μF)	Feature	Page
NPPS	-40~105℃	630Vdc~2000Vdc	0.00047μF~0.56μF	• Epoxy resin coating • Very Low D.F • High dv/dt	164
BNPS	-40~105℃	630Vdc~2000Vdc	0.00047μF~0.56μF	• Plastic case(UL94 V-0) Epoxy resin sealing • Very Low D.F • High dv/dt	170
MNPS	-40~105℃	630Vdc~2000Vdc	0.00047μF~0.82μF	• Epoxy resin coating • Very Low D.F • High dv/dt	176
BMNPS	-40~105℃	630Vdc~2000Vdc	0.00047μF~0.82μF	• Plastic case(UL94 V-0) Epoxy resin sealing • High dv/dt	182
Double Metallized Construction					
Series Name	Operating Temp	Rated Voltage(V)	Rated Capacitance(μF)	Feature	Page
DMPP	-40~105℃	250Vdc~3000Vdc	0.00047μF~3.3μF	• Epoxy resin coating • Very Low D.F • Very high puse strength	188
BDMPP	-40~105℃	250Vdc~3000Vdc	0.00047μF~3.3μF	• Plastic case(UL94 V-0)Epoxy resin sealing • Very Low D.F • Very high puse strength	198
BDMPP (P=7.5)	-40~105℃	250Vdc~630Vdc	0.001μF~0.01μF	• Plastic case(UL94 V-0) Epoxy resin sealing • Very Low D.F • Very high puse strength	206

EMI Capacitors

Metallized Polypropylene Film Capacitor					
Series Name	Operating Temp	Rated Voltage(V)	Rated Capacitance(μF)	Feature	Page
CMPP	-40~105℃	275Vac, 310Vac	0.0047μF~10μF	• UL,CQC,VDE,ENEC Approved(ClassX2)	210
CMPS	-40~105℃	300Vac	0.0010μF~1μF	• UL,CQC,VDE,ENEC Approved(ClassY2)	216
CMPR	-40~105℃	250Vc, 300Vac	0.0100μF~1μF	• UL,CQC,VDE,ENEC Approved(ClassX2) • RC UNIT	220

Precautions And Safety Considerations

■ SAFETY PRECAUTIONS

1. The Film Capacitors shown in this catalogue contain a film based dielectric which may be flammable under certain operating conditions. When in use, they can either emit smoke and/or ignite should the product be defective. It is recommeded covering the surrounding resin with flame-resistant materials or case as needed particularly when used long-term.

2. Prior to use, please make sure that failure of the film capacitors does not have any negative effects on other surrounding electronic circuit components and devices that would possibly cause damage.
   Proper safety measures should be taken using fail-safe protective circuit designs to help prevent other devices of becoming unsafe.
   Example: a.State in which basic performance of automobiles(run, turn and stop)
   b.False operations
   c.Smoke emission/ignitions(Example : A large current flowed to the speaker because of the short circuit of the capacitor for the coupling of car audio, and it was smoking from the speaker)

■ We request the user to observe the following:

1. Information of this catalogue is subject to change without notice. Prior of use, the latest written agreement on delivery specifications ought to be prepared beforehand. Please make sure that the product you purchased is used in compliance with the descriptions in the aforementioned specifications.
   The precautions in using film capacitors follow the JEITA RCR-1001A "Safety Application Guide on components for use in electronic and electrical equipments" and JEITA RCR-2350C "Safety Application Guide for fixed plastic film capacitors for use in electornic equipment". Please refer to the above guidelines for details. Additional technical specifications are available upon request.

2. The Film Capacitors listed in this catalogue are designed and manufactured specifically for general electronic devices, including audio-video equipment, home appliance, office equipment and data communication equipment etc.. Accordingly, it is strongly recommended that the user contact us in advance if the parts are to be used for the following devices(items 1~12), which require having
   advanced security measures:
   (1) Transport Equipment(motor vehicles, airplanes, trains, ships, traffic signal controllers)
   (2) Medical Equipment(life-support equipment, pacemakers for the heart, dialysis controllers)
   (3) Aircraft Epuipment, Aerospace Equipment(airplanes, artifical satellites, rockets, etc.)
   (4) Submarine Equipment(submarine repeating equipment, etc.)
   (5) Generatrion Control Equipment(equipment for atomic/hydraulic/heat power plants)
   (6) Information Processing Equipment(large scale computer system)
   (7) Electric Heating Appliance, Burning Apparatus
   (8) Rotary Motion Equipment
   (9) Security Systems
   (10) Robots
   (11) Lighting Equipment
   (12) And any similar types of equipment
   It is strongly recommended that further investigation or analysis is performed to verify the compatibility of the film capacitors when used in conjunction with any life-supporting equipment like electronic aviation controllers, automotive driving controllers and engine controllers(i.e:fuel injection, ignition, etc.).

3. This catalogue indicates the quality and performance of film capacitors as discrete components. Prior of using the film capacitors, the user should evaluate and verify its quality and performance after it has been assembled on the product. Further care should be taken when parts are subjected under voltages, currents and/or temperatuers that go beyond the specified ratings. These conditions should not be applied to the film capacitors even if defects such as short or open of other parts are found in the circuit.

4. When exporting product the user is required to comply with export-related regulations, including Foreign Exchange and Foreign Trade laws.

■ Other Notices

1. Our film capacitors comply with the RoHS Directive.

2. Any ozone-depleting substances(ODS), the use of which is restricted in the Montreal Protocol are not used in our manufacturing process.

3. Technical information shown in this catalogue, which is intended for describing the typical operation, application circuits, and so forth of our products, means neither to warrant our company's and third parties' intellectual property rights and other rights nor to grant a license on the occasion of the use of the products listed in this catalogue.

4. Product characteristics indicated in this catalogue, which are shown as representative values, does not warrant the performance of our products.

Technical Terms Explanation

1. Rated Capacitance(CR)

Capacitance referred to 1kHz, 20 1℃, 65 2% of relative humidity and 96 10kPa.
In case of doubt please refer to IEC 60068-1, sub-clause 5.2.

2. Capacitance Tolerance

Admitted capacitance deviation from the rated capacitance.

3. Rated Temperature(TR)

The maximum ambient temperature surrounding the capacitor or hottest contact point(e.g. tracks), Whichever is higher, at which the rated voltage Vdc or Vac at 50 Hz may be continuously applied.

4. Rated Voltage(VR)

The maximum direct voltage or the maximum r.m.s. alternating voltage(50 Hz) or the peak value of a pulse voltage which may be continuously applied to a capacitor at any temperature between the lower category temperature and the rated temperature.

5. Category Voltage(Vc)

The maximum direct voltage or the maximum r.m.s. alternating voltage or the peak value of a pulse voltage which may be continuously applied to a capacitor at its upper category temperature.

6. Temperature Derated Voltage

The maximum voltage that may be continuously applied to a capacitor for any temperature between the rated temperature and the upper category temperature.

7. Climatic Category

The climatic category which the capacitor belongs to is expressed in numbers(Standard IEC 60068-1: Ex: 40/105/56)
40 : the lower category temperature : -40℃;
105 : the upper category temperature : +105℃;
56 : the number of days relevant to the damp heat test : 56 days;

8. Operating Temperature Range

The operating temperature of the capacitor is defined as the ambient temperature
+ Self temperature raise + temperature raise due to thermal radiation form other sources

9. Temperature Coefficient of Capacitance(αi)

The change rate of capacitance with temperature measured over a specified range of Temperature. It is normally expressed in parts per million per Celsius degree(10-6/℃) and referred to 20℃.

$$\alpha_i = \frac{C_i - C_0}{C_0(T_i - T_0)}$$

C_i = Capacitance at temperature Ti
C_0 = Capacitance at temperature 20±2℃

For more details please refer to EN 130000.

10. Dissipation factor(tanδ)

The capacitance factor is the ratio between the resistive and the reactive part of the impedance of the capacitor submitted to a sinusoidal voltage of specified frequency.

11. Insulation resistance(I.R.) / time constant

The insulation resistance is the ratio between an applied DC voltage and the resulting leakage current after a minute of charge. It is expressed in M .
The time constant is expressed in seconds with the following formula: t[s] = I.R.[MΩ] × C_R[μF]
It states the time necessary to reduce the voltage to the terminals of the capacitor at 37% of a fully charged capacitor value.

12. Resonance frequency

The resonance frequency of a capacitor is reached when:

$\omega L = 1/\omega C$

$\omega = 2\pi f$(f=frequency)

L = inductance caused by the winding and the length of the leads

C = the capacitance at f

13. Pulse rise time(dv/dt)

the pulse rise time defines the capability of a capacitor to withstand high current peaks due to fast voltage changes.

The peak current is defined by the following formula:

I_P(peak current) = C_R dv/dt

Where: I_P in A ; C_R in μF ; dv/dt in V/μs

Capacitor loaded with pulses with high dv/dt will be exposed to high current pulses.

In order not to overload the internal connections the current must be limited.

The current limits for a specific type are dependent upon:

· Amplitude and form of the pulse;

· Rated Voltage of the capacitor;

· Capacitance;

· Geometrical configuration of the winding;

I_P(peak current) =$(R \times C_R) \times$ dv/dt

U_R = Rated voltage

R = Discharge resistor

C = Rated capacitance

14. Energy of the wave-form(K0)

K_0 is the content of energy of the wave-form applied to the capacitor and it is defined by the following formula:

$K_0 = 2 \int_0^{\tau} (dv/dt)^2 dt$ where : τ(pulse width) in μs K_0 in V^2/μs

The maximum values of dv/dt and K_0 mentioned in this catalogue must not be exceeded in order to prevent a dangerous overheating of the capacitor.

Film Capacitors Standards

NO.	Standards
IEC 60384-1	Generic specification
IEC 60384-2	Sectional Specification: Fixed metallized polyester film DC capacitor
IEC 60384-2-1	Blank detail specification: Fixed metallized polyester film DC capacitor Detail specification for MPE/BMPE/FMPE/BMPE/MPE(AF)
IEC 60384-13	Sectional Specification: Fixed polypropylene film metal foil DC capacitor
IEC 60384-13-1	Blank detail specification: Fixed polypropylene film metal foil DC capacitor Detail specification for NPP/BNPP
IEC 60384-14	Sectional Specification: Fixed capacitor for electromagnetic Interference suppression and connection to the supply mains
IEC 60384-14-1	Blank detail specification: Fixed capacitor for electromagnetic Interference suppression and connection to the supply mains Detail specification for CMPP/CMPS/CMPR
IEC 60384-16	Sectional Specification: Fixed metallized polypropylene film DC capacitor
IEC 60384-16-1	Blank detail specification: Fixed metallized polypropylene film DC capacitor Detail specification for MPP/BMPP/FMPP/BFMPP/ MPP(R)/FMPP(R)/MPP(AF)/MPP(AT)/MPPS/BMPS
IEC 60384-17	Sectional Specification: Fixed metallized polypropylene film AC and pulse capacitor.
IEC 60384-17-1	Blank detail specification: Fixed metallized polypropylene film AC and pulse capacitor. Detail specification for NPPS/BNPS/MNPS/BMNPS/ DMPP/BDMP/SNPS/SMPS/SDPS

Application Notes

1. Operating Voltage

1.1. Rated voltage(VR)

Rated voltage is the max voltage that may be continuously applied at the rated temperature.
Values higher than the rated voltage may cause a perforation in the capacitor dielectric or a short circuit.
Metallized capacitors have self-healing properties and the application of voltages higher than rated voltage will not cause an immediate short circuit. Instead, what may occur, is a progressive drop in the insulation resistance with a possible risk of smoke or fire, depending upon the type of electric circuit in which the capacitor is working.
The rated voltage of the capacitor is usually DC If a capacitor marked DC is used as an AC capacitor, the maximum working voltage is limited by the heat produced or by micro discharges that could take place inside the capacitor. Do not use AC voltages higher than those specified in the catalogue for each series.

Note:

a) The AC voltages described in the catalogue refer to a sinusoidal wave-form. In case of other types of waveforms or for working conditions different from those described in the catalogue, please contact our Technical Service before using the capacitors.
b) If the capacitor is subject to voltages higher than the rated voltage, caused, for example, by the bad functioning of other equipment, it might be necessary to use a protection device.
c) The Rated Voltage(Vac) can be applied during the whole life of the capacitor in case you are using a suppressor series or those quoting "AC APPLICATIONS", In any other case, the Vac can be applied for a max. operating time of 1000 hours.

1.2. Voltage derating for high operating temperature

In case of a plastic film capacitor, the operating temperature(the temperature measured on the hottest point of the capacitor) depends upon the type of dielectric used, the ambient temperature in which the capacitor is placed, the type of voltage applied(AC or DC) and in case of pulse applications, upon the value of current and frequency applied.
The rated voltage(VR) is the maximum voltage that can be applied at a temperature the rated temperature.
For temperatures higher than the rated temperature it is necessary to apply a voltage derating to prevent any damages to the dielectric of the capacitor.
This derating depends, in general, upon the type of dielectrics used(polyester, polypropylene).
The catalogue quotes the limits for each series.

2. Permissible current

The main effect produced by the current flowing through the capacitor is overheating.
If the heating is excessive, the capacitor might deteriorate, which could cause a short or open circuit of the capacitor or a fire.
The heating of the capacitor can be caused by two different types of currents :

2.1. Effective current(r.m.s. current) given by a periodic wave-form,

causing the entire body of the capacitor to heat up.

2.2. Peak of current caused by a pulse wave-form.

· When a medium-high current pulse flows through the capacitor for a very short time(μs/ns), a localized heating of the ends of the capacitor might take place due to the resistance of the contacts between the leads and end spray and between the end spray and the electrodes of the capacitor.
These conditions usually take place mainly in the following type of circuits: switching, snubber, fly-back and S-correction.
· The parameters that define this type of phenomenon are dv/dt (pulse rise time) and Ko.
The pulse rise time defines the capability of a capacitor to withstand high current peaks due to fast voltage changes. The peak current is defined by the following formula:
I_P(peak current) = C x dv/dt
where: I_P in A ;C in μF ; dv/dt in V/μs
K_0 is the content of energy of the wave-form applied to the capacitor and it is defined by the following formula:
$K_0 = 2 \int_0^{\tau} (dv/dt)^2 \, dt$ where : τ(pulse width) in μs, K_0 in $V^2/\mu s$
The maximum values of dv/dt and K_0 mentioned in this catalogue must not be exceeded in order to prevent a dangerous overheating of the capacitor.
If more than 10,000 pulses are applied, please kindly contact our Technical Service, unless you are using series NPP/BNPP/NPPS/BNPS/MPPS/BMPS/MNPS/BMNPS/DMPP/BDMP.

Warning:

If the capacitor is subjected to r.m.s. and pulse currents higher than those admitted, caused for example by a bad functioning of any other equipment, we suggest the use of a protection device.

3. Operating temperature

3.1. ΔT(over temperature of a capacitor).

As described in the previous paragraphs, when a capacitor is used in AC applications the current that flows through the capacitor makes it heat up. If the capacitor heats up too much it might deteriorate causing a short circuit or fire. It is essential that the limits described in the catalogue are not exceeded and that a temperature check on the capacitor is made whenever it is under heavy load.

3.2. How to calculate the max. ΔT of the capacitor.

To calculate the max. T of the capacitor use the following formula:

$$\Delta T_{max} = \frac{\Delta T_m}{tg\delta_m} \times tg\delta_{max}$$

where:

Tmax = capacitor overtemperature calculated using the max tg Ä value at the working frequency.
Tm = T1(Capacitor's own over temperature)- T2(Ambient temperature);
tg m = dissipation factor of the tested capacitor measured at the working frequency and at the temperature reached by the capacitor under test.
tg max = max. dissipation factor at the working frequency of the capacitor under test (if this value is not available at catalogue, please contact us).

Warning:

When a capacitor is used above its max. operating temperature, the dissipation factor(tg) increases and consequently the heat generated by the capacitor itself. Temperatures exceeding the maximum admitted value might cause a damage of the dielectric, a short circuit or an increase in the risk of fire or smoke. The same effects might be caused by other components or parts of the circuit that produce heat and cause localized heating of the capacitor beyond its performance limits.
In this case we suggest to check the temperature of the hottest point of the capacitor subject to the heat produced by the other components.

4. Surface overtemperature(ΔT)

4.1. When a capacitor is used in AC or pulse applications at high frequency, the current that flows through the capacitor makes it heat up. If the capacitor heats up too much it might deteriorate causing a short circuit of fire. It is essential that the limits described in the catalogue are not exceeded and that a temperature check on the capacitor is made whenever it is under load.

4.2. The method to determine the surface over temperature of the capacitor is showed in fig.1.
The capacitor being tested must be supplied by the working AC or pulse voltage and frequency.

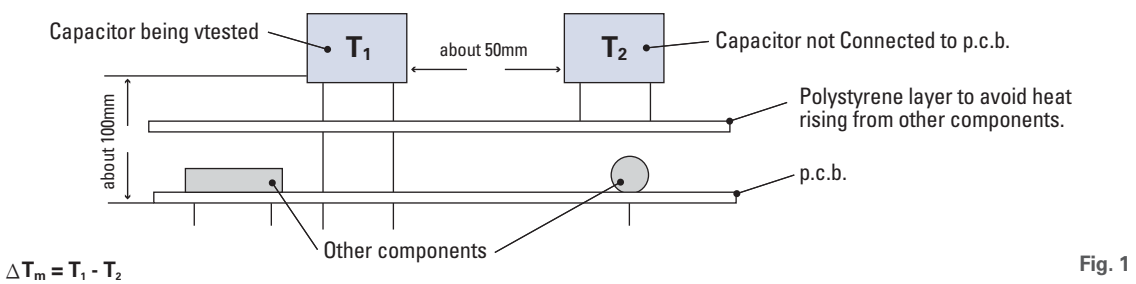


Fig. 1

5. Ionization

Ionization may lead to a destructive process of the capacitor.

This phenomenon is due to the air that is inside the capacitor and precisely:

· the air contained inside the dielectric
· the air present in between the different layers of film that form the capacitor
· the air present near the ends of the capacitor

When the intensity of the electric field that is formed in a capacitor exceeds the dielectric rigidity of the air, some micro discharge might take place that could damage the dielectric of the capacitor and/or the metallization itself.
This phenomenon causes a drop in the capacitance and in the case of persistent ionization will may give rise to a short circuit or fire.
The voltage at which the ionization phenomenon is started is called corona inception voltage.

The size of the phenomenon depends upon certain factors such as:

· the amount of air contained in the capacitor
· the type of dielectric used
· impregnating elements(if used)

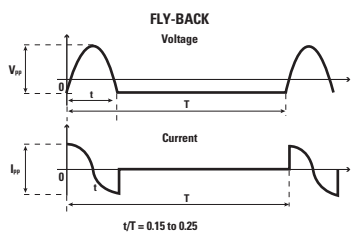
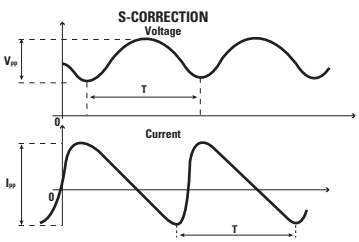
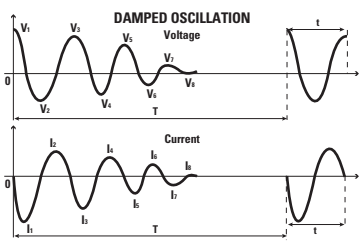
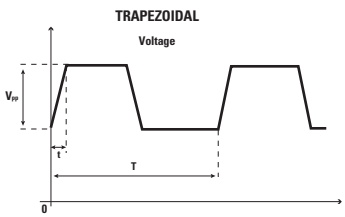
· the type of electrode(metallized film, film-foil)
· the type of construction(radial, axial)
· the construction parameters(i.e. element flattening)
· the temperature, voltage, working frequency

For a proper use of the capacitor, always make sure that the following condition is satisfied:

$$V_{pp} \text{ (peak to peak voltage)} \leq 2 \times \sqrt{2} \times V_R \text{ (a.c.)}$$

6. Calculation of r.m.s. in various waveforms

In each wave-form, calculate the r.m.s. value in the following formula.

WAVE-FORM	ELECTRICAL PARAMETERS	WAVE-FORM	ELECTRICAL PARAMETERS
	$V_{rmsc} = \frac{V_{pp}}{1.04}\sqrt{\frac{t}{2T}}$ $I_{rmsc} = \frac{I_{pp}/2}{1.04}\sqrt{\frac{t}{2T}}$ $f = \frac{1}{2t}$ $tg\delta_{max}$ at $f = \frac{1}{2t}$		$V_{rmsc} = \frac{V_{pp}}{2\sqrt{2}}$ $V_{rmsc} = \frac{I_{pp}}{2\sqrt{2}}$ $f = \frac{1}{T}$ $tg\delta_{max}$ at $f = \frac{1}{T}$
	$V_{rmsc} = \sqrt{\sum_{i-1}^{8} \frac{V_i^2}{2} \frac{t}{2T}}$ $I_{rmsc} = \sqrt{\sum_{i-1}^{8} \frac{I_i^2}{2} \frac{t}{2T}}$ $f = \frac{1}{t}$ $tg\delta_{max}$ at $f = \frac{1}{t}$		$V_{rmsc} = V_{pp}\sqrt{\frac{3T-4t}{12T}}$ $f = \frac{1}{T}$ $tg\delta_{max}$ at $f = \frac{1}{4t}$

7. Capacitor for electromagnetic interference suppression of AC power supply

7.1.When using a capacitor across-the-line as means for prevention of noise, not only the supply voltage is always applied, but also abnormal surge such as lighting is applied.

which may lead to smoking or firing. Therefore, the across-the-line capacitor is strictly regulated in safety standard in each country. Please use those approved products, which conform to corresponding safety standards of different countries.
The DC capacitor will not be used in across-the-line circuit.

7.2. It is suitable for being used in situation where failure of the capacitor could not lead to danger of electric shock, classified as Class X and Class Y;

8. Flame retardation

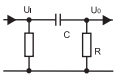
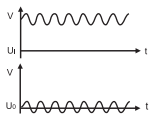
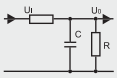
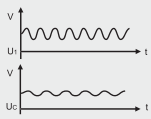
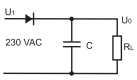
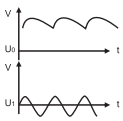
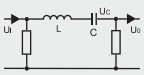
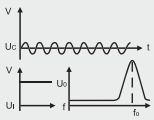
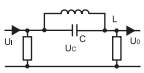
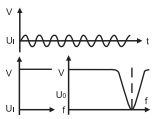
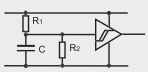
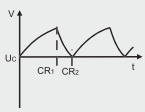
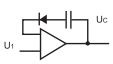
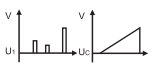
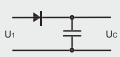
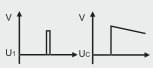
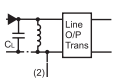
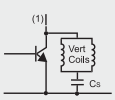
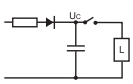
Although flame retardation epoxy resin or plastic case is used in the coating or encapsulating of plastic film capacitor, continuos outer high temperature or firing will break the coating layer or plastic case of the capacitor, and may lead to melting and firing of the capacitor element.

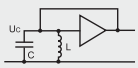
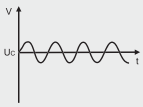
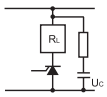
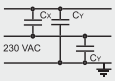
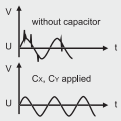
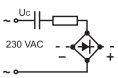
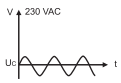
Category of flammability	Severities Flame exposure time, in seconds, for capacitor volume ranges				Maximum burning times
	Volume ≤ 250 mm^3	250 mm^3 < Volume ≤ 500 mm^3	500 mm^3 < Volume ≤ 1,750 mm^3	Volume > 1,750 mm^3	
A	15	30	60	120	3
B	10	20	30	60	10
C	5	10	20	30	30

9. RoHS Compliance

Sungho electronics products in the catalogue are RoHS compliant.

Application Notes

Application Function	Circuit Application	Waveform	Requirements
Blocking.Coupling High-Pass Filter - prevention DC voltage - transferring AC voltage			High insulation resistance Low self-inductance (to observe Voltage rating)
Bypass/Decoupling - LowPass Filter - suppressing transmission of high frequencies(AC voltages)			High insulation resistance Low self-inductance
Smoothing - smoothing of pulsating DC-voltages from AC_rectifier			Comparably high capacitance Low dissipation factor (to observe frequency)
Band-Pass Filter - pass frequencies within a certain range - attenuate frequencies outside that range			Low dissipation factor Stable capacitance
Band-Stop Filter - attenuate frequencies within a specific range - pass frequencies outside that range			Low dissipation factor Stable capacitance
Timing - when capacitor is charge voltage is increasing over time - after passing certain value a new state change occurs			High insulation resistance Stable capacitance
Sample & Hold Analog-Digital Converter: - capacitor is used to store analogue voltage value - electronic switch is used to connect/ disconnect capacitor from analogue input(sampling rate)			Low dielectric absorption High insulation resistance
Peak Voltage Detectors - diode conducts positive "half cycles" to charge capacitor to peak voltage - DC "peak" stored in the capacitor, the diode is blocking current flow - capacitor retains the peak value even if the waveform drops to zero			Low dielectric absorption High insulation resistance
Fly-Back - current flows from deflection coil to fly-back capacitor - electron beam is rapidly shifted from right to left side of screen			Low dissipation factor High pulse rise time High dielectric strenth
S-Correction(Smoothing) - current flows from CL through trafo deflection coils to CS - CS is smoothing pulsating DC- voltages			Low dissipation factor Good pulse rise time
Energy Storage - capacitor is charged to a high voltage, stores the energy and then releases it in short time			High pulse rise time High(surge) current carrying capacity High insulation resistance

Application Function	Circuit Application	Waveform	Requirements
Osscillating circuit Resonant system(LC): - AC voltage oscillates at resonant frequency			Low dissipation factor Stable capacitance
Snubbing - capacitor attenuates over-voltage peaks by high current swithing			Low dissipation factor High pulse rise time
EMI suppression - capacitor suppress high-frequency disturbances of electrical equipment on the mains - class X capacitors are connected between phase and neutral or phase and phase conductors - class Y capacitors are connected between phase conductors and earthed casing and thus by-pass operating insulation			Paricular high reliability against active and passive flammability
Voltage Dropper - capacitor voltage divider			High capacitance stability Flame retardant

Part number system

BMPP	250V	106	K	27.5	C	7.5	XXXXX
Part-1	Part-2	Part-3	Part-4	Part-5	Part-6	Part-7	Part-8

Part-1 Type Name 3~7 digits

MPE	BMPE	FMPE	BFMPE		
MPP	BMPP	FMPP	BFMPP	RMPP	RFMPP
NPP	BNPP				
NPPS	BNPS	MNPS	BMNPS		
MPPS	BMPS				
DMPP	BDMP				
CMPP	CMPS	CMPR			

Part-2 Rated Voltage 3~7 digits

DC	63V~3000V
AC	AC63V~AC1000V

Part-3 Rated capacitance value 3 digits

101=10*101=100pF=0.0001μF
102=10*102=1000pF=0.001μF
103=10*103=10000pF=0.01μF
104=10*104=100000pF=0.1μF
105=10*105=1000000pF=1.0μF
106=10*106=10000000pF=10μF
107=10*107=100000000pF=100μF
108=10*108=1000000000pF=1000μF

Part-4 Capacitance tolerance 1 digit

G = ±2%
J = ±5%
M = ±20%
H = ±3%
K = ±10%

Part-5 Lead spacing(in mm) 2~4 digits

P/N	Description
7.5	7.5(±0.5)mm
10	10(±0.5)mm
15	15(±0.5)mm
17.5	17.5(±0.5)mm
20	20(±0.5)mm
22.5	22.5(±0.5)mm
27.5	27.5(±0.5)mm
32.5	32.5(±0.5)mm
37.5	37.5(±0.5)mm
42.5	42.5(±0.5)mm
52.5	52.5(±0.5)mm

Part-6 Lead-wire Type 1 digits

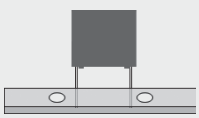
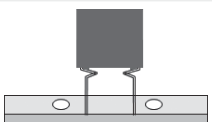
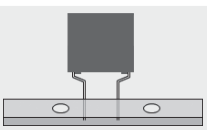
refer to Lead-Wire Type

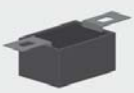
Part-7 Size No. 1 digits

1	Min-Type
2	
3	
4	
5	Standard-Type
6	Large-Type
7	
8	
9	

Pack And Lead-Wire Type

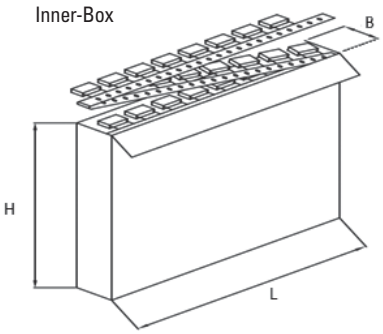
Lead-wire Type

CODE	STYLE	DRAWING
B	Bending Forming	
C	Straight Cutting	
D	D-Type Forming	
L	B-Type long Forming	
M	C-Type long Forming	
S	Straight	
X	B-Type Forming	
Y	C-Type Forming	
Z	Z-Type Forming	
T	A-Type Tapping	
U	B-Type Tapping	
V	C-Type Tapping	

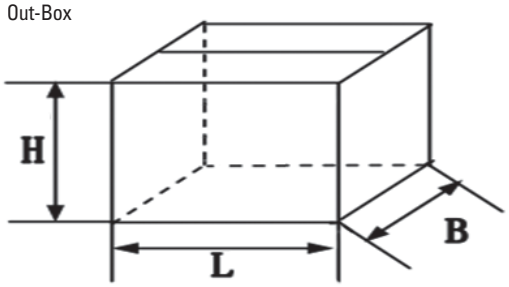
CODE	STYLE	DRAWING
Q	Four-Pin	
A	A-Type Lug	
E	E-Type Lug	
G	G-Type Lug	
H	H-Type Lug	
J	J-Type Lug	
K	K-Type Lug	
R	R-Type Lug	
P	P-Type Lug	
F	Flexible Lead	
W	W-Type Lug	
O	O-Type Lug	

Packing Sepcifications for Taped-Ammo Package

Inner-Box



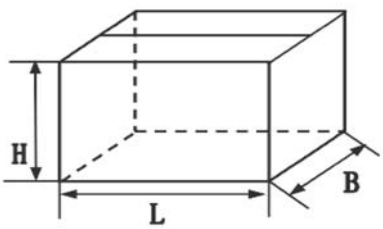
Out-Box



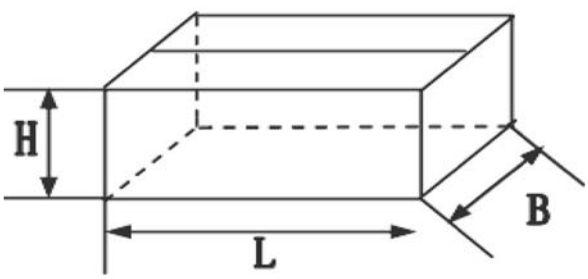
Items	SIZE L(mm) x H(mm) x B(mm)
Inner-Box	310 x 330 x 60
Out-Box	360 x 325 x 330 650 x 325 x 345

Packaging Specifications for Bulk Package

Inner-Box



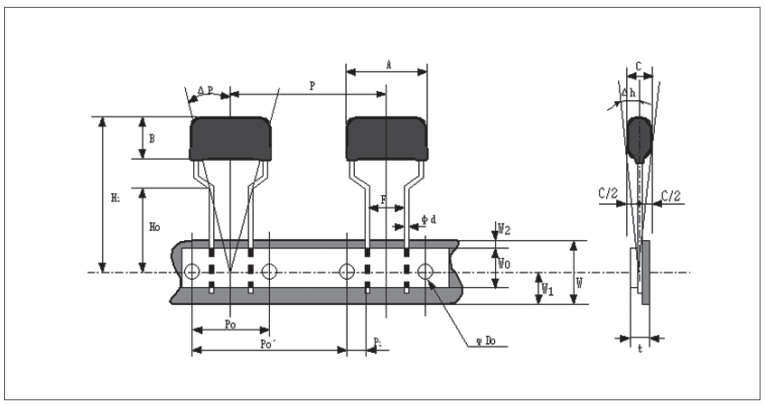
Out-Box



Items	SIZE L(mm) x H(mm) x B(mm)
Inner-Box	350 x 200 x 275
Out-Box	580 x 220 x 370

Taping Specification

DIMENSION



SYMBOL	SIZE	REMARKS
P	30.0 ± 1.0	
P_O	15.0 ± 0.2	
P_O'	30.0 ± 0.2	
P_1	3.75 ± 0.5	
F	7.5 ± 0.3	
Δh	0 ± 1.0	
δ	C/2 ± 0.25	
W	18.0 ± 0.5	
W_O	12.5 min	
W_1	9.0 ± 0.5	
W_2	0 ~ 3.0	
H_O	16.0 ± 0.5	
H_1	46 max	
ΔP	0 ± 1.0	
$ΦD_O$	4.0Φ ± 0.2	
t	0.5 ± 0.2	
Φd	Normal(0.6 ~ 0.8Φ)	
A	(W) max	DIMENSION
B	(H) max	DIMENSION
C	(T) max	DIMENSION

Soldering Process

Internal temperature of the capacitor must be kept as follows :

Polyester : preheating: Tmax. T 125 C
soldering: Tmax. T 135 C
Polypropylene : preheating: Tmax. T 100 C
soldering: Tmax. T 110 C

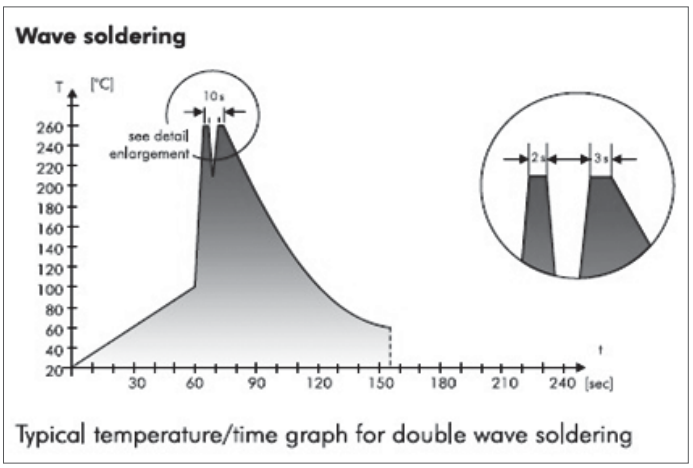
Single wave soldering

Soldering bath temperature: T P 260 C
Dwell time: t P 5 sec

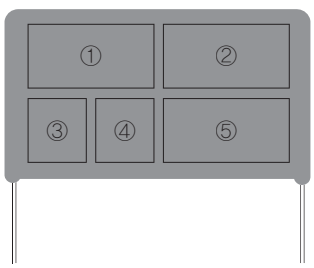
Double wave soldering

Soldering bath temperature: T P 260 C
Dwell time: St P 5 sec

Due to different soldering processes and heat requirements the graphs are to be regarded as a recommendation only.



Marking



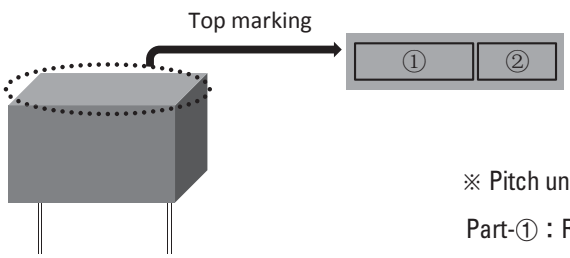
Part-① : Rated Capacitance Value and Capacitance Tolerance

Part-② : Rated Voltage

Part-③ : Trade Mark : S → Sung Ho

Part-④ : Date Code : D16 → 16th week 2013year

Part-⑤ : Series Name



※ Pitch under 7.5mm, Boxed type : Top marking only.

Part-① : Rated Capacitance Value and Capacitance Tolerance

Part-② : Rated Voltage

Schematic of Capacitors

General Puspose

Metallized Polyester Flim

Safe Construction
FMPE
Volt : 450V, 500Vdc
Temp : '-40~105℃
Cap. : '0.1μF~4.7μF

BOX TYPE →

Safe Construction
BFMPE
Volt : 450V, 500Vdc
Temp : '-40~105℃
Cap. : '0.1μF~4.7μF

Miniaturized ↑

Standard
MPE
Volt : 100~1,250Vdc
125~275Vac
Temp : '-40~105℃
Cap. : '0.001μF~10.0μF

BOX TYPE →

Standard
BMPE
Volt : 100~1,000Vdc
Temp : '-40~105℃
Cap. : '0.001μF~10.0μF

P= 5&7.5
BMPE
Volt : 63~630Vdc
Temp : '-40~105℃
Cap. : '0.001μF~1.0μF

High humidity ↓

High humidity Type (85℃ 85% guarantee
MPE-R
Volt : 250~630Vdc
Temp : '-40~105℃
Cap. : '0.01μF~10μF

High current →

Small and Vertical Type
MPE-V
Volt : 100~630Vdc
Temp : '-40~105℃
Cap. : '0.18μF~10μF

Metallized Polypropylene Flim

Safe Construction
RFMPP ※Old : FMPP®
Volt : 450~500Vdc
Temp : '-40~105℃
Cap. : '0.01μF~4.7μF

ROUND TYPE ←

Safe Construction
FMPP
Volt : 450~500Vdc
Temp : '-40~105℃
Cap. : '0.01μF~4.7μF

BOX TYPE →

Safe Construction
BFMPP
Volt : 450~500Vdc
Temp : '-40~105℃
Cap. : '0.01μF~4.7μF

Miniaturized ↑

Standard
RMPP ※Old : MPP®
Volt : 100~630Vdc
Temp : '-40~105℃
Cap. : '0.01μF~10μF

ROUND TYPE ←

Standard
MPP
Volt : 100~630Vdc
Temp : '-40~105℃
Cap. : '0.01μF~10μF

BOX TYPE →

Standard
BMPP
Volt : 100~630Vdc
Temp : '-40~105℃
Cap. : '0.0015μF~10.0μF

P=7.5
BMPP
Volt : 100~630Vdc
Temp : '-40~105℃
Cap. : '0.001μF~0.018μF

High humidity ↓

High humidity Type (85℃ 85% guarantee
MPP-R
Volt : 400~630Vdc
Temp : '-40~105℃
Cap. : '0.01μF~2.4μF

High current →

Small and Vertical Type
MPP-V
Volt : 250~630Vdc
Temp : '-40~105℃
Cap. : '0.047μF~10μF

General Purpose Resonant pulse

Standard
NPP
Volt : 100~800Vdc
Temp : '-40~105℃
Cap. : '0.00082μF~2.70μF

BOX TYPE →

Standard
BNPP
Volt : 100~800Vdc
Temp : '-40~105℃
Cap. : '0.00082μF~2.70μF

EMI Suppressors

Class X2 Type
CMPP
Volt : 275~310Vdc
Temp : '-40~105℃
Cap. : '0.0047μF~10.0μF

Class Y2 Type
CMPS
Volt : 300Vdc
Temp : '-40~105℃
Cap. : '0.0010μF~1.0μF

RC Unit Type
CMPR
Volt : 250~300Vdc
Temp : '-40~105℃
Cap. : '0.010μF~1.0μF

Polypropylene Pulse/High Frequency

Min-Type
MNPS
Volt : 630~2,000Vdc
Temp : '-40~105℃
Cap. : '0.00047μF~0.82μF

BOX TYPE →

Min-Type
BMNPS
Volt : 630~2000Vdc
Temp : '-40~105℃
Cap. : '0.00047μF~0.82μF

Miniaturized ↑

Standard
NPPS
Volt : 630~2,000Vdc
125~275Vac
Temp : '-40~105℃
Cap. : '0.00047μF~0.56μF

BOX TYPE →

Standard
BNPS
Volt : 630~2,000Vdc
Temp : '-40~105℃
Cap. : '0.00047μF~0.56μF

Miniaturized ↓

High voltage/ High current Type
DMPP
Volt : 250~3,000Vdc
Temp : '-40~105℃
Cap. : '0.00047μF~3.30μF

BOX TYPE →

Standard
BDMPP
Volt : 250~3,000Vdc
Temp : '-40~105℃
Cap. : '0.00047μF~3.30μF

P=7.5
BDMPP
Volt : 250~630Vdc
Temp : '-40~105℃
Cap. : '0.001μF~0.01μF

Capacitors selection Guide

TYPE	Blocking/ Coupling	Smoothing	Band-Pass/ Stop Filter	Timing	Sample & Hold	Peak Voltage Detectors	Fly-back	S-corrention	Energy Storage (Ballast)	Oscillating Circuit	Snubbing	EMI Suppression	Viltage Dropper
MPE	✓	✓	✓										
BMPE	✓	✓	✓										
FMPE	✓	✓	✓										
BFMPE	✓	✓	✓										
MPE-R	✓	✓	✓										
MPE-V	✓	✓	✓										
MPP	✓	✓	✓	✓	✓	✓	✓						
BMPP	✓	✓	✓	✓	✓	✓	✓						
FMPP	✓	✓	✓	✓	✓	✓	✓						
BFMPP	✓	✓	✓	✓	✓	✓	✓						
MPP®	✓	✓	✓	✓	✓	✓	✓						
MPP-R	✓	✓	✓	✓	✓	✓	✓						
MPP-V	✓	✓	✓	✓	✓	✓	✓						
MPPS	✓	✓	✓	✓	✓	✓	✓						
BMPS	✓	✓	✓	✓	✓	✓	✓						
NPP				✓	✓	✓	✓				✓		
BNPP				✓	✓	✓	✓				✓		
NPPS				✓	✓	✓	✓	✓			✓		
BNPS				✓	✓	✓	✓	✓			✓		
MNPS								✓	✓	✓	✓		
BMNPS								✓	✓	✓	✓		
DMPP								✓	✓	✓	✓		
BDMPP								✓	✓	✓	✓		
CMPP												✓	✓
CMPS												✓	✓
CMPR												✓	✓

MPE

Non-inductive construction using metallized Polyester film with flame retardant epoxy resin coating

■ Features

- Non-inductive wound construction.
- Wide capacitance range, small size, and light weight.
- Long life due to self-healing effect.
- Coated with flame-retardant(UL94 V-0) epoxy resin.
- RoHS directive compliant

■ Applications

- General purpose usage

※Please contact us when applications are CD , ignitor etc.

■ Specifications

Reference Standard			IEC 60384-2
Climatic Category			40 / 105 / 21
Rated Temperature			85℃
Operation Temperature Range			-40℃~105℃ +85℃~+105℃ decreasing factor 1.0% / ℃ for V_R(dc)
Rated Voltage	**DC-Type**		100V, 250V, 400V, 630V, 1000V, 1250V
	AC-Type		125Vac, 250Vac, 275Vac
Capacitance Range			0.001μF~10.0μF
Capacitance Tolerance			G : ±2% H : ±3% J : ±5% K : ±10% M : ±20% ※Standard : K : ±10%, Other Tolerance Grade : available on request.
Voltage Proof	**DC-Type**		1.75U_R(dc) / 3sec
	AC-Type		4.3U_R(ac) / 3sec
Dissipation Factor			≤1.0%(at 1kHz 20℃)
Rated Voltage	**DC-Type**	U_R(dc)〈500V	≥9,000MΩ C_R≤0.33μF 100Vdc 60sec 20℃
			≥3,000Ω·F C_R〉0.33μF 100Vdc 60sec 20℃
		U_R(dc)≥500V	≥9,000MΩ C_R≤0.33μF 500Vdc 60sec 20℃
			≥3,000Ω·F C_R〉0.33μF 500Vdc 60sec 20℃
	AC-Type		≥9,000MΩ C_R≤0.33μF 250Vdc 60sec 20℃
			≥3,000Ω·F C_R〉0.33μF 250Vdc 60sec 20℃

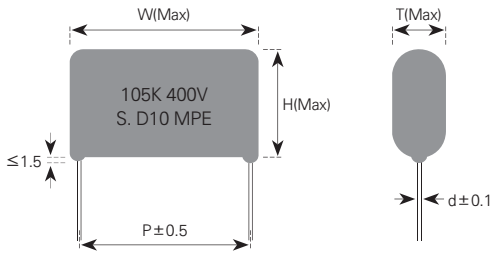
■ Part Number System

MPE	100V	824	K	7.5	S	5	
Part-1	Part-2	Part-3	Part-4	Part-5	Part-6	Part-7	Part-8

Part-1 : Series Code(Series Name)-MPE
Part-2 : Rated Voltage(DC : 100V~1250V / 125Vac~275Vac(Only for AC applications))
Part-3 : Rated Capacitance Value(0.001μF~10.0μF / 103~106)
Part-4 : Capacitance Tolerance(G : ±2% H : ±3% J : ±5% K : ±10% M : ±20%)
Part-5 : Lead Spacing(7.5mm / 10mm / 15mm / 22.5mm / 27.5mm)
Part-6 : Forming-Type and Packing Code →
Part-7 : Size Number(1~4 : Min-Type / 5 : Standard-Type / 6~9 : Large-Type)
Part-8 : Internal Use

CODE	STYLE
B	Bending Forming
C	Straight Cutting
D	D-Type Forming
L	B-Type long Forming
M	C-Type long Forming
S	Straight
X	B-Type Forming
Y	C-Type Forming
Z	Z-Type Forming
T	A-Type Tapping
U	B-Type Tapping
V	C-Type Tapping

▪ Dimensions



100Vdc

Cap. (μF)	Dimensions(mm) W (max.)	H (max.)	T (max.)	Pitch - d	PART NUMBER
0.82	10.5	12	7	7.5-0.6	MPE 100V 824K 7.5S 5 ____
1.0	10.5	12	7.5	7.5-0.6	MPE 100V 105K 7.5S 5 ____
0.56	12	10.9	5.5	10-0.6	MPE 100V 564K 10S 5 ____
0.68	12	11.9	6	10-0.6	MPE 100V 684K 10S 5 ____
0.82	12	13.5	6	10-0.6	MPE 100V 824K 10S 5 ____
1.0	12	14	6.7	10-0.6	MPE 100V 105K 10S 5 ____
1.2	18.5	12.8	5.5	15-0.8	MPE 100V 125K 15S 5 ____
1.5	18.5	13.4	6	15-0.8	MPE 100V 155K 15S 5 ____
1.8	18.5	14.4	6.5	15-0.8	MPE 100V 185K 15S 5 ____
2.2	18.5	15	7	15-0.8	MPE 100V 225K 15S 5 ____
2.7	18.5	15.8	8	15-0.8	MPE 100V 275K 15S 5 ____
3.3	18.5	16.5	8.5	15-0.8	MPE 100V 335K 15S 5 ____
3.9	18	18.5	10	15-0.8	MPE 100V 395K 15S 5 ____
4.7	18	19.5	11	15-0.8	MPE 100V 475K 15S 5 ____
5.6	18	21.5	11.5	15-0.8	MPE 100V 565K 15S 5 ____
6.8	18	22.5	12.5	15-0.8	MPE 100V 685K 15S 5 ____
2.2	26	12.5	7.5	22.5-0.8	MPE 100V 225K 22.5S 5 ____
2.7	26	13.5	8	22.5-0.8	MPE 100V 275K 22.5S 5 ____
3.3	26	14	9	22.5-0.8	MPE 100V 335K 22.5S 5 ____
3.9	26	16.4	7	22.5-0.8	MPE 100V 395K 22.5S 5 ____
4.7	26	17	7.5	22.5-0.8	MPE 100V 475K 22.5S 5 ____
5.6	26	7.5	8.3	22.5-0.8	MPE 100V 565K 22.5S 5 ____
6.8	26	18.5	9	22.5-0.8	MPE 100V 685K 22.5S 5 ____
8.2	26	20	10	22.5-0.8	MPE 100V 825K 22.5S 5 ____
10.0	26	21	11.5	22.5-0.8	MPE 100V 106K 22.5S 5 ____
10.0	32	29.5	19	27.5-0.8	MPE 100V 106K 27.5S 5 ____

250Vdc

Cap. (μF)	Dimensions(mm) W (max.)	H (max.)	T (max.)	Pitch - d	PART NUMBER
0.01	10.3	7.4	4.3	7.5-0.6	MPE 250V 103K 7.5S 5 ____
0.012	10.3	7.5	4.4	7.5-0.6	MPE 250V 123K 7.5S 5 ____
0.015	10.3	7.5	4.4	7.5-0.6	MPE 250V 153K 7.5S 5 ____
0.018	10.3	7.5	4.4	7.5-0.6	MPE 250V 183K 7.5S 5 ____
0.022	10.3	7.5	4.4	7.5-0.6	MPE 250V 223K 7.5S 5 ____
0.027	10.3	7.5	4.4	7.5-0.6	MPE 250V 273K 7.5S 5 ____
0.033	10.3	7.5	4.5	7.5-0.6	MPE 250V 333K 7.5S 5 ____
0.039	10.3	7.5	4.5	7.5-0.6	MPE 250V 393K 7.5S 5 ____
0.047	10.3	7.5	4.5	7.5-0.6	MPE 250V 473K 7.5S 5 ____
0.056	10.3	7.9	4.8	7.5-0.6	MPE 250V 563K 7.5S 5 ____
0.068	10.3	7.5	4.5	7.5-0.6	MPE 250V 683K 7.5S 5 ____
0.082	10.3	8	4.9	7.5-0.6	MPE 250V 823K 7.5S 5 ____
0.1	10.3	8.4	5.8	7.5-0.6	MPE 250V 104K 7.5S 5 ____
0.12	10.3	9	6	7.5-0.6	MPE 250V 124K 7.5S 5 ____
0.15	10.3	10.8	6	7.5-0.6	MPE 250V 154K 7.5S 5 ____
0.18	12	10.3	5	10-0.6	MPE 250V 184K 7.5S 5 ____
0.22	12	10.5	5.5	10-0.6	MPE 250V 224K 7.5S 5 ____
0.27	12	11.5	6	10-0.6	MPE 250V 274K 7.5S 5 ____
0.33	12	12	6.5	10-0.6	MPE 250V 334K 7.5S 5 ____
0.39	18.5	12	4.9	15-0.6	MPE 250V 394K 15S 5 ____
0.47	18.5	12.5	5.3	15-0.6	MPE 250V 474K 15S 5 ____
0.56	18.5	13	5.5	15-0.6	MPE 250V 564K 15S 5 ____
0.68	18.5	13.5	6	15-0.8	MPE 250V 684K 15S 5 ____
0.82	18.5	14.5	6.5	15-0.8	MPE 250V 824K 15S 5 ____
1.0	18.5	15	7.4	15-0.8	MPE 250V 105K 15S 5 ____
1.2	18.5	15.9	8	15-0.8	MPE 250V 125K 15S 5 ____
1.5	18.5	16.8	9	15-0.8	MPE 250V 155K 15S 5 ____
0.8	26	12.5	7.5	22.5-0.8	MPE 250V 824K 22.5S 5 ____
1.0	26	12	7	22.5-0.8	MPE 250V 105K 22.5S 5 ____
1.2	26	12.5	7.5	22.5-0.8	MPE 250V 125K 22.5S 5 ____
1.5	26	13.5	8	22.5-0.8	MPE 250V 155K 22.5S 5 ____
1.8	26	15.5	7.5	22.5-0.8	MPE 250V 185K 22.5S 5 ____
2.2	26	16.3	8.5	22.5-0.8	MPE 250V 225K 22.5S 5 ____
2.7	26	17	9.4	22.5-0.8	MPE 250V 275K 22.5S 5 ____
3.3	26	18	10.3	22.5-0.8	MPE 250V 335K 22.5S 5 ____
3.9	26	20.5	11	22.5-0.8	MPE 250V 395K 22.5S 5 ____

4.7	26	21.5	12	22.5-0.8	MPE 250V 475K 22.5S 5 ____
5.6	26	21.5	13	22.5-0.8	MPE 250V 565K 22.5S 5 ____
6.8	26	23.5	14	22.5-0.8	MPE 250V 685K 22.5S 5 ____
2.2	31	14	8.5	27.5-0.8	MPE 250V 225K 27.5S 5 ____
2.7	31	15.5	9	27.5-0.8	MPE 250V 275K 27.5S 5 ____
3.3	31	16.5	9.5	27.5-0.8	MPE 250V 335K 27.5S 5 ____
3.9	31	17	10.5	27.5-0.8	MPE 250V 395K 27.5S 5 ____
4.7	31	19	10.5	27.5-0.8	MPE 250V 475K 27.5S 5 ____
5.6	31	21	11.8	27.5-0.8	MPE 250V 565K 27.5S 5 ____
6.8	31	22.4	13	27.5-0.8	MPE 250V 685K 27.5S 5 ____
8.2	31	23.5	14.3	27.5-0.8	MPE 250V 825K 27.5S 5 ____
10.0	31	25.8	15.9	27.5-0.8	MPE 250V 106K 27.5S 5 ____
5.6	42	27	15	37.5-1	MPE 250V 565K 37.5S 5 ____
6.8	42	28	17	37.5-1	MPE 250V 685K 37.5S 5 ____
8.2	42	32	21	37.5-1	MPE 250V 825K 37.5S 5 ____
10.0	42	35	20	37.5-1	MPE 250V 106K 37.5S 5 ____

400Vdc

Cap. (μF)	Dimensions(mm)			Pitch - d	PART NUMBER
	W (max.)	H (max.)	T (max.)		
0.01	10.3	7.4	4.3	7.5-0.6	MPE 400V 103K 7.5S 5 ____
0.012	10.3	7.5	4.4	7.5-0.6	MPE 400V 123K 7.5S 5 ____
0.015	10.3	7.5	4.4	7.5-0.6	MPE 400V 153K 7.5S 5 ____
0.018	10.3	7.5	4.4	7.5-0.6	MPE 400V 183K 7.5S 5 ____
0.022	10.3	7.9	4.8	7.5-0.6	MPE 400V 223K 7.5S 5 ____
0.027	10.3	8	5.5	7.5-0.6	MPE 400V 273K 7.5S 5 ____
0.033	10.3	9	6	7.5-0.6	MPE 400V 333K 7.5S 5 ____
0.068	10.5	12	7	7.5-0.6	MPE 400V 683K 7.5S 5 ____
0.082	10.5	13	7.5	7.5-0.6	MPE 400V 823K 7.5S 5 ____
0.1	10.5	13.5	8.5	7.5-0.6	MPE 400V 104K 7.5S 5 ____
0.12	10.5	14	9	7.5-0.6	MPE 400V 124K 7.5S 5 ____
0.039	12	8	4.9	10-0.6	MPE 400V 393K 7.5S 5 ____
0.047	12	8.3	5	10-0.6	MPE 400V 473K 7.5S 5 ____
0.056	12	10	5	10-0.6	MPE 400V 563K 7.5S 5 ____
0.068	12	10.5	5.4	10-0.6	MPE 400V 683K 7.5S 5 ____
0.082	12	11	5.8	10-0.6	MPE 400V 823K 7.5S 5 ____
0.1	12	12	6.3	10-0.6	MPE 400V 104K 7.5S 5 ____
0.12	13	12	6.5	10-0.6	MPE 400V 124K 7.5S 5 ____
0.15	13	12.5	7.5	10-0.6	MPE 400V 154K 7.5S 5 ____
0.18	13	13	8	10-0.6	MPE 400V 184K 7.5S 5 ____
0.22	13	14	8.5	10-0.6	MPE 400V 224K 7.5S 5 ____
0.12	18.5	10	5	15-0.6	MPE 400V 124K 15S 5 ____
0.15	18.5	12.4	5	15-0.6	MPE 400V 154K 15S 5 ____
0.18	18.5	12.5	5.4	15-0.6	MPE 400V 184K 15S 5 ____
0.22	18.5	13	5.9	15-0.6	MPE 400V 224K 15S 5 ____
0.27	18.5	14.3	6.5	15-0.8	MPE 400V 274K 15S 5 ____
0.33	18.5	14.9	7	15-0.8	MPE 400V 334K 15S 5 ____
0.39	18.5	15.4	7.5	15-0.8	MPE 400V 394K 15S 5 ____
0.47	18.5	17	7.8	15-0.8	MPE 400V 474K 15S 5 ____
0.68	18	19.5	11.5	15-0.8	MPE 400V 684K 15S 5 ____
0.82	18	18.5	10	15-0.8	MPE 400V 824K 15S 5 ____
1.0	18	19.5	11	15-0.8	MPE 400V 105K 15S 5 ____
1.2	18	20.5	12	15-0.8	MPE 400V 125K 15S 5 ____
1.5	18	23	13	15-0.8	MPE 400V 155K 15S 5 ____
0.27	26	12.5	7.5	22.5-0.8	MPE 400V 274K 22.5S 5 ____
0.33	26	12	6.5	22.5-0.8	MPE 400V 334K 22.5S 5 ____
0.39	26	12.5	7	22.5-0.8	MPE 400V 394K 22.5S 5 ____
0.47	26	13	7.5	22.5-0.8	MPE 400V 474K 22.5S 5 ____
0.56	26	16	6.5	22.5-0.8	MPE 400V 564K 22.5S 5 ____
0.68	26	16.5	7	22.5-0.8	MPE 400V 684K 22.5S 5 ____
0.82	26	17.3	7.9	22.5-0.8	MPE 400V 824K 22.5S 5 ____
1.0	26	18	8.5	22.5-0.8	MPE 400V 105K 22.5S 5 ____
1.2	26	18.9	9.5	27.5-0.8	MPE 400V 125K 22.5S 5 ____
0.8	31	13.5	8.5	27.5-0.8	MPE 400V 824K 27.5S 5 ____
1.0	31	14.5	9	27.5-0.8	MPE 400V 105K 27.5S 5 ____
1.2	31	16	9.5	27.5-0.8	MPE 400V 125K 27.5S 5 ____
1.5	31	19	9.5	27.5-0.8	MPE 400V 155K 27.5S 5 ____
1.8	31	20.5	11	27.5-0.8	MPE 400V 185K 27.5S 5 ____
2.2	31	22	11	27.5-0.8	MPE 400V 225K 27.5S 5 ____
2.7	31	22	12	27.5-0.8	MPE 400V 275K 27.5S 5 ____
3.3	31	23.5	13.5	27.5-0.8	MPE 400V 335K 27.5S 5 ____
4.7	31	26	16.5	27.5-0.8	MPE 400V 475K 27.5S 5 ____

630Vdc

Cap. (μF)	Dimensions(mm) W (max.)	H (max.)	T (max.)	Pitch - d	PART NUMBER
0.022	10.5	11.5	6.5	7.5-0.6	MPE 630V 223K 7.5S 5 _____
0.027	10.5	12	7	7.5-0.6	MPE 630V 273K 7.5S 5 _____
0.033	10.5	13	7.5	7.5-0.6	MPE 630V 333K 7.5S 5 _____
0.039	10.5	13	8	7.5-0.6	MPE 630V 393K 7.5S 5 _____
0.047	10.5	14	9	7.5-0.6	MPE 630V 473K 7.5S 5 _____
0.0047	12	10	4.5	10-0.6	MPE 630V 472K 10S 5 _____
0.0056	12	10	4.5	10-0.6	MPE 630V 562K 10S 5 _____
0.0068	12	10	4.9	10-0.6	MPE 630V 682K 10S 5 _____
0.0082	12	10	4.5	10-0.6	MPE 630V 822K 10S 5 _____
0.01	12	7.5	4.5	10-0.6	MPE 630V 103K 10S 5 _____
0.012	12	7.8	4.5	10-0.6	MPE 630V 123K 10S 5 _____
0.015	12	8.2	5	10-0.6	MPE 630V 153K 10S 5 _____
0.018	12	10	4.9	10-0.6	MPE 630V 183K 10S 5 _____
0.022	12	10.5	5.3	10-0.6	MPE 630V 223K 10S 5 _____
0.027	12	10.9	5.5	10-0.6	MPE 630V 273K 10S 5 _____
0.033	12	11.9	6	10-0.6	MPE 630V 333K 10S 5 _____
0.039	12	13.4	6	10-0.6	MPE 630V 393K 10S 5 _____
0.047	12	13.5	6.5	10-0.6	MPE 630V 473K 10S 5 _____
0.056	13	12.5	7	10-0.6	MPE 630V 563K 10S 5 _____
0.068	13	13	7.5	10-0.6	MPE 630V 683K 10S 5 _____
0.082	13	13.5	8.5	10-0.6	MPE 630V 823K 10S 5 _____
0.056	18.5	10.5	5.4	15-0.6	MPE 630V 563K 15S 5 _____
0.068	18.5	11	5.8	15-0.6	MPE 630V 683K 15S 5 _____
0.082	18.5	12	6.5	15-0.6	MPE 630V 823K 15S 5 _____
0.1	18.5	14	6.3	15-0.6	MPE 630V 104K 15S 5 _____
0.12	18.5	14.5	6.3	15-0.8	MPE 630V 124K 15S 5 _____
0.15	18.5	15.4	7.5	15-0.8	MPE 630V 154K 15S 5 _____
0.18	18.5	16	8	15-0.8	MPE 630V 184K 15S 5 _____
0.22	18.5	16.5	9	15-0.8	MPE 630V 224K 15S 5 _____
0.27	18	16.5	9.5	15–0.8	MPE 630V 274K 15S 5 _____
0.33	18	18.5	10	15–0.8	MPE 630V 334K 15S 5 _____
0.47	18	20	12	15–0.8	MPE 630V 474K 15S 5 _____
0.12	26	13.5	8.5	22.5–0.8	MPE 630V 124K 22.5S 5 _____
0.15	26	15.5	8.5	22.5–0.8	MPE 630V 154K 22.5S 5 _____
0.18	26	12.5	7.5	22.5–0.8	MPE 630V 184K 22.5S 5 _____
0.22	26	13.5	8	22.5–0.8	MPE 630V 224K 22.5S 5 _____
0.27	26	16.5	7	22.5–0.8	MPE 630V 274K 22.5S 5 _____
0.33	26	17	7.8	22.5–0.8	MPE 630V 334K 22.5S 5 _____
0.39	26	17.9	8.5	22.5–0.8	MPE 630V 394K 22.5S 5 _____
0.47	26	18.5	9.3	22.5–0.8	MPE 630V 474K 22.5S 5 _____
0.56	26	20	10	22.5–0.8	MPE 630V 564K 22.5S 5 _____
0.68	26	21	11.5	22.5–0.8	MPE 630V 684K 22.5S 5 _____
0.82	26	21	12.5	22.5–0.8	MPE 630V 824K 22.5S 5 _____
1.0	26	23	13	22.5–0.8	MPE 630V 105K 22.5S 5 _____
1.2	26	24.5	14.5	22.5–0.8	MPE 630V 125K 22.5S 5 _____
0.3	31	13.5	8.5	27.5–0.8	MPE 630V 334K 27.5S 5 _____
0.4	31	21.5	13	27.5–0.8	MPE 630V 394K 27.5S 5 _____
0.5	31	16	9	27.5–0.8	MPE 630V 474K 27.5S 5 _____
0.7	31	7.5	11	27.5–0.8	MPE 630V 684K 27.5S 5 _____
0.8	31	20.5	11.3	27.5–0.8	MPE 630V 824K 27.5S 5 _____
1.0	31	21.9	12.5	27.5–0.8	MPE 630V 105K 27.5S 5 _____
1.2	31	23	13.5	27.5–0.8	MPE 630V 125K 27.5S 5 _____
1.5	31	24.7	15.3	27.5–0.8	MPE 630V 155K 27.5S 5 _____
1.8	31	27	16.8	27.5–0.8	MPE 630V 185K 27.5S 5 _____
2.2	31	29	19.5	27.5–0.8	MPE 630V 225K 27.5S 5 _____

1000Vdc

Cap. (μF)	Dimensions(mm) W (max.)	H (max.)	T (max.)	Pitch - d	PART NUMBER
0.015	12.3	10.8	5.6	10-0.6	MPE 1000V 153K 10S 5 _____
0.018	12.3	11.3	6.1	10-0.6	MPE 1000V 183K 10S 5 _____
0.022	12.3	11.9	6.7	10-0.6	MPE 1000V 223K 10S 5 _____
0.010	15.5	11.0	6.0	12.5-0.6	MPE 1000V 103K 12.5 K 5 _____
0.012	15.5	12.0	6.0	12.5-0.6	MPE 1000V 123K 12.5 K 5 _____
0.015	15.5	12.5	7.0	12.5-0.6	MPE 1000V 153K 12.5 K 5 _____
0.018	15.5	13.0	7.5	12.5-0.8	MPE 1000V 183K 12.5 K 5 _____
0.022	15.5	15.5	7.5	12.5-0.8	MPE 1000V 223K 12.5 K 5 _____
0.022	17.5	10.0	7.0	15-0.8	MPE 1000V 223K 15S 5 _____
0.027	17.5	11.8	5.0	15-0.8	MPE 1000V 273K 15S 5 _____
0.033	17.5	12.0	8.0	15-0.8	MPE 1000V 333K 15S 5 _____
0.039	17.5	12.7	5.9	15-0.8	MPE 1000V 393K 15S 5 _____
0.047	17.5	13.2	6.5	15-0.8	MPE 1000V 473K 15S 5 _____
0.056	17.5	13.8	7.0	15-0.8	MPE 1000V 563K 15S 5 _____
0.068	17.5	14.5	7.7	15-0.8	MPE 1000V 683K 15S 5 _____

0.082	17.5	15.2	8.5	15-0.8	MPE 1000V 823K 15S 5 ____
0.100	17.5	16.6	9.7	15-0.8	MPE 1000V 104K 15S 5 ____
0.027	21.0	13.0	6.0	17.5-0.8	MPE 1000V 273K 17.5S 5 ____
0.033	21.0	14.0	6.5	17.5-0.8	MPE 1000V 333K 17.5S 5 ____
0.039	21.0	14.5	7.0	17.5-0.8	MPE 1000V 393K 17.5S 5 ____
0.047	21.0	15.5	7.5	17.5-0.8	MPE 1000V 473K 17.5S 5 ____
0.056	21.0	17.0	7.5	17.5-0.8	MPE 1000V 563K 17.5S 5 ____
0.068	21.0	18.0	8.5	17.5-0.8	MPE 1000V 683K 17.5S 5 ____
0.082	21.0	18.5	9.0	17.5-0.8	MPE 1000V 823K 17.5S 5 ____
0.100	21.0	20.0	10.0	17.5-0.8	MPE 1000V 104K 17.5S 5 ____
0.047	25.0	12.0	7.0	22.5-0.8	MPE 1000V 473K 22.5S 5 ____
0.068	25.0	13.0	8.0	22.5-0.8	MPE 1000V 683K 22.5S 5 ____
0.100	25.0	14.0	9.5	22.5-0.8	MPE 1000V 104K 22.5S 5 ____
0.12	26.0	18.5	9.0	22.5-0.8	MPE 1000V 124K 22.5S 5 ____
0.15	26.0	20.0	10.0	22.5-0.8	MPE 1000V 154K 22.5S 5 ____
0.18	26.0	22.0	10.5	22.5-0.8	MPE 1000V 184K 22.5S 5 ____
0.22	26.0	23.0	12.0	22.5-0.8	MPE 1000V 224K 22.5S 5 ____
0.15	30.0	16.0	11.0	27.5-0.8	MPE 1000V 154K 27.5S 5 ____
0.22	30.0	20.0	12.0	27.5-0.8	MPE 1000V 224K 27.5S 5 ____
0.33	30.0	23.0	13.5	27.5-0.8	MPE 1000V 334K 27.5S 5 ____
0.47	30.0	24.0	16.0	27.5-0.8	MPE 1000V 474K 27.5S 5 ____

1250Vdc

Cap. (μF)	Dimensions(mm)			Pitch - d	PART NUMBER
	W (max.)	H (max.)	T (max.)		
0.001	15.5	11	6	12.5-0.6	MPE 1250V 102K 12.5 K 5 ____
0.0012	15.5	11	6	12.5-0.6	MPE 1250V 122K 12.5 K 5 ____
0.0015	15.5	11	6	12.5-0.6	MPE 1250V 152K 12.5 K 5 ____
0.0018	15.5	11	6	12.5-0.6	MPE 1250V 182K 12.5 K 5 ____
0.0022	15.5	11.5	6	12.5-0.6	MPE 1250V 222K 12.5 K 5 ____
0.0027	15.5	12	6.5	12.5-0.6	MPE 1250V 272K 12.5 K 5 ____
0.0033	15.5	11.5	6	12.5-0.6	MPE 1250V 332 12.5 K 5 ____
0.0039	15.5	12	6.5	12.5-0.6	MPE 1250V 392K 12.5 K 5 ____
0.0047	15.5	12.5	7	12.5-0.6	MPE 1250V 472K 12.5 K 5 ____
0.0056	15.5	13	7.5	12.5-0.6	MPE 1250V 562K 12.5 K 5 ____
0.0068	15.5	15	7.5	12.5-0.6	MPE 1250V 682K 12.5 K 5 ____
0.0082	21	12	5	17.5-0.8	MPE 1250V 822K 17.5S 5 ____
0.01	21	12.5	5	17.5-0.8	MPE 1250V 103K 17.5S 5 ____
0.012	21	13	5.5	17.5-0.8	MPE 1250V 123K 17.5S 5 ____
0.015	21	13.5	6	17.5-0.8	MPE 1250V 153K 17.5S 5 ____
0.018	21	14.5	6.5	17.5-0.8	MPE 1250V 183K 17.5S 5 ____
0.022	21	15	7	17.5-0.8	MPE 1250V 223K 17.5S 5 ____
0.027	26	15.5	6	22.5-0.8	MPE 1250V 273K 22.5S 5 ____
0.033	26	16	6.5	22.5-0.8	MPE 1250V 333K 22.5S 5 ____
0.039	26	16.5	7	22.5-0.8	MPE 1250V 393K 22.5S 5 ____
0.047	26	17	8	22.5-0.8	MPE 1250V 473K 22.5S 5 ____
0.056	31	17	7.5	27.5-0.8	MPE 1250V 563K 22.5S 5 ____
0.068	31	7.5	8	27.5-0.8	MPE 1250V 683K 22.5S 5 ____
0.082	31	18.5	9	27.5-0.8	MPE 1250V 823K 22.5S 5 ____
0.1	31	19.5	10	27.5-0.8	MPE 1250V 104K 27.5S 5 ____
0.12	31	20.5	11.5	27.5-0.8	MPE 1250V 124K 27.5S 5 ____
0.15	31	23	12	27.5-0.8	MPE 1250V 154K 27.5S 5 ____
0.18	31	24.5	13	27.5-0.8	MPE 1250V 184K 27.5S 5 ____
0.22	31	26.5	14.5	27.5-0.8	MPE 1250V 224K 27.5S 5 ____

125Vac

Cap. (μF)	Dimensions(mm)			Pitch - d	PART NUMBER
	W (max.)	H (max.)	T (max.)		
0.01	10.5	7.5	4.5	7.5-0.6	MPE AC125V 103K 7.5S 5 ____
0.012	10.5	7.5	4.4	7.5-0.6	MPE AC125V 123K 7.5S 5 ____
0.015	10.5	7.5	4.4	7.5-0.6	MPE AC125V 153K 7.5S 5 ____
0.018	10.5	7.5	4.4	7.5-0.6	MPE AC125V 183K 7.5S 5 ____
0.022	10.5	7.5	4.4	7.5-0.6	MPE AC125V 223K 7.5S 5 ____
0.027	10.5	7.5	4.4	7.5-0.6	MPE AC125V 273K 7.5S 5 ____
0.033	10.5	7.8	4.5	7.5-0.6	MPE AC125V 333K 7.5S 5 ____
0.039	10.5	7.8	4.5	7.5-0.6	MPE AC125V 393K 7.5S 5 ____
0.047	10.5	8	5.5	7.5-0.6	MPE AC125V 473K 7.5S 5 ____
0.056	10.5	8.5	5.9	7.5-0.6	MPE AC125V 563K 7.5S 5 ____
0.068	10.5	9.4	6.3	7.5-0.6	MPE AC125V 683K 7.5S 5 ____

250Vac

Cap. (μF)	Dimensions(mm) W (max.)	H (max.)	T (max.)	Pitch - d	PART NUMBER
0.010	10.5	9.0	5.0	7.5-0.6	MPE AC250V 103K 7.5S 5 ____
0.012	10.5	8.5	5.0	7.5-0.6	MPE AC250V 123K 7.5S 5 ____
0.015	10.5	9.0	5.5	7.5-0.6	MPE AC250V 153K 7.5S 5 ____
0.018	10.5	9.5	5.5	7.5-0.6	MPE AC250V 183K 7.5S 5 ____
0.022	10.5	9.0	5.0	7.5-0.6	MPE AC250V 223K 7.5S 5 ____
0.027	10.5	9.0	5.5	7.5-0.6	MPE AC250V 273K 7.5S 5 ____
0.033	10.5	10.0	5.5	7.5-0.6	MPE AC250V 333K 7.5S 5 ____
0.039	10.5	10.5	6.0	7.5-0.6	MPE AC250V 393K 7.5S 5 ____
0.047	10.5	11.5	6.0	7.5-0.6	MPE AC250V 473K 7.5S 5 ____
0.056	10.5	11.5	6.5	7.5-0.6	MPE AC250V 563K 7.5S 5 ____
0.068	10.5	12.0	7.0	7.5-0.6	MPE AC250V 683K 7.5S 5 ____
0.082	10.5	13.0	7.5	7.5-0.6	MPE AC250V 823K 7.5S 5 ____
0.100	10.5	13.5	8.5	7.5-0.6	MPE AC250V 104K 7.5S 5 ____
0.120	10.5	14.0	9.0	7.5-0.6	MPE AC250V 124K 7.5S 5 ____
0.022	13.0	9.0	5.5	10-0.6	MPE AC250V 223K 10S 5 ____
0.027	13.0	9.0	5.0	10-0.6	MPE AC250V 273K 10S 5 ____
0.033	13.0	9.0	5.5	10-0.6	MPE AC250V 333K 10S 5 ____
0.039	13.0	9.5	6.0	10-0.6	MPE AC250V 393K 10S 5 ____
0.047	13.0	9.0	5.5	10-0.6	MPE AC250V 473K 10S 5 ____
0.056	13.0	9.0	5.5	10-0.6	MPE AC250V 563K 10S 5 ____
0.068	13.0	9.5	6.0	10-0.6	MPE AC250V 683K 10S 5 ____
0.082	13.0	10.5	6.0	10-0.6	MPE AC250V 823K 10S 5 ____
0.10	13.0	11.5	6.0	10-0.6	MPE AC250V 104K 10S 5 ____
0.12	13.0	12.0	6.5	10-0.6	MPE AC250V 124K 10S 5 ____
0.15	13.0	12.5	7.5	10-0.6	MPE AC250V 154K 10S 5 ____
0.18	13.0	13.0	8.0	10-0.6	MPE AC250V 184K 10S 5 ____
0.22	13.0	14.0	8.5	10-0.6	MPE AC250V 224K 10S 5 ____
0.27	13.0	15.5	9.0	10-0.6	MPE AC250V 274K 10S 5 ____
0.33	13.0	16.5	9.5	10-0.6	MPE AC250V 334K 10S 5 ____
0.068	18.0	9.5	6.0	15-0.8	MPE AC250V 683K 15S 5 ____
0.082	18.0	9.5	6.0	15-0.8	MPE AC250V 823K 15S 5 ____
0.10	18.0	10.0	6.5	15-0.8	MPE AC250V 104K 15S 5 ____
0.12	18.0	9.5	5.5	15-0.8	MPE AC250V 124K 15S 5 ____
0.15	18.0	10.0	6.0	15-0.8	MPE AC250V 154K 15S 5 ____
0.18	18.0	10.0	6.5	15-0.8	MPE AC250V 184K 15S 5 ____
0.22	18.0	11.0	6.5	15-0.8	MPE AC250V 224K 15S 5 ____
0.27	18.0	12.0	7.0	15-0.8	MPE AC250V 274K 15S 5 ____
0.33	18.0	13.0	7.5	15-0.8	MPE AC250V 334K 15S 5 ____
0.39	18.0	14.5	7.5	15-0.8	MPE AC250V 394K 15S 5 ____
0.47	18.0	15.0	8.0	15-0.8	MPE AC250V 474K 15S 5 ____
0.68	18.0	16.5	10.0	15-0.8	MPE AC250V 684K 15S 5 ____
0.82	18.0	18.5	10.0	15-0.8	MPE AC250V 824K 15S 5 ____
1.00	18.0	19.5	11.0	15-0.8	MPE AC250V 105K 15S 5 ____
1.20	18.0	20.5	12.0	15-0.8	MPE AC250V 125K 15S 5 ____
1.50	18.0	23.0	13.0	15-0.8	MPE AC250V 155K 15S 5 ____
0.22	26.0	12.5	7.5	22.5-0.8	MPE AC250V 224K 22.5S 5 ____
0.27	26.0	12.5	7.5	22.5-0.8	MPE AC250V 274K 22.5S 5 ____
0.33	26.0	12.0	6.5	22.5-0.8	MPE AC250V 334K 22.5S 5 ____
0.39	26.0	12.5	7.0	22.5-0.8	MPE AC250V 394K 22.5S 5 ____
0.47	26.0	13.0	7.5	22.5-0.8	MPE AC250V 474K 22.5S 5 ____
0.68	26.0	14.0	9.0	22.5-0.8	MPE AC250V 684K 22.5S 5 ____
0.82	26.0	14.5	9.5	22.5-0.8	MPE AC250V 824K 22.5S 5 ____
1.00	26.0	16.5	9.5	22.5-0.8	MPE AC250V 105K 22.5S 5 ____
1.20	26.0	17.0	10.5	22.5-0.8	MPE AC250V 125K 22.5S 5 ____
1.50	26.0	18.5	11.5	22.5-0.8	MPE AC250V 155K 22.5S 5 ____
1.80	26.0	20.5	12.0	22.5-0.8	MPE AC250V 185K 22.5S 5 ____
2.20	26.0	22.5	12.5	22.5-0.8	MPE AC250V 225K 22.5S 5 ____
0.39	31.0	13.0	7.5	27.5-0.8	MPE AC250V 394K 27.5S 5 ____
0.47	31.0	13.5	8.0	27.5-0.8	MPE AC250V 474K 27.5S 5 ____
0.56	31.0	12.5	7.5	27.5-0.8	MPE AC250V 564K 27.5S 5 ____
0.68	31.0	13.0	8.0	27.5-0.8	MPE AC250V 684K 27.5S 5 ____
0.82	31.0	13.5	8.5	27.5-0.8	MPE AC250V 824K 27.5S 5 ____
1.00	31.0	14.5	9.0	27.5-0.8	MPE AC250V 105K 27.5S 5 ____
1.20	31.0	16.0	9.5	27.5-0.8	MPE AC250V 125K 27.5S 5 ____
1.50	31.0	17.0	10.5	27.5-0.8	MPE AC250V 155K 27.5S 5 ____
1.80	31.0	18.0	11.0	27.5-0.8	MPE AC250V 185K 27.5S 5 ____
2.20	31.0	20.0	11.5	27.5-0.8	MPE AC250V 225K 27.5S 5 ____
2.50	31.0	21.5	12.0	27.5-0.8	MPE AC250V 255K 27.5S 5 ____

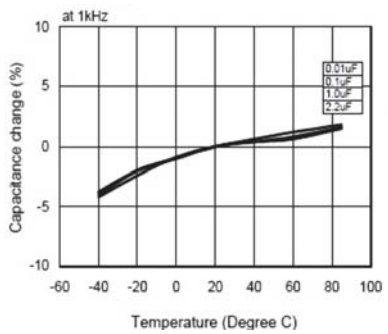
275Vac

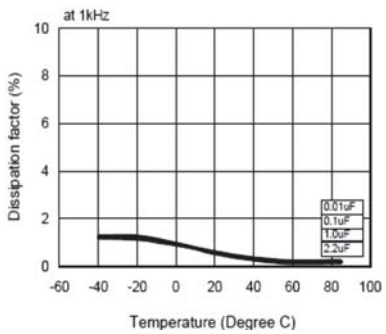
Cap. (μF)	Dimensions(mm) W (max.)	H (max.)	T (max.)	Pitch - d	PART NUMBER
0.010	10.5	9.0	5.0	7.5-0.6	MPE AC275V 103K 7.5S 5 ____
0.012	10.5	8.5	5.0	7.5-0.6	MPE AC275V 123K 7.5S 5 ____
0.015	10.5	9.0	5.5	7.5-0.6	MPE AC275V 153K 7.5S 5 ____
0.018	10.5	9.5	5.5	7.5-0.6	MPE AC275V 183K 7.5S 5 ____
0.022	10.5	9.0	5.0	7.5-0.6	MPE AC275V 223K 7.5S 5 ____
0.027	10.5	9.0	5.5	7.5-0.6	MPE AC275V 273K 7.5S 5 ____
0.033	10.5	10.0	5.5	7.5-0.6	MPE AC275V 333K 7.5S 5 ____
0.039	10.5	10.5	6.0	7.5-0.6	MPE AC275V 393K 7.5S 5 ____
0.047	10.5	11.5	6.0	7.5-0.6	MPE AC275V 473K 7.5S 5 ____
0.056	10.5	11.5	6.5	7.5-0.6	MPE AC275V 563K 7.5S 5 ____
0.068	10.5	12.0	7.0	7.5-0.6	MPE AC275V 683K 7.5S 5 ____
0.082	10.5	13.0	7.5	7.5-0.6	MPE AC275V 823K 7.5S 5 ____
0.100	10.5	13.5	8.5	7.5-0.6	MPE AC275V 104K 7.5S 5 ____
0.120	10.5	14.0	9.0	7.5-0.6	MPE AC275V 124K 7.5S 5 ____
0.047	13.0	9.0	5.5	10.0-0.6	MPE AC275V 473K 10S 5 ____
0.056	13.0	9.0	5.5	10.0-0.6	MPE AC275V 563K 10S 5 ____
0.068	13.0	9.5	6.0	10.0-0.6	MPE AC275V 683K 10S 5 ____
0.082	13.0	10.5	6.0	10.0-0.6	MPE AC275V 823K 10S 5 ____
0.10	13.0	11.5	6.0	10.0-0.6	MPE AC275V 104K 10S 5 ____
0.12	13.0	12.0	6.5	10.0-0.6	MPE AC275V 124K 10S 5 ____
0.15	13.0	12.5	7.5	10.0-0.6	MPE AC275V 154K 10S 5 ____
0.18	13.0	13.0	8.0	10.0-0.6	MPE AC275V 184K 10S 5 ____
0.22	13.0	14.0	8.5	10.0-0.6	MPE AC275V 224K 10S 5 ____
0.27	13.0	15.5	9.0	10.0-0.6	MPE AC275V 274K 10S 5 ____
0.33	13.0	16.5	9.5	10.0-0.6	MPE AC275V 334K 10S 5 ____
0.027	13.0	9.0	5.0	10.0-0.6	MPE AC275V 273K 10S 5 ____
0.033	13.0	9.0	5.5	10.0-0.6	MPE AC275V 333K 10S 5 ____
0.039	13.0	9.5	6.0	10.0-0.6	MPE AC275V 393K 10S 5 ____
0.022	13.0	9.0	5.5	10.0-0.6	MPE AC275V 223K 10S 5 ____
0.068	18.0	9.5	6.0	15.0-0.8	MPE AC275V 683K 15S 5 ____
0.082	18.0	9.5	6.0	15.0-0.8	MPE AC275V 823K 15S 5 ____
0.10	18.0	10.0	6.5	15.0-0.8	MPE AC275V 104K 15S 5 ____
0.12	18.0	9.5	5.5	15.0-0.8	MPE AC275V 124K 15S 5 ____
0.15	18.0	10.0	6.0	15.0-0.8	MPE AC275V 154K 15S 5 ____
0.18	18.0	10.0	6.5	15.0-0.8	MPE AC275V 184K 15S 5 ____
0.22	18.0	11.0	6.5	15.0-0.8	MPE AC275V 224K 15S 5 ____
0.27	18.0	12.0	7.0	15.0-0.8	MPE AC275V 274K 15S 5 ____
0.33	18.0	13.0	7.5	15.0-0.8	MPE AC275V 334K 15S 5 ____
0.39	18.0	14.5	7.5	15.0-0.8	MPE AC275V 394K 15S 5 ____
0.47	18.0	15.0	8.0	15.0-0.8	MPE AC275V 474K 15S 5 ____
0.68	18.0	16.5	10.0	15.0-0.8	MPE AC275V 684K 15S 5 ____
0.82	18.0	18.5	10.0	15.0-0.8	MPE AC275V 824K 15S 5 ____
1.00	18.0	19.5	11.0	15.0-0.8	MPE AC275V 105K 15S 5 ____
1.20	18.0	20.5	12.0	15.0-0.8	MPE AC275V 125K 15S 5 ____
1.50	18.0	23.0	13.0	15.0-0.8	MPE AC275V 155K 15S 5 ____
0.22	26.0	12.5	7.5	22.5-0.8	MPE AC275V 224K 22.5S 5 ____
0.27	26.0	12.5	7.5	22.5-0.8	MPE AC275V 274K 22.5S 5 ____
0.33	26.0	12.0	6.5	22.5-0.8	MPE AC275V 334K 22.5S 5 ____
0.39	26.0	12.5	7.0	22.5-0.8	MPE AC275V 394K 22.5S 5 ____
0.47	26.0	13.0	7.5	22.5-0.8	MPE AC275V 474K 22.5S 5 ____
0.68	26.0	14.0	9.0	22.5-0.8	MPE AC275V 684K 22.5S 5 ____
0.82	26.0	14.5	9.5	22.5-0.8	MPE AC275V 824K 22.5S 5 ____
1.00	26.0	16.5	9.5	22.5-0.8	MPE AC275V 105K 22.5S 5 ____
1.20	26.0	17.0	10.5	22.5-0.8	MPE AC275V 125K 22.5S 5 ____
1.50	26.0	18.5	11.5	22.5-0.8	MPE AC275V 155K 22.5S 5 ____
1.80	26.0	20.5	12.0	22.5-0.8	MPE AC275V 185K 22.5S 5 ____
2.20	26.0	22.5	12.5	22.5-0.8	MPE AC275V 225K 22.5S 5 ____
2.70	26.0	24.0	14.0	22.5-0.8	MPE AC275V 275K 22.5S 5 ____
3.30	26.0	25.5	15.5	22.5-0.8	MPE AC275V 335K 22.5S 5 ____
0.33	31.0	13.0	7.5	27.5-0.8	MPE AC275V 334K 27.5S 5 ____
0.39	31.0	13.0	7.5	27.5-0.8	MPE AC275V 394K 27.5S 5 ____
0.47	31.0	13.5	8.0	27.5-0.8	MPE AC275V 474K 27.5S 5 ____
0.56	31.0	12.5	7.5	27.5-0.8	MPE AC275V 564K 27.5S 5 ____
0.68	31.0	13.0	8.0	27.5-0.8	MPE AC275V 684K 27.5S 5 ____
0.82	31.0	13.5	8.5	27.5-0.8	MPE AC275V 824K 27.5S 5 ____
1.00	31.0	14.5	9.0	27.5-0.8	MPE AC275V 105K 27.5S 5 ____
1.20	31.0	16.0	9.5	27.5-0.8	MPE AC275V 125K 27.5S 5 ____
1.50	31.0	17.0	10.5	27.5-0.8	MPE AC275V 155K 27.5S 5 ____
1.80	31.0	18.0	11.0	27.5-0.8	MPE AC275V 185K 27.5S 5 ____
2.20	31.0	20.0	11.5	27.5-0.8	MPE AC275V 225K 27.5S 5 ____
2.50	31.0	21.5	12.0	27.5-0.8	MPE AC275V 255K 27.5S 5 ____
2.70	31.0	22.0	12.0	27.5-0.8	MPE AC275V 275K 27.5S 5 ____
3.30	31.0	23.5	13.5	27.5-0.8	MPE AC275V 335K 27.5S 5 ____
4.70	31.0	26.0	16.5	27.5-0.8	MPE AC275V 475K 27.5S 5 ____

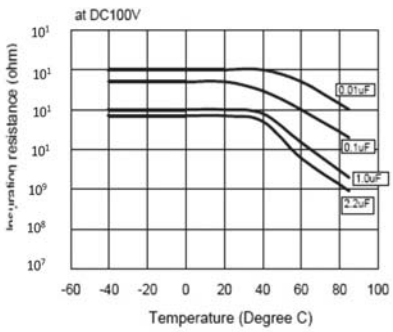
■ Electrical Characteristics (Typical Data)

100Vdc Series

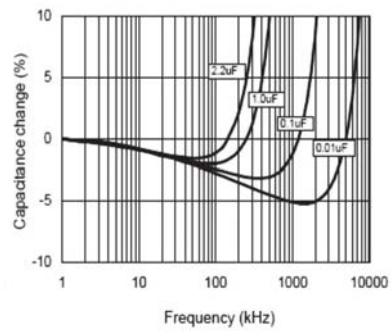
Temperature Characteristics

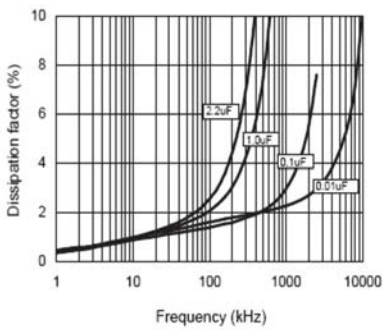


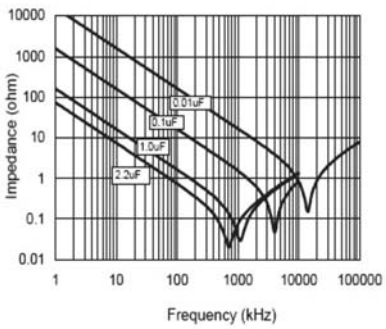




Frequency Characteristics

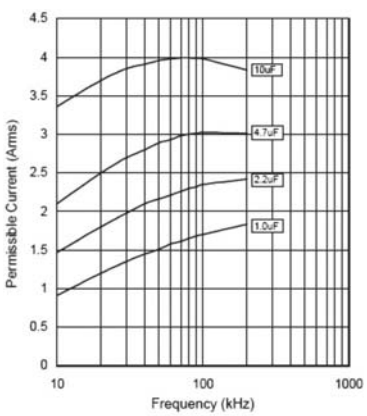




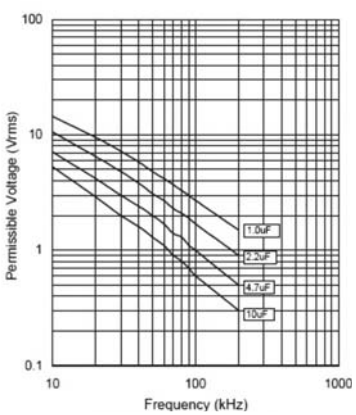


■ Applicable Specifications

Permissible Current



Permissible Voltage
(at sinewave)



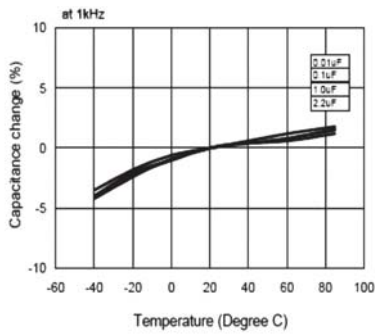
Pulse Handling Capability(dv/dt)
(Max 1000cycles)

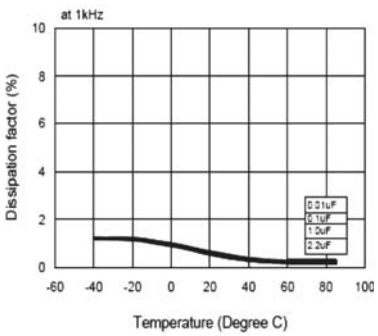
Rating Voltage	Capacitance Value(uF)	Code	dV/dt(V/us)	Current(o-p) (A)
100VDC	0.56	564	22	12.32
	0.68	684		15.0
	0.82	824		18.0
	1.00	105		22.0
	1.20	125	11	13.2
	1.50	155		17.1
	1.80	185		19.8
	2.20	225		24.2
	2.70	275		29.7
	3.30	335		36.3
	3.90	395	6	23.4
	4.70	475		28.2
	5.60	565		33.6
	6.80	685		40.8
	8.20	825		49.2
	10.00	106		60.0

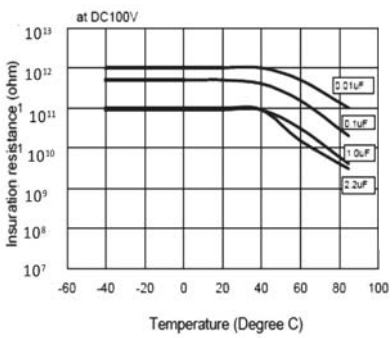
■ Electrical Characteristics (Typical Data)

250Vdc Series

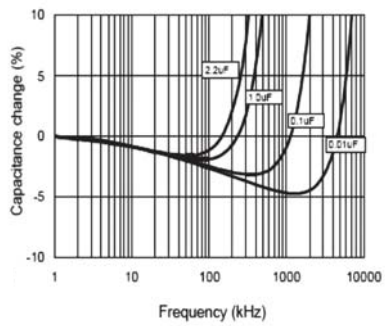
Temperature Characteristics

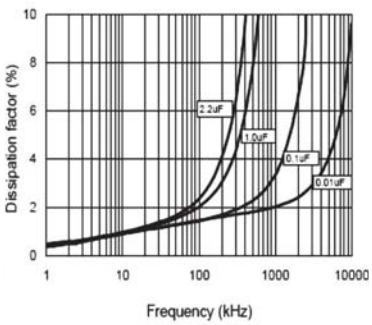


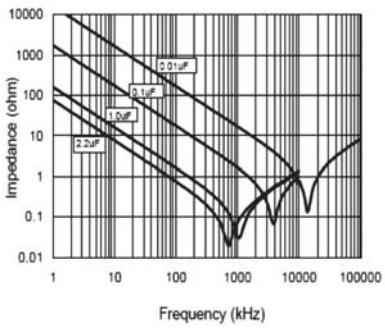




Frequency Characteristics

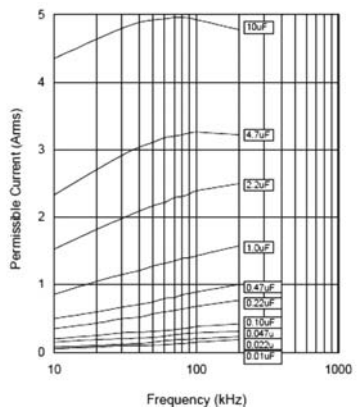




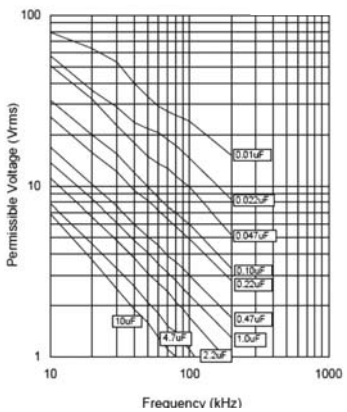


■ Applicable Specifications

Permissible Current



Permissible Voltage
(at sinewave)



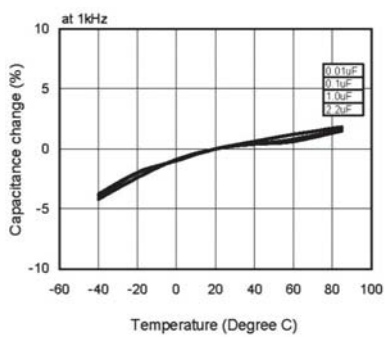
Pulse Handling Capability(dv/dt)
(Max 1000cycles)

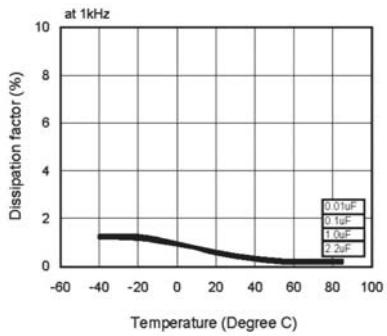
Rating Voltage	Capacitance Value(uF)	Code	dV/dt(V/us)	Current(o-p) (A)
250VDC	0.010	103	48	0.48
	0.015	153		0.72
	0.022	223		1.06
	0.033	333		1.58
	0.047	473		2.26
	0.068	683		3.26
	0.100	104		4.80
	0.150	154		7.20
	0.220	224	33	7.26
	0.330	334		10.89
	0.470	474	18	8.46
	0.680	684		12.24
	1.000	105		18.00
	1.500	155		27.00
	2.200	225	10	22.00
	3.300	335		33.00
	4.700	475		47.00
	6.800	685	8	54.40
	10.000	106		80.00

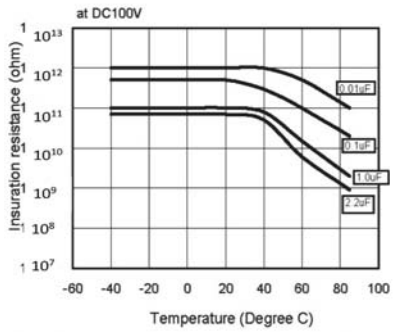
■ Electrical Characteristics (Typical Data)

400Vdc Series

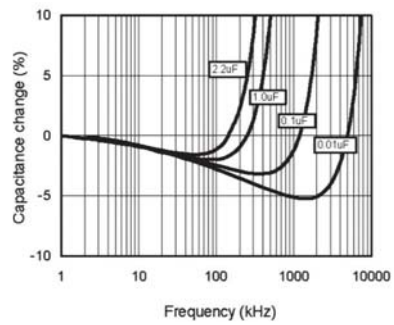
Temperature Characteristics

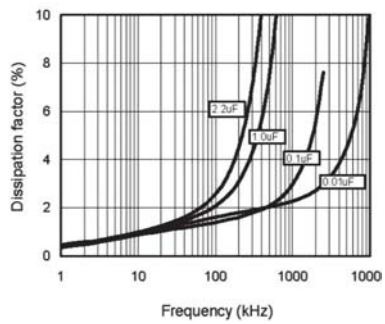


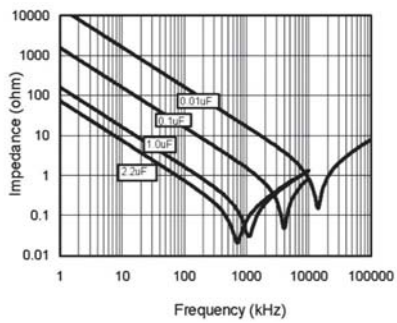




Frequency Characteristics

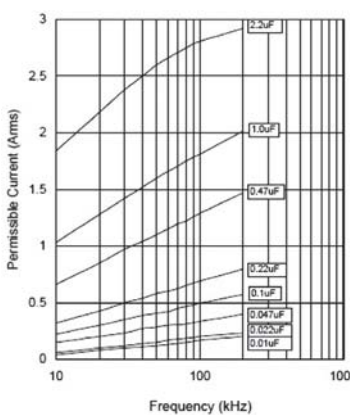




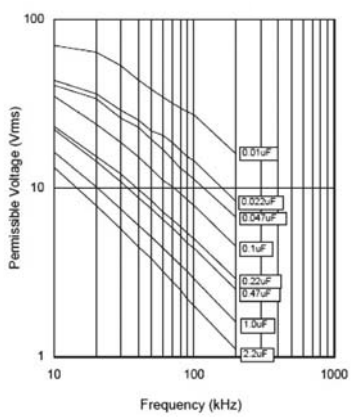


■ Applicable Specifications

Permissible Current



Permissible Voltage
(at sinewave)



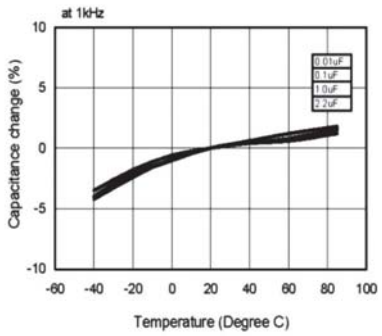
Pulse Handling Capability(dv/dt)
(Max 1000cycles)

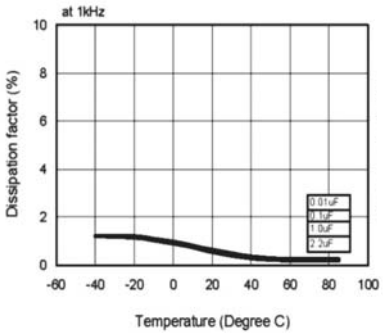
Rating Voltage	Capacitance Value(uF)	Code	dV/dt(V/us)	Current(o-p) (A)
400VDC	0.010	103	131	1.31
	0.015	153		1.97
	0.022	223		2.88
	0.033	333		4.32
	0.047	473	78	3.67
	0.068	683		5.30
	0.100	104		7.80
	0.150	154	37	5.55
	0.220	224		8.14
	0.330	334		12.21
	0.470	474		17.39
	0.680	684	22	14.96
	1.000	105		22.00
	1.200	155	18	27.00
	2.200	225		39.60

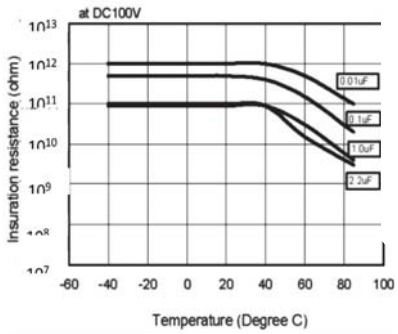
■ Electrical Characteristics (Typical Data)

630Vdc Series

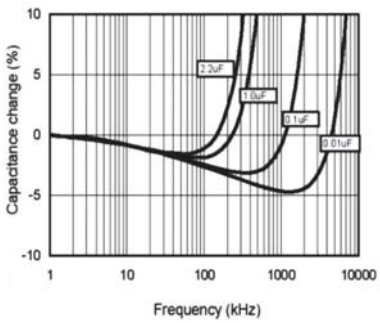
Temperature Characteristics

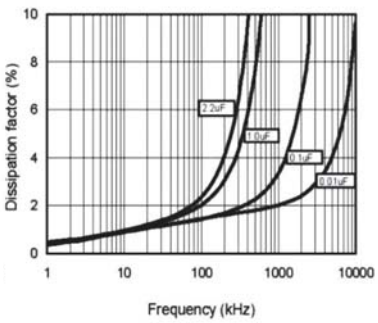


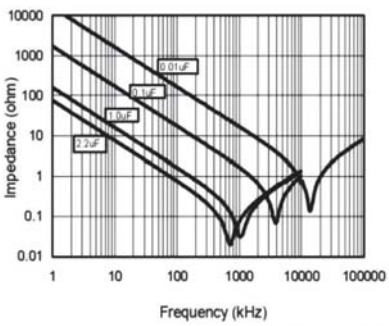




Frequency Characteristics

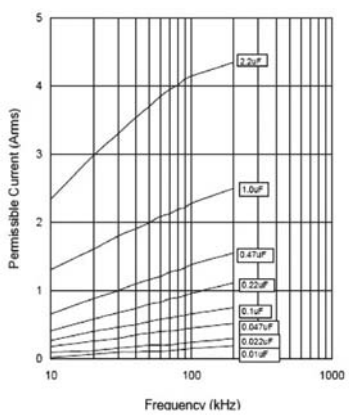




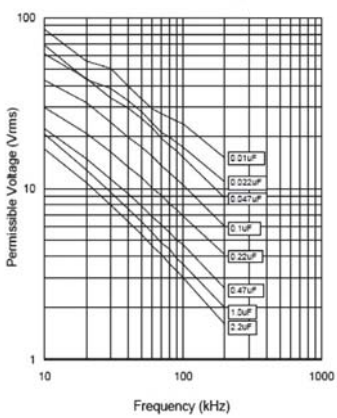


■ Applicable Specifications

Permissible Current



Permissible Voltage
(at sinewave)



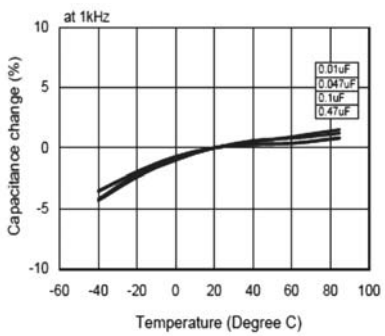
Pulse Handling Capability(dv/dt)
(Max 1000cycles)

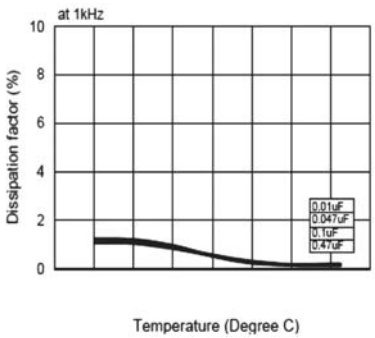
Rating Voltage	Capacitance Value(uF)	Code	dV/dt(V/us)	Current(o-p) (A)
630VDC	0.010	103	273	2.73
	0.015	153		4.10
	0.022	223		6.01
	0.033	333		9.01
	0.047	473		12.83
	0.068	683	116	7.89
	0.100	104		11.60
	0.150	154		17.40
	0.220	224		25.52
	0.330	334	63	20.79
	0.470	474		29.61
	0.680	684		42.84
	1.000	105	48	48.00
	1.500	155		72.00
	2.200	225		105.60

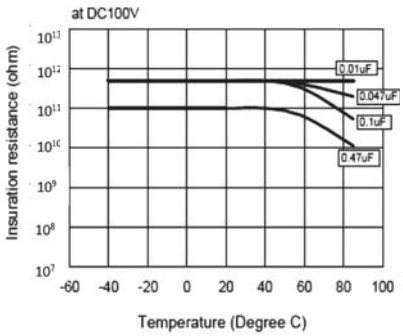
■ Electrical Characteristics (Typical Data)

125Vac Series

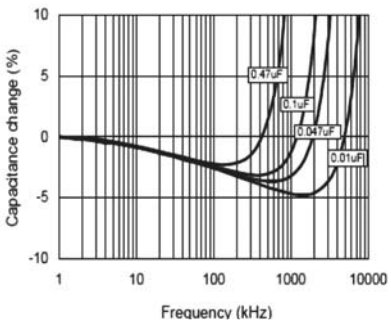
Temperature Characteristics

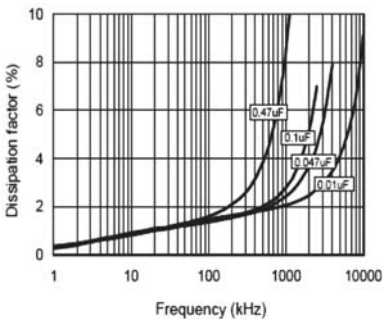


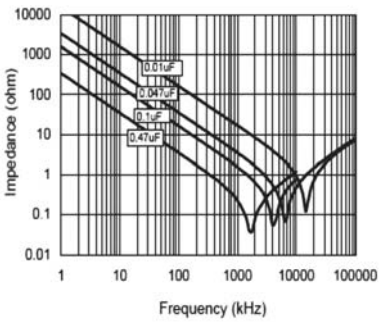




Frequency Characteristics



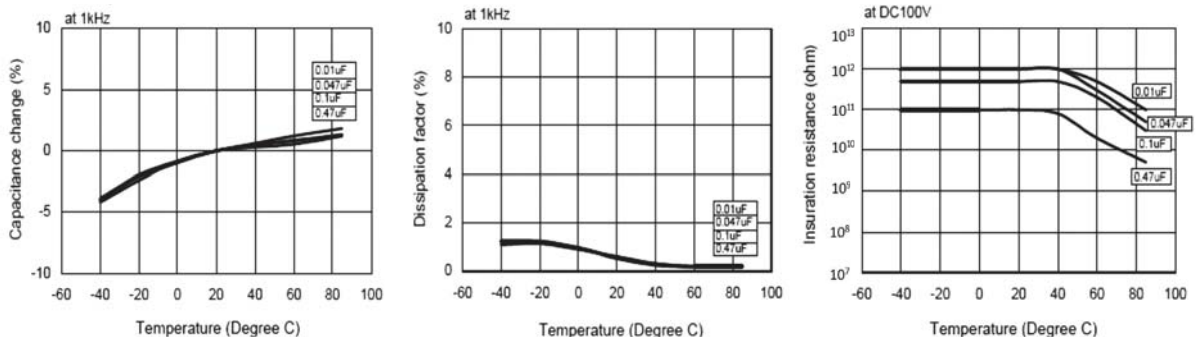




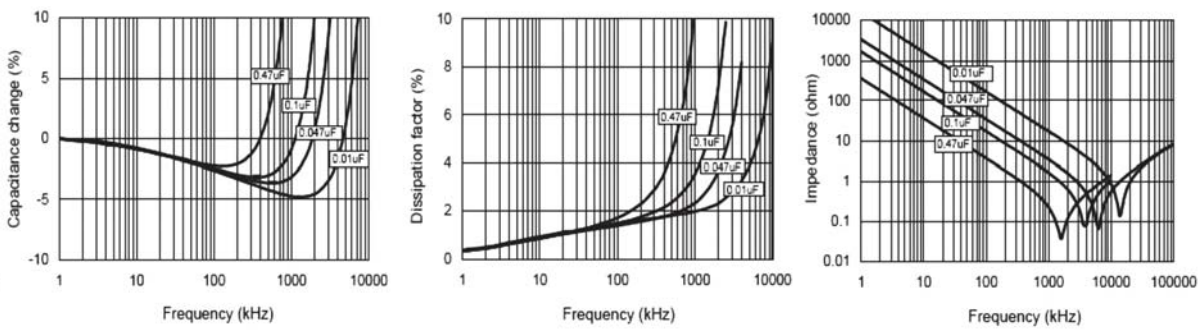
■ Electrical Characteristics (Typical Data)

250Vac Series

Temperature Characteristics



Frequency Characteristics



BMPE

Non-inductive construction using metallized Polyester film with flame retardant plastic case and epoxy resin filled.

■ Features

- Non-inductive wound construction.
- Wide capacitance range, small size, and light weight.
- Long life due to self-healing effect.
- Plastic case(UL94 V-0), Epoxy resin sealing
- RoHS directive compliant

■ Applications

- Typical applications include blocking, coupling, decoupling,
- bypassing and interference suppression in low voltage
- applications such as automotive. Not for use with the mains.

■ Specifications

Reference Standard		IEC 60384-2	
Climatic Category		40 / 105 / 21	
Rated Temperature		85℃	
Operation Temperature Range		-40℃~105℃ +85℃~+105℃ decreasing factor 1.0% / ℃ for V_R(dc)	
Rated Voltage	**DC-Type**	100V, 250V, 400V, 630V, 1000V	
	AC-Type	63Vac, 160Vac, 200Vac, 250Vac, 250Vac	
Capacitance Range		0.015μF~10.0μF	
Capacitance Tolerance		G : ±2% H : ±3% J : ±5% K : ±10% M : ±20% ※Standard : K : ±10%, Other Tolerance Grade : available on request.	
Voltage Proof	**DC-Type**	1.75U_R(dc) / 3sec	
	AC-Type	4.3U_R(ac) / 3sec	
Dissipation Factor		≤1.0%(at 1kHz 20℃)	
Rated Voltage	**DC-Type**	U_R(dc)〈500V	≥9,000MΩ C_R≤0.33μF 100Vdc 60sec 20℃
			≥3,000Ω·F C_R〉0.33μF 100Vdc 60sec 20℃
		U_R(dc)≥500V	≥9,000MΩ C_R≤0.33μF 500Vdc 60sec 20℃
			≥3,000Ω·F C_R〉0.33μF 500Vdc 60sec 20℃
	AC-Type		≥9,000MΩ C_R≤0.33μF 250Vdc 60sec 20℃
			≥3,000Ω·F C_R〉0.33μF 250Vdc 60sec 20℃

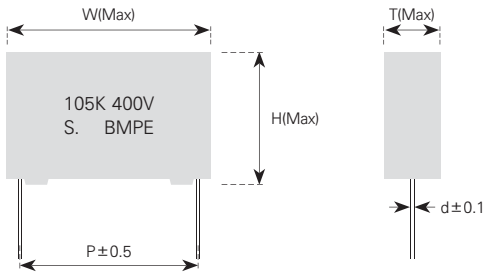
■ Part Number System

BMPE	100V	125	K	10	S	5	
Part-1	Part-2	Part-3	Part-4	Part-5	Part-6	Part-7	Part-8

Part-1 : Series Code(Series Name) - BMPE
Part-2 : Rated Voltage(DC : 100V~1000V / 63Vac~250Vac(Only for AC applications))
Part-3 : Rated Capacitance Value(0.015μF~10.0μF / 153~106)
Part-4 : Capacitance Tolerance(G : ±2% H : ±3% J : ±5% K : ±10% M : ±20%)
Part-5 : Lead Spacing(10mm / 15mm / 22.5mm / 27.5mm)
Part-6 : Forming-Type and Packing Code →
Part-7 : Size Number(1~4 : Min-Type / 5 : Standard-Type / 6~9 : Large-Type)
Part-8 : Internal Use

CODE	STYLE
B	Bending Forming
C	Straight Cutting
D	D-Type Forming
L	B-Type long Forming
M	C-Type long Forming
S	Straight
X	B-Type Forming
Y	C-Type Forming
Z	Z-Type Forming
T	A-Type Tapping
U	B-Type Tapping
V	C-Type Tapping

■ Dimensions



160Vdc

Cap. (μF)	Dimensions(mm) W (max.)	H (max.)	T (max.)	Pitch - d	PART NUMBER
1.5	13.0	15.0	9.0	10-0.6	BMPE100V155K10S5 ____
1.8	13.0	16.0	10.0	10-0.6	BMPE100V185K10S5 ____
1.2	18.0	12.0	6.0	15-0.8	BMPE100V125K15S5 ____
1.5	18.0	13.0	7.0	15-0.8	BMPE100V155K15S5 ____
1.8	18.0	13.5	7.5	15-0.8	BMPE100V185K15S5 ____
2.2	18.0	15.0	8.5	15-0.8	BMPE100V225K15S5 ____
2.7	18.0	15.0	9.0	15-0.8	BMPE100V275K15S5 ____
3.3	18.0	16.5	10.0	15-0.8	BMPE100V335K15S5 ____
3.9	18.0	18.0	10.0	15-0.8	BMPE100V395K15S5 ____
4.7	18.0	19.0	11.0	15-0.8	BMPE100V475K15S5 ____
5.6	18.0	21.0	12.0	15-0.8	BMPE100V565K15S5 ____
2.2	26.0	15.0	6.0	22.5-0.8	BMPE100V225K22.5S5 ____
2.7	26.0	16.5	7.0	22.5-0.8	BMPE100V275K22.5S5 ____
3.3	26.0	16.5	7.0	22.5-0.8	BMPE100V335K22.5S5 ____
3.9	26.0	17.0	8.5	22.5-0.8	BMPE100V395K22.5S5 ____
4.7	26.0	18.0	9.0	22.5-0.8	BMPE100V475K22.5S5 ____
5.6	26.0	19.0	10.0	22.5-0.8	BMPE100V565K22.5S5 ____
6.8	26.0	20.0	11.0	22.5-0.8	BMPE100V685K22.5S5 ____
8.2	26.0	22.0	12.5	22.5-0.8	BMPE100V825K22.5S5 ____
10	26.0	24.0	13.5	22.5-0.8	BMPE100V106K22.5S5 ____
8.2	31.0	20.0	11.0	27.5-0.8	BMPE100V825K27.5S5 ____
10	31.0	22.0	13.0	27.5-0.8	BMPE100V106K27.5S5 ____

250Vdc

Cap. (μF)	Dimensions(mm) W (max.)	H (max.)	T (max.)	Pitch - d	PART NUMBER
184	10.5	11.0	5.0	7.5-0.6	BMPE250V184K7.5S5 ____
224	10.5	12.0	6.0	7.5-0.6	BMPE250V224K7.5S5 ____
274	10.5	12.0	6.0	7.5-0.6	BMPE250V274K7.5S5 ____
184	13.0	11.0	5.0	10-0.6	BMPE250V184K10S5 ____
224	13.0	11.0	5.0	10-0.6	BMPE250V224K10S5 ____
274	13.0	11.0	5.0	10-0.6	BMPE250V274K10S5 ____
334	13.0	11.0	5.5	10-0.6	BMPE250V334K10S5 ____
394	13.0	12.0	6.0	10-0.6	BMPE250V394K10S5 ____
474	13.0	13.0	7.0	10-0.6	BMPE250V474K10S5 ____
334	18.0	11.0	5.0	15-0.8	BMPE250V334K15S5 ____
394	18.0	11.0	5.0	15-0.8	BMPE250V394K15S5 ____
474	18.0	11.0	5.0	15-0.8	BMPE250V474K15S5 ____
564	18.0	11.0	5.0	15-0.8	BMPE250V564K15S5 ____
684	18.0	12.0	6.0	15-0.8	BMPE250V684K15S5 ____
824	18.0	13.0	7.0	15-0.8	BMPE250V824K15S5 ____
105	18.0	13.0	7.0	15-0.8	BMPE250V105K15S5 ____
125	18.0	13.5	7.5	15-0.8	BMPE250V125K15S5 ____
155	18.0	15.0	8.5	15-0.8	BMPE250V155K15S5 ____
185	18.0	16.5	10.0	15-0.8	BMPE250V185K15S5 ____
225	18.0	19.0	10.0	15-0.8	BMPE250V225K15S5 ____
824	26.0	15.0	6.0	22.5-0.8	BMPE250V824K22.5S5 ____
105	26.0	15.0	6.0	22.5-0.8	BMPE250V105K22.5S5 ____
125	26.0	15.0	6.0	22.5-0.8	BMPE250V125K22.5S5 ____
155	26.0	16.5	7.0	22.5-0.8	BMPE250V155K22.5S5 ____
185	26.0	16.5	7.0	22.5-0.8	BMPE250V185K22.5S5 ____
225	26.0	17.0	8.5	22.5-0.8	BMPE250V225K22.5S5 ____
275	26.0	18.0	9.0	22.5-0.8	BMPE250V275K22.5S5 ____
335	26.0	19.0	10.0	22.5-0.8	BMPE250V335K22.5S5 ____
395	26.0	20.0	11.0	22.5-0.8	BMPE250V395K22.5S5 ____
475	26.0	22.0	12.5	22.5-0.8	BMPE250V475K22.5S5 ____
565	26.0	22.0	12.5	22.5-0.8	BMPE250V565K22.5S5 ____
685	26.0	24.0	13.5	22.5-0.8	BMPE250V685K22.5S5 ____
225	31.0	18.0	9.0	27.5-0.8	BMPE250V225K27.5S5 ____
275	31.0	18.0	9.0	27.5-0.8	BMPE250V275K27.5S5 ____
335	31.0	18.0	9.0	27.5-0.8	BMPE250V335K27.5S5 ____
395	31.0	19.0	10.0	27.5-0.8	BMPE250V395K27.5S5 ____

475	31.0	20.0	11.0	27.5-0.8	BMPE250V475K27.5S5 ____
565	31.0	20.0	11.0	27.5-0.8	BMPE250V565K27.5S5 ____
685	31.0	22.0	13.0	27.5-0.8	BMPE250V685K27.5S5 ____
825	31.0	23.5	14.0	27.5-0.8	BMPE250V825K27.5S5 ____
106	31.0	25.5	16.0	27.5-0.8	BMPE250V106K27.5S5 ____
565	42.0	24.0	12.0	37.5-1	BMPE250V565K37.5S5 ____
685	42.0	24.0	12.0	37.5-1	BMPE250V685K37.5S5 ____
825	42.0	27.0	15.0	37.5-1	BMPE250V825K37.5S5 ____
106	42.0	27.0	15.0	37.5-1	BMPE250V106K37.5S5 ____

400Vdc

Cap. (μF)	Dimensions(mm)			Pitch - d	PART NUMBER
	W (max.)	H (max.)	T (max.)		
0.068	10.5	11.0	5.0	7.5-0.6	BMPE400V683K7.5S5 ____
0.082	10.5	11.0	5.0	7.5-0.6	BMPE400V823K7.5S5 ____
0.1	10.5	11.0	5.0	7.5-0.6	BMPE400V104K7.5S5 ____
0.12	10.5	12.0	6.0	7.5-0.6	BMPE400V124K7.5S5 ____
0.15	10.5	12.0	6.0	7.5-0.6	BMPE400V154K7.5S5 ____
0.1	13.0	11.0	5.0	10-0.6	BMPE400V104K10S5 ____
0.12	13.0	11.0	5.0	10-0.6	BMPE400V124K10S5 ____
0.15	13.0	11.0	5.0	10-0.6	BMPE400V154K10S5 ____
0.18	13.0	11.0	5.5	10-0.6	BMPE400V184K10S5 ____
0.22	13.0	12.0	6.0	10-0.6	BMPE400V224K10S5 ____
0.18	18.0	11.0	5.0	15-0.8	BMPE400V184K15S5 ____
0.22	18.0	11.0	5.0	15-0.8	BMPE400V224K15S5 ____
0.27	18.0	11.0	5.0	15-0.8	BMPE400V274K15S5 ____
0.33	18.0	12.0	6.0	15-0.8	BMPE400V334K15S5 ____
0.39	18.0	12.0	6.0	15-0.8	BMPE400V394K15S5 ____
0.47	18.0	13.0	7.0	15-0.8	BMPE400V474K15S5 ____
0.56	18.0	13.5	7.5	15-0.8	BMPE400V564K15S5 ____
0.68	18.0	15.0	8.5	15-0.8	BMPE400V684K15S5 ____
0.82	18.0	17.0	8.0	15-0.8	BMPE400V824K15S5 ____
1	18.0	16.5	10.0	15-0.8	BMPE400V105K15S5 ____
1.2	18.0	19.0	11.0	15-0.8	BMPE400V125K15S5 ____
1.5	18.0	21.0	12.0	15-0.8	BMPE400V155K15S5 ____
0.27	26.0	15.0	6.0	22.5-0.8	BMPE400V274K22.5S5 ____
0.33	26.0	15.0	6.0	22.5-0.8	BMPE400V334K22.5S5 ____
0.39	26.0	15.0	6.0	22.5-0.8	BMPE400V394K22.5S5 ____
0.47	26.0	15.0	6.0	22.5-0.8	BMPE400V474K22.5S5 ____
0.56	26.0	15.0	6.0	22.5-0.8	BMPE400V564K22.5S5 ____
0.68	26.0	16.5	7.0	22.5-0.8	BMPE400V684K22.5S5 ____
0.82	26.0	17.0	8.5	22.5-0.8	BMPE400V824K22.5S5 ____
1	26.0	18.0	9.0	22.5-0.8	BMPE400V105K22.5S5 ____
1.2	26.0	19.0	10.0	22.5-0.8	BMPE400V125K22.5S5 ____
1.5	26.0	20.0	11.0	22.5-0.8	BMPE400V155K22.5S5 ____
1.8	26.0	22.0	12.5	22.5-0.8	BMPE400V185K22.5S5 ____
2.2	26.0	24.0	13.5	22.5-0.8	BMPE400V225K22.5S5 ____
2.7	26.0	25.0	15.0	22.5-0.8	BMPE400V275K22.5S5 ____
3.3	26.0	25.5	16.0	22.5-0.8	BMPE400V335K22.5S5 ____
1	31.0	18.0	9.0	27.5-0.8	BMPE400V105K27.5S5 ____
1.2	31.0	18.0	9.0	27.5-0.8	BMPE400V125K27.5S5 ____
1.5	31.0	19.0	10.0	27.5-0.8	BMPE400V155K27.5S5 ____
1.8	31.0	20.0	11.0	27.5-0.8	BMPE400V185K27.5S5 ____
2.2	31.0	22.0	13.0	27.5-0.8	BMPE400V225K27.5S5 ____
2.7	31.0	22.0	13.0	27.5-0.8	BMPE400V275K27.5S5 ____
3.3	31.0	24.5	15.0	27.5-0.8	BMPE400V335K27.5S5 ____
3.9	31.0	25.5	16.0	27.5-0.8	BMPE400V395K27.5S5 ____
4.7	31.0	26.0	18.0	27.5-0.8	BMPE400V475K27.5S5 ____
5.6	31.0	28.0	19.0	27.5-0.8	BMPE400V565K27.5S5 ____
6.8	31.0	31.0	21.0	27.5-0.8	BMPE400V685K27.5S5 ____
8.2	31.0	37.0	22.0	27.5-0.8	BMPE400V825K27.5S5 ____
2.2	42.0	24.0	12.0	37.5-1	BMPE400V225K37.5S5 ____
2.7	42.0	24.0	12.0	37.5-1	BMPE400V275K37.5S5 ____
3.3	42.0	27.0	15.0	37.5-1	BMPE400V335K37.5S5 ____
3.9	42.0	27.0	15.0	37.5-1	BMPE400V395K37.5S5 ____
4.7	42.0	30.0	17.0	37.5-1	BMPE400V475K37.5S5 ____
5.6	42.0	30.0	17.0	37.5-1	BMPE400V565K37.5S5 ____
6.8	42.0	34.0	20.5	37.5-1	BMPE400V685K37.5S5 ____
8.2	42.0	35.5	22.5	37.5-1	BMPE400V825K37.5S5 ____
10	42.0	41.0	27.5	37.5-1	BMPE400V106K37.5S5 ____

630Vdc

Cap. (μF)	Dimensions(mm)			Pitch - d	PART NUMBER
	W (max.)	H (max.)	T (max.)		
0.022	10.5	11.0	5.0	7.5_0.6	BMPE630V223K7.5S5 ____
0.027	10.5	11.0	5.0	7.5_0.6	BMPE630V273K7.5S5 ____

0.033	10.5	12.0	6.0	7.5_0.6	BMPE630V333K7.5S5 _____
0.039	10.5	12.0	6.0	7.5_0.6	BMPE630V393K7.5S5 _____
0.047	10.5	12.0	6.0	7.5_0.6	BMPE630V473K7.5S5 _____
0.056	10.5	13.0	7.0	7.5_0.6	BMPE630V563K7.5S5 _____
0.033	13.0	11.0	5.0	10_0.6	BMPE630V333K10S5 _____
0.039	13.0	11.0	5.0	10_0.6	BMPE630V393K10S5 _____
0.047	13.0	11.0	5.0	10_0.6	BMPE630V473K10S5 _____
0.056	13.0	11.0	5.0	10_0.6	BMPE630V563K10S5 _____
0.068	13.0	11.0	5.5	10_0.6	BMPE630V683K10S5 _____
0.082	13.0	12.0	6.0	10_0.6	BMPE630V823K10S5 _____
0.056	18.0	11.0	5.0	15_0.8	BMPE630V563K15S5 _____
0.068	18.0	11.0	5.0	15_0.8	BMPE630V683K15S5 _____
0.082	18.0	12.0	6.0	15_0.8	BMPE630V823K15S5 _____
0.1	18.0	12.0	6.0	15_0.8	BMPE630V104K15S5 _____
0.12	18.0	13.0	7.0	15_0.8	BMPE630V124K15S5 _____
0.15	18.0	13.0	7.0	15_0.8	BMPE630V154K15S5 _____
0.18	18.0	15.0	8.5	15_0.8	BMPE630V184K15S5 _____
0.22	18.0	17.0	8.0	15_0.8	BMPE630V224K15S5 _____
0.27	18.0	18.0	9.0	15_0.8	BMPE630V274K15S5 _____
0.33	18.0	19.0	10.0	15_0.8	BMPE630V334K15S5 _____
0.39	18.0	19.0	11.0	15_0.8	BMPE630V394K15S5 _____
0.47	18.0	21.0	12.0	15_0.8	BMPE630V474K15S5 _____
0.12	26.0	15.0	6.0	22.5_0.8	BMPE630V124K22.5S5 _____
0.15	26.0	15.0	6.0	22.5_0.8	BMPE630V154K22.5S5 _____
0.18	26.0	15.0	6.0	22.5_0.8	BMPE630V184K22.5S5 _____
0.22	26.0	15.0	6.0	22.5_0.8	BMPE630V224K22.5S5 _____
0.27	26.0	16.5	7.0	22.5_0.8	BMPE630V274K22.5S5 _____
0.33	26.0	17.0	8.5	22.5_0.8	BMPE630V334K22.5S5 _____
0.39	26.0	17.0	8.5	22.5_0.8	BMPE630V394K22.5S5 _____
0.47	26.0	18.0	9.0	22.5_0.8	BMPE630V474K22.5S5 _____
0.56	26.0	19.0	10.0	22.5_0.8	BMPE630V564K22.5S5 _____
0.68	26.0	20.0	11.0	22.5_0.8	BMPE630V684K22.5S5 _____
0.82	26.0	22.0	12.5	22.5_0.8	BMPE630V824K22.5S5 _____
1	26.0	24.0	13.5	22.5_0.8	BMPE630V105K22.5S5 _____
1.2	26.0	25.0	15.0	22.5_0.8	BMPE630V125K22.5S5 _____
0.33	31.0	18.0	9.0	27.5_0.8	BMPE630V334K27.5S5 _____
0.39	31.0	18.0	9.0	27.5_0.8	BMPE630V394K27.5S5 _____
0.47	31.0	18.0	9.0	27.5_0.8	BMPE630V474K27.5S5 _____
0.56	31.0	18.0	9.0	27.5_0.8	BMPE630V564K27.5S5 _____
0.68	31.0	19.0	10.0	27.5_0.8	BMPE630V684K27.5S5 _____
0.82	31.0	20.0	11.0	27.5_0.8	BMPE630V824K27.5S5 _____
1	31.0	22.0	13.0	27.5_0.8	BMPE630V105K27.5S5 _____
1.2	31.0	23.5	14.0	27.5_0.8	BMPE630V125K27.5S5 _____
1.5	31.0	24.5	15.0	27.5_0.8	BMPE630V155K27.5S5 _____
1.8	31.0	25.5	16.0	27.5_0.8	BMPE630V185K27.5S5 _____
2.2	31.0	26.0	18.0	27.5_0.8	BMPE630V225K27.5S5 _____
2.7	31.0	33.0	18.0	27.5_0.8	BMPE630V275K27.5S5 _____
3.3	31.0	37.0	22.0	27.5_0.8	BMPE630V335K27.5S5 _____
4.7	31.0	37.0	22.0	27.5_0.8	BMPE630V475K27.5S5 _____
0.82	42.0	24.0	12.0	37.5_1	BMPE630V824K37.5S5 _____
1	42.0	24.0	12.0	37.5_1	BMPE630V105K37.5S5 _____
1.2	42.0	24.0	12.0	37.5_1	BMPE630V125K37.5S5 _____
1.5	42.0	24.0	12.0	37.5_1	BMPE630V155K37.5S5 _____
1.8	42.0	27.0	15.0	37.5_1	BMPE630V185K37.5S5 _____
2.2	42.0	27.0	15.0	37.5_1	BMPE630V225K37.5S5 _____
2.7	42.0	29.0	15.5	37.5_1	BMPE630V275K37.5S5 _____
3.3	42.0	30.0	17.0	37.5_1	BMPE630V335K37.5S5 _____
3.9	42.0	34.0	20.5	37.5_1	BMPE630V395K37.5S5 _____
4.7	42.0	34.0	20.5	37.5_1	BMPE630V475K37.5S5 _____
5.6	42.0	40.0	20.0	37.5_1	BMPE630V565K37.5S5 _____
6.8	42.0	41.0	27.5	37.5_1	BMPE630V685K37.5S5 _____
8.2	42.0	45.0	25.0	37.5_1	BMPE630V825K37.5S5 _____

1000Vdc

Cap. (μF)	Dimensions(mm)			Pitch - d	PART NUMBER
	W (max.)	H (max.)	T (max.)		
0.0082	10.5	11.0	5.0	7.5-0.6	BMPE1000V822K7.5S5 _____
0.01	10.5	12.0	6.0	7.5-0.6	BMPE1000V103K7.5S5 _____
0.012	10.5	12.0	6.0	7.5-0.6	BMPE1000V123K7.5S5 _____
0.015	13.0	11.0	5.0	10-0.6	BMPE1000V153K10S5 _____
0.018	13.0	11.0	5.5	10-0.6	BMPE1000V183K10S5 _____
0.022	13.0	12.0	6.0	10-0.6	BMPE1000V223K10S5 _____
0.027	13.0	12.5	6.5	10-0.6	BMPE1000V273K10S5 _____
0.033	13.0	13.0	7.0	10-0.6	BMPE1000V333K10S5 _____
0.022	18.0	11.0	5.0	15-0.8	BMPE1000V223K15S5 _____
0.027	18.0	11.0	5.0	15-0.8	BMPE1000V273K15S5 _____
0.033	18.0	11.0	5.0	15-0.8	BMPE1000V333K15S5 _____
0.039	18.0	12.0	6.0	15-0.8	BMPE1000V393K15S5 _____

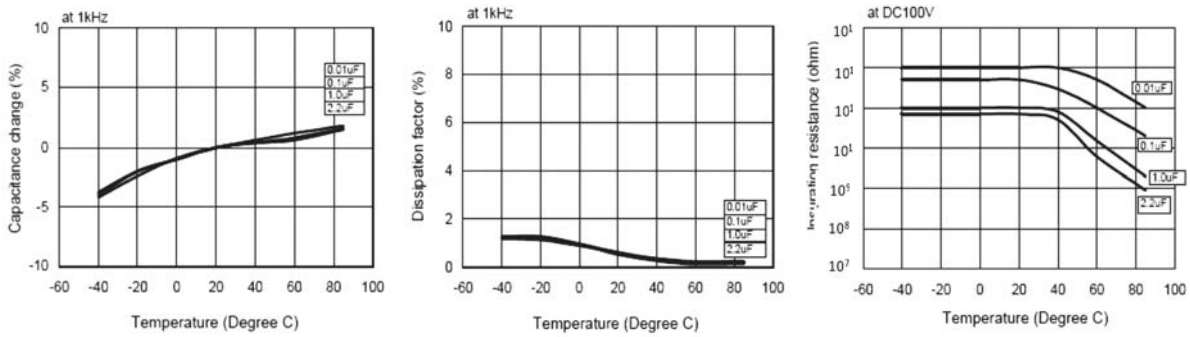
0.047	18.0	12.0	6.0	15-0.8	BMPE1000V473K15S5 ____
0.056	18.0	12.0	6.0	15-0.8	BMPE1000V563K15S5 ____
0.068	18.0	13.0	7.0	15-0.8	BMPE1000V683K15S5 ____
0.082	18.0	13.5	7.5	15-0.8	BMPE1000V823K15S5 ____
0.1	18.0	15.0	8.5	15-0.8	BMPE1000V104K15S5 ____
0.12	18.0	17.0	8.0	15-0.8	BMPE1000V124K15S5 ____
0.15	18.0	16.5	10.0	15-0.8	BMPE1000V154K15S5 ____
0.18	18.0	19.0	10.0	15-0.8	BMPE1000V184K15S5 ____
0.033	26.0	15.0	6.0	22.5-0.8	BMPE1000V333K22.5S5 ____
0.039	26.0	15.0	6.0	22.5-0.8	BMPE1000V393K22.5S5 ____
0.047	26.0	15.0	6.0	22.5-0.8	BMPE1000V473K22.5S5 ____
0.056	26.0	15.0	6.0	22.5-0.8	BMPE1000V563K22.5S5 ____
0.068	26.0	15.0	6.0	22.5-0.8	BMPE1000V683K22.5S5 ____
0.082	26.0	15.0	6.0	22.5-0.8	BMPE1000V823K22.5S5 ____
0.1	26.0	15.0	6.0	22.5-0.8	BMPE1000V104K22.5S5 ____
0.12	26.0	16.5	7.0	22.5-0.8	BMPE1000V124K22.5S5 ____
0.15	26.0	16.5	7.0	22.5-0.8	BMPE1000V154K22.5S5 ____
0.18	26.0	17.0	8.5	22.5-0.8	BMPE1000V184K22.5S5 ____
0.22	26.0	18.0	9.0	22.5-0.8	BMPE1000V224K22.5S5 ____
0.27	26.0	19.0	10.0	22.5-0.8	BMPE1000V274K22.5S5 ____
0.33	26.0	20.0	11.0	22.5-0.8	BMPE1000V334K22.5S5 ____
0.39	26.0	22.0	12.5	22.5-0.8	BMPE1000V394K22.5S5 ____
0.47	26.0	24.0	13.5	22.5-0.8	BMPE1000V474K22.5S5 ____
0.56	26.0	25.0	15.0	22.5-0.8	BMPE1000V564K22.5S5 ____
0.68	26.0	25.0	15.0	22.5-0.8	BMPE1000V684K22.5S5 ____
0.15	31.0	18.0	9.0	27.5-0.8	BMPE1000V154K27.5S5 ____
0.18	31.0	18.0	9.0	27.5-0.8	BMPE1000V184K27.5S5 ____

0.22	31.0	18.0	9.0	27.5-0.8	BMPE1000V224K27.5S5 ____
0.27	31.0	18.0	9.0	27.5-0.8	BMPE1000V274K27.5S5 ____
0.33	31.0	19.0	10.0	27.5-0.8	BMPE1000V334K27.5S5 ____
0.39	31.0	19.0	10.0	27.5-0.8	BMPE1000V394K27.5S5 ____
0.47	31.0	20.0	11.0	27.5-0.8	BMPE1000V474K27.5S5 ____
0.56	31.0	22.0	13.0	27.5-0.8	BMPE1000V564K27.5S5 ____
0.68	31.0	23.5	14.0	27.5-0.8	BMPE1000V684K27.5S5 ____
0.82	31.0	24.5	15.0	27.5-0.8	BMPE1000V824K27.5S5 ____
1	31.0	26.0	18.0	27.5-0.8	BMPE1000V105K27.5S5 ____
1.2	31.0	28.0	19.0	27.5-0.8	BMPE1000V125K27.5S5 ____
1.5	31.0	31.0	21.0	27.5-0.8	BMPE1000V155K27.5S5 ____
1.8	31.0	37.0	22.0	27.5-0.8	BMPE1000V185K27.5S5 ____
2.2	31.0	37.0	22.0	27.5-0.8	BMPE1000V225K27.5S5 ____
0.47	42.0	24.0	12.0	37.5-1	BMPE1000V474K37.5S5 ____
0.56	42.0	24.0	12.0	37.5-1	BMPE1000V564K37.5S5 ____
0.68	42.0	24.0	12.0	37.5-1	BMPE1000V684K37.5S5 ____
0.82	42.0	24.0	12.0	37.5-1	BMPE1000V824K37.5S5 ____
1	42.0	24.0	15.0	37.5-1	BMPE1000V105K37.5S5 ____
1.2	42.0	24.0	15.0	37.5-1	BMPE1000V125K37.5S5 ____
1.5	42.0	29.0	15.5	37.5-1	BMPE1000V155K37.5S5 ____
1.8	42.0	30.0	17.0	37.5-1	BMPE1000V185K37.5S5 ____
2.2	42.0	34.0	20.5	37.5-1	BMPE1000V225K37.5S5 ____
2.7	42.0	35.0	22.5	37.5-1	BMPE1000V275K37.5S5 ____
3.3	42.0	41.0	27.0	37.5-1	BMPE1000V335K37.5S5 ____
3.9	42.0	41.0	27.0	37.5-1	BMPE1000V395K37.5S5 ____
4.7	42.0	43.0	31.0	37.5-1	BMPE1000V475K37.5S5 ____

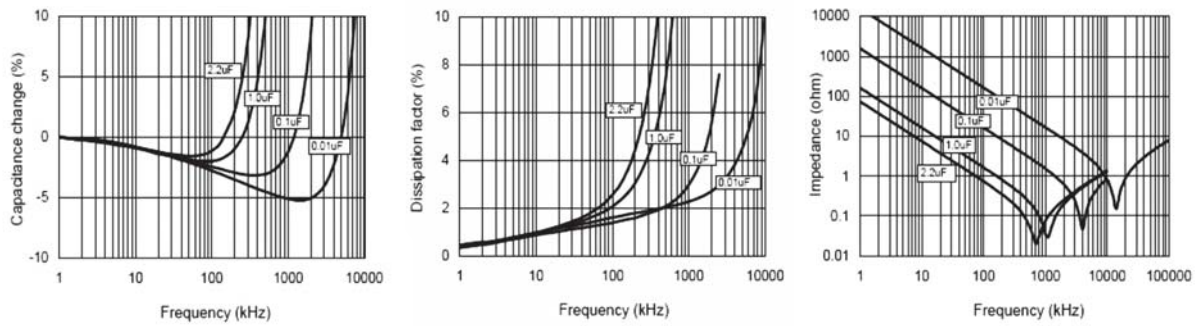
■ Electrical Characteristics (Typical Data)

100Vdc Series

Temperature Characteristics

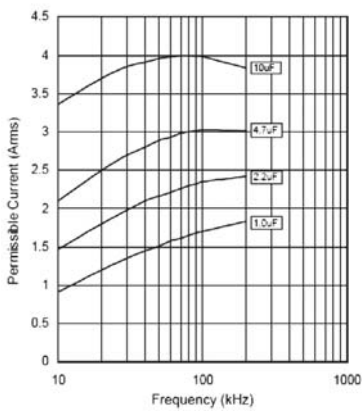


Frequency Characteristics

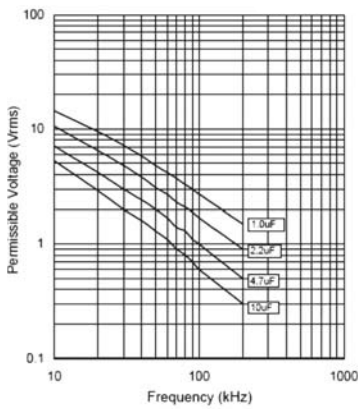


■ Applicable Specifications

Permissible Current



Permissible Voltage
(at sinewave)



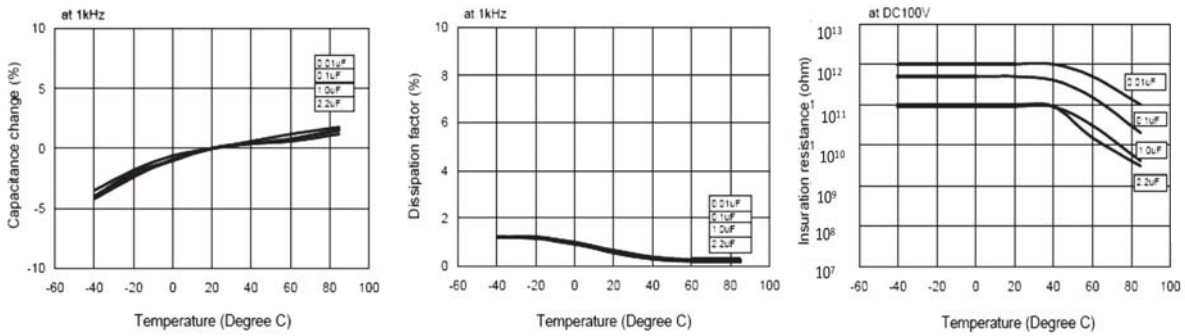
Pulse Handling Capability(dv/dt)
(Max 1000cycles)

Rating Voltage	Capacitance Value(uF)	Code	dV/dt(V/us)	Current(o-p) (A)
100VDC	0.56	564	22	12.32
	0.68	684		15.0
	0.82	824		18.0
	1.00	105		22.0
	1.20	125	11	13.2
	1.50	155		17.1
	1.80	185		19.8
	2.20	225		24.2
	2.70	275		29.7
	3.30	335		36.3
	3.90	395	6	23.4
	4.70	475		28.2
	5.60	565		33.6
	6.80	685		40.8
	8.20	825		49.2
	10.00	106		60.0

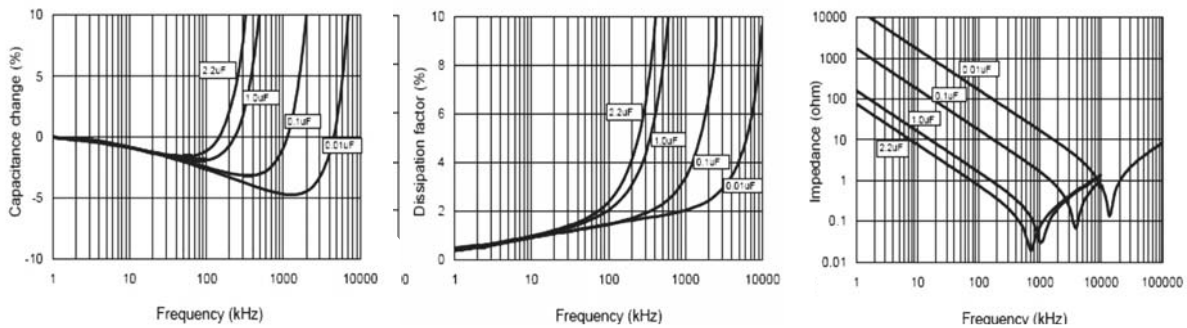
■ Electrical Characteristics (Typical Data)

250Vdc Series

Temperature Characteristics

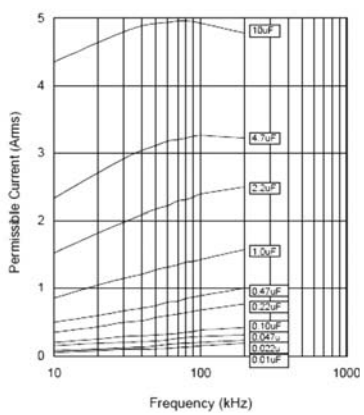


Frequency Characteristics

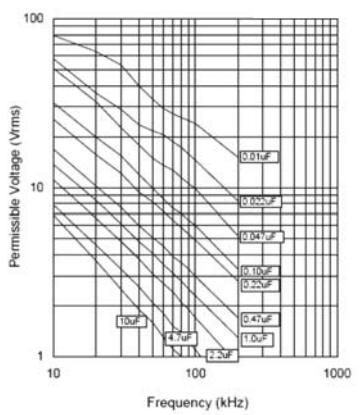


■ Applicable Specifications

Permissible Current



Permissible Voltage
(at sinewave)



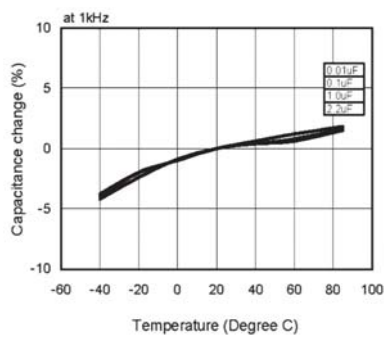
Pulse Handling Capability(dv/dt)
(Max 1000cycles)

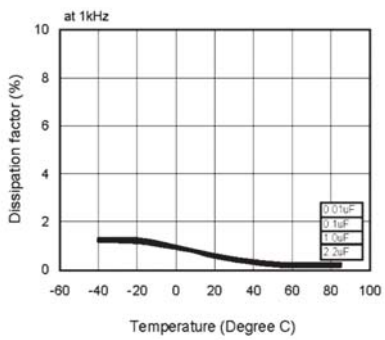
Rating Voltage	Capacitance Value(uF)	Code	dV/dt(V/us)	Current(o-p) (A)
250VDC	0.010	103	48	0.48
	0.015	153		0.72
	0.022	223		1.06
	0.033	333		1.58
	0.047	473		2.26
	0.068	683		3.26
	0.100	104		4.80
	0.150	154		7.20
	0.220	224	33	7.26
	0.330	334		10.89
	0.470	474	18	8.46
	0.680	684		12.24
	1.000	105		18.00
	1.500	155		27.00
	2.200	225	10	22.00
	3.300	335		33.00
	4.700	475		47.00
	6.800	685	8	54.40
	10.000	106		80.00

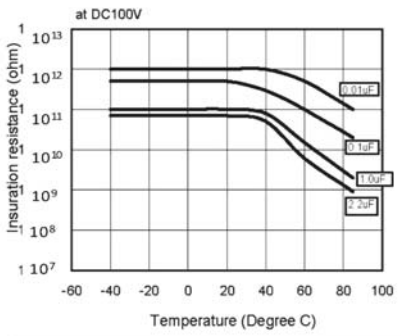
■ Electrical Characteristics (Typical Data)

400Vdc Series

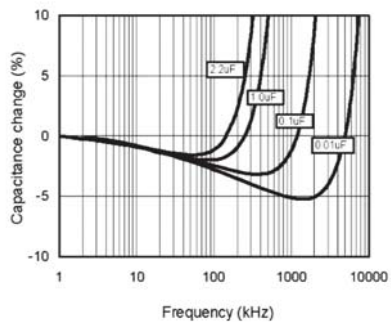
Temperature Characteristics

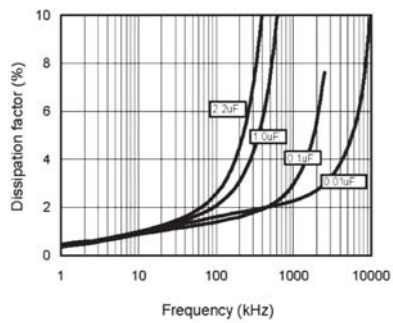


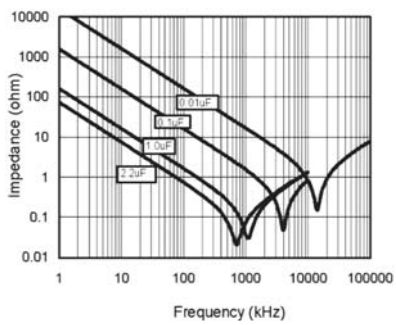




Frequency Characteristics

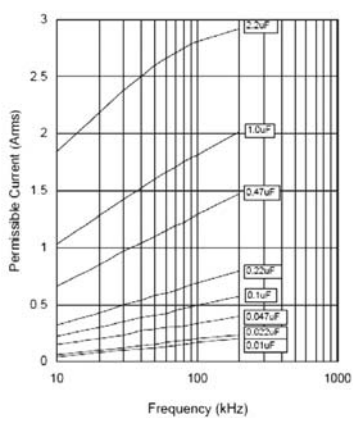




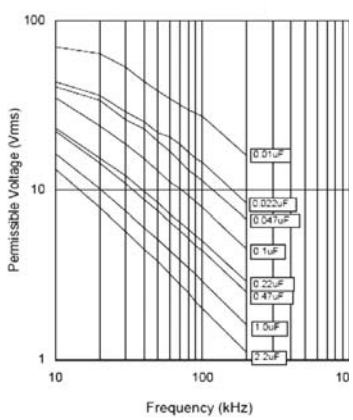


■ Applicable Specifications

Permissible Current



Permissible Voltage
(at sinewave)



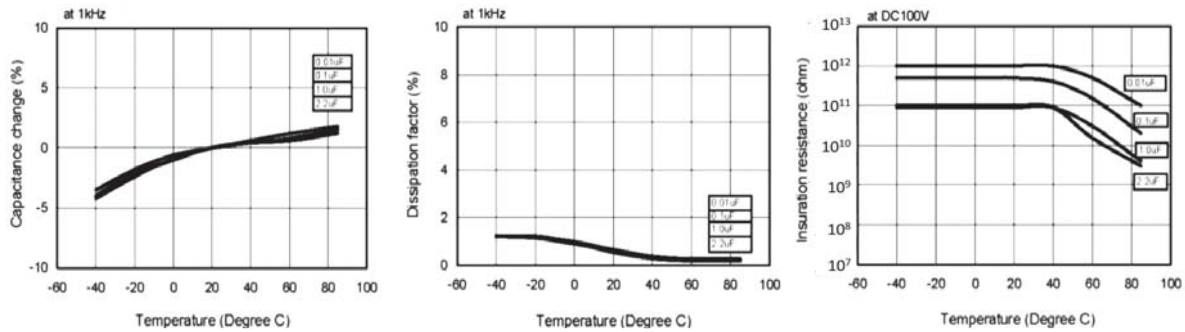
Pulse Handling Capability(dv/dt)
(Max 1000cycles)

Rating Voltage	Capacitance Value(uF)	Code	dV/dt(V/us)	Current(o-p) (A)
400VDC	0.010	103	131	1.31
	0.015	153		1.97
	0.022	223		2.88
	0.033	333		4.32
	0.047	473	78	3.67
	0.068	683		5.30
	0.100	104		7.80
	0.150	154	37	5.55
	0.220	224		8.14
	0.330	334		12.21
	0.470	474		17.39
	0.680	684	22	14.96
	1.000	105		22.00
	1.200	155	18	27.00
	2.200	225		39.60

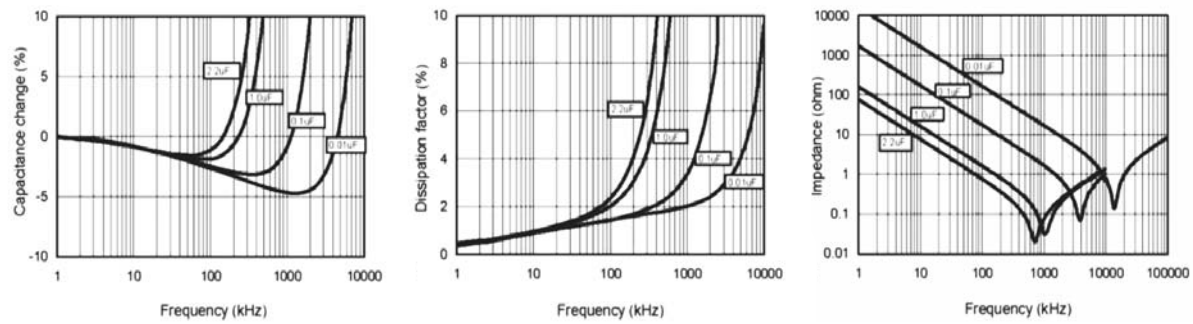
■ Electrical Characteristics (Typical Data)

630Vdc Series

Temperature Characteristics

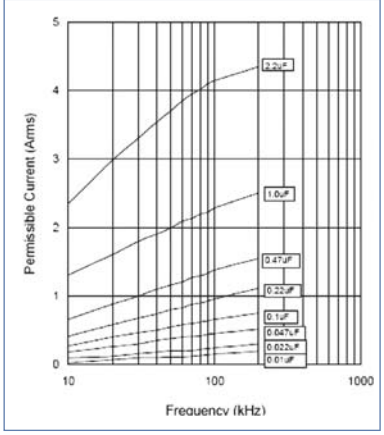


Frequency Characteristics

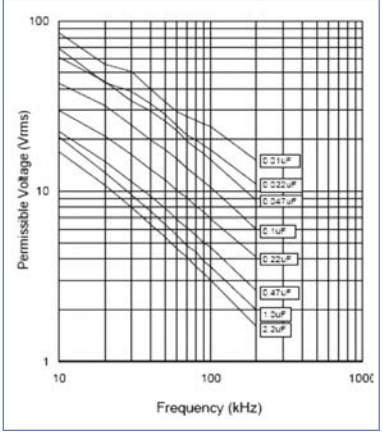


■ Applicable Specifications

Permissible Current



Permissible Voltage
(at sinewave)



Pulse Handling Capability(dv/dt)
(Max 1000cycles)

Rating Voltage	Capacitance Value(uF)	Code	dV/dt(V/us)	Current(o-p) (A)
630VDC	0.010	103	273	2.73
	0.015	153		4.10
	0.022	223		6.01
	0.033	333		9.01
	0.047	473		12.83
	0.068	683	116	7.89
	0.100	104		11.60
	0.150	154		17.40
	0.220	224		25.52
	0.330	334	63	20.79
	0.470	474		29.61
	0.680	684		42.84
	1.000	105	48	48.00
	1.500	155		72.00
	2.200	225		105.60

BMPE(P=5&7.5)

Non-inductive construction using metallized Polyester film with flame retardant plastic case and epoxy resin filled.

■ Features

- Non-inductive wound construction.
- Wide capacitance range, small size, and light weight
- Long life due to self-healing effect.
- Plastic case(UL94 V-0), Epoxy resin sealing
- RoHS directive compliant

■ Applications

- Typical applications include blocking, coupling, decoupling
- bypassing and interference suppression in low voltage
- applications such as automotive. Not for use with the mains.

■ Specifications

Reference Standard		IEC 60384-2	
Climatic Category		40 / 105 / 21	
Rated Temperature		85℃	
Operation Temperature Range		-40℃~105℃ +85℃~+105℃ decreasing factor 1.0% / ℃ for V_R(dc)	
Rated Voltage	**DC-Type**	63V, 100V, 250V, 400V, 630V, 1000V	
	AC-Type	40Vac, 63Vac, 160Vac, 200Vac, 220Vac, 250Vac	
Capacitance Range		0.001μF~10.0μF	
Capacitance Tolerance		G : ±2% H : ±3% J : ±5% K : ±10% M : ±20% ※Standard : K : ±10%, Other Tolerance Grade : available on request.	
Voltage Proof	**DC-Type**	1.75U_R(dc) / 3sec	
	AC-Type	4.3U_R(ac) / 3sec	
Dissipation Factor		≤1.0%(at 1kHz 20℃)	
Rated Voltage	**DC-Type**	U_R(dc)〈500V	≥9,000MΩ C_R≤0.33μF 100Vdc 60sec 20℃
			≥3,000Ω·F C_R〉0.33μF 100Vdc 60sec 20℃
		U_R(dc)≥500V	≥9,000MΩ C_R≤0.33μF 500Vdc 60sec 20℃
			≥3,000Ω·F C_R〉0.33μF 500Vdc 60sec 20℃
	AC-Type		≥9,000MΩ C_R≤0.33μF 250Vdc 60sec 20℃
			≥3,000Ω·F C_R〉0.33μF 250Vdc 60sec 20℃

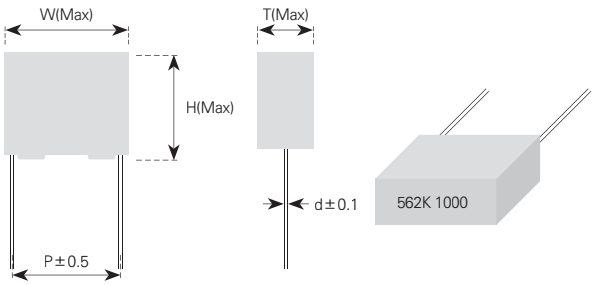
■ Part Number System

BMPE	63V	104	K	5	S	5	
Part-1	Part-2	Part-3	Part-4	Part-5	Part-6	Part-7	Part-8

Part-1 : Series Code(Series Name) - BMPE
Part-2 : Rated Voltage(DC:63V~1000V / 40Vac~250Vac(Only for AC applications))
Part-3 : Rated Capacitance Value(0.001μF~1.0μF / 102~105)
Part-4 : Capacitance Tolerance(G : ±2% H : ±3% J : ±5% K : ±10% M : ±20%)
Part-5 : Lead Spacing(5mm / 7.5mm)
Part-6 : Forming-Type and Packing Code →
Part-7 : Size Number(1~4 : Min-Type / 5 : Standard-Type / 6~9 : Large-Type)
Part-8 : Internal Use

CODE	STYLE
B	Bending Forming
C	Straight Cutting
D	D-Type Forming
L	B-Type long Forming
M	C-Type long Forming
S	Straight
X	B-Type Forming
Y	C-Type Forming
Z	Z-Type Forming
T	A-Type Tapping
U	B-Type Tapping
V	C-Type Tapping

■ Dimensions



63Vdc(40Vac)

Cap. (μF)	Dimensions(mm) W (max.)	H (max.)	T (max.)	Pitch - d	PART NUMBER
0.1	7.2	6.5	2.5	5-0.6	BMPE 63V 104K 5S 5 ____
0.15	7.2	7.5	3.5	5-0.6	BMPE 63V 154K 5S 5 ____
0.22	7.2	7.5	3.5	5-0.6	BMPE 63V 224K 5S 5 ____
0.33	7.2	9.5	4.5	5-0.6	BMPE 63V 334K 5S 5 ____
0.47	7.2	9.5	4.5	5-0.6	BMPE 63V 474K 5S 5 ____
0.68	7.2	11	6	5-0.6	BMPE 63V 684K 5S 5 ____
1	7.2	11	6	5-0.6	BMPE 63V 105K 5S 5 ____
0.1	10.5	6.5	3.5	7.5-0.6	BMPE 63V 104K 7.5S 5 ____
0.15	10.5	6.5	3.5	7.5-0.6	BMPE 63V 154K 7.5S 5 ____
0.22	10.5	9	4	7.5-0.6	BMPE 63V 224K 7.5S 5 ____
0.33	10.5	9	4	7.5-0.6	BMPE 63V 334K 7.5S 5 ____
0.47	10.5	11	5	7.5-0.6	BMPE 63V 474K 7.5S 5 ____
0.68	10.5	11	5	7.5-0.6	BMPE 63V 684K 7.5S 5 ____
1	10.5	11	5	7.5-0.6	BMPE 63V 105K 7.5S 5 ____

100Vdc(63Vac)

Cap. (μF)	Dimensions(mm) W (max.)	H (max.)	T (max.)	Pitch - d	PART NUMBER
0.001	7.2	6.5	2.5	5-0.6	BMPE 100V 102K 5S 5 ____
0.0015	7.2	6.5	2.5	5-0.6	BMPE 100V 152K 5S 5 ____
0.0022	7.2	6.5	2.5	5-0.6	BMPE 100V 222K 5S 5 ____
0.0033	7.2	6.5	2.5	5-0.6	BMPE 100V 332K 5S 5 ____
0.0047	7.2	6.5	2.5	5-0.6	BMPE 100V 472K 5S 5 ____
0.0068	7.2	6.5	2.5	5-0.6	BMPE 100V 682K 5S 5 ____
0.01	7.2	6.5	2.5	5-0.6	BMPE 100V 103K 5S 5 ____
0.015	7.2	6.5	2.5	5-0.6	BMPE 100V 153K 5S 5 ____
0.022	7.2	6.5	2.5	5-0.6	BMPE 100V 223K 5S 5 ____
0.033	7.2	6.5	2.5	5-0.6	BMPE 100V 333K 5S 5 ____
0.047	7.2	6.5	2.5	5-0.6	BMPE 100V 473K 5S 5 ____
0.068	7.2	6.5	2.5	5-0.6	BMPE 100V 683K 5S 5 ____
0.1	7.2	7.5	3.5	5-0.6	BMPE 100V 104K 5S 5 ____
0.15	7.2	9.5	4.5	5-0.6	BMPE 100V 154K 5S 5 ____
0.22	7.2	9.5	4.5	5-0.6	BMPE 100V 224K 5S 5 ____
0.33	7.2	10	5	5-0.6	BMPE 100V 334K 5S 5 ____
0.47	7.2	11	6	5-0.6	BMPE 100V 474K 5S 5 ____
0.047	10.5	6.5	3.5	7.5-0.6	BMPE 100V 473K 7.5S 5 ____
0.068	10.5	6.5	3.5	7.5-0.6	BMPE 100V 683K 7.5S 5 ____
0.1	10.5	9	4	7.5-0.6	BMPE 100V 104K 7.5S 5 ____
0.15	10.5	9	4	7.5-0.6	BMPE 100V 154K 7.5S 5 ____
0.22	10.5	9	4	7.5-0.6	BMPE 100V 224K 7.5S 5 ____
0.33	10.5	11	5	7.5-0.6	BMPE 100V 334K 7.5S 5 ____
0.47	10.5	11	5	7.5-0.6	BMPE 100V 474K 7.5S 5 ____
0.68	10.5	11	5	7.5-0.6	BMPE 100V 684K 7.5S 5 ____
1	10.5	12	6	7.5-0.6	BMPE 100V 105K 7.5S 5 ____

250Vdc(160Vac)

Cap. (μF)	Dimensions(mm) W (max.)	H (max.)	T (max.)	Pitch - d	PART NUMBER
0.01	10.5	6.5	3.5	7.5-0.6	BMPE 250V 103K 7.5S 5 ____
0.015	10.5	6.5	3.5	7.5-0.6	BMPE 250V 153K 7.5S 5 ____
0.022	10.5	6.5	3.5	7.5-0.6	BMPE 250V 223K 7.5S 5 ____
0.033	10.5	6.5	3.5	7.5-0.6	BMPE 250V 333K 7.5S 5 ____
0.047	10.5	9	4	7.5-0.6	BMPE 250V 473K 7.5S 5 ____
0.068	10.5	9	4	7.5-0.6	BMPE 250V 683K 7.5S 5 ____
0.1	10.5	11	5	7.5-0.6	BMPE 250V 104K 7.5S 5 ____
0.15	10.5	12	6	7.5-0.6	BMPE 250V 154K 7.5S 5 ____
0.22	10.5	12	6	7.5-0.6	BMPE 250V 224K 7.5S 5 ____

400Vdc(200Vac)

Cap. (μF)	Dimensions(mm)			Pitch - d	PART NUMBER
	W (max.)	H (max.)	T (max.)		
0.0047	10.5	6.5	3.5	7.5-0.6	BMPE 400V 472K 7.5S 5 ____
0.0068	10.5	6.5	3.5	7.5-0.6	BMPE 400V 682K 7.5S 5 ____
0.01	10.5	9	4	7.5-0.6	BMPE 400V 103K 7.5S 5 ____
0.015	10.5	9	4	7.5-0.6	BMPE 400V 153K 7.5S 5 ____
0.022	10.5	11	5	7.5-0.6	BMPE 400V 223K 7.5S 5 ____
0.033	10.5	12	6	7.5-0.6	BMPE 400V 333K 7.5S 5 ____

630Vdc(220Vac)

Cap. (μF)	Dimensions(mm)			Pitch - d	PART NUMBER
	W (max.)	H (max.)	T (max.)		
0.001	10.5	6.5	3.5	7.5-0.6	BMPE 630V 102K 7.5S 5 ____
0.0015	10.5	6.5	3.5	7.5-0.6	BMPE 630V 152K 7.5S 5 ____
0.0022	10.5	6.5	3.5	7.5-0.6	BMPE 630V 222K 7.5S 5 ____
0.0033	10.5	6.5	3.5	7.5-0.6	BMPE 630V 332K 7.5S 5 ____
0.0047	10.5	9	4	7.5-0.6	BMPE 630V 472K 7.5S 5 ____
0.0068	10.5	9	4	7.5-0.6	BMPE 630V 682K 7.5S 5 ____
0.01	10.5	11	5	7.5-0.6	BMPE 630V 103K 7.5S 5 ____
0.015	10.5	11	5	7.5-0.6	BMPE 630V 153K 7.5S 5 ____
0.022	10.5	12	6	7.5-0.6	BMPE 630V 223K 7.5S 5 ____
0.033	10.5	12	6	7.5-0.6	BMPE 630V 333K 7.5S 5 ____
0.047	10.5	12	6	7.5-0.6	BMPE 630V 473K 7.5S 5 ____

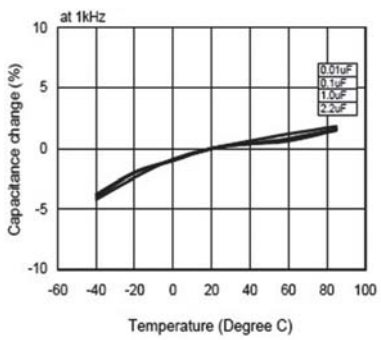
1000Vdc(250Vac)

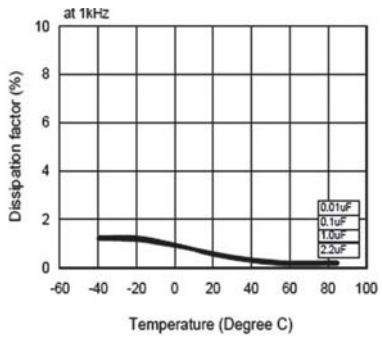
Cap. (μF)	Dimensions(mm)			Pitch - d	PART NUMBER
	W (max.)	H (max.)	T (max.)		
0.001	10.5	9	4	7.5-0.6	BMPE 1000V 102K 7.5S 5 ____
0.0015	10.5	9	4	7.5-0.6	BMPE 1000V 152K 7.5S 5 ____
0.0022	10.5	9	4	7.5-0.6	BMPE 1000V 222K 7.5S 5 ____
0.0033	10.5	9	4	7.5-0.6	BMPE 1000V 332K 7.5S 5 ____
0.0047	10.5	11	5	7.5-0.6	BMPE 1000V 472K 7.5S 5 ____
0.0068	10.5	11	5	7.5-0.6	BMPE 1000V 682K 7.5S 5 ____
0.01	10.5	11	5	7.5-0.6	BMPE 1000V 103K 7.5S 5 ____
0.015	10.5	12	6	7.5-0.6	BMPE 1000V 153K 7.5S 5 ____

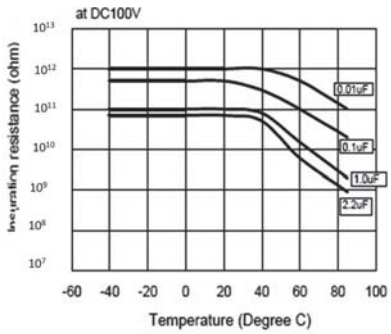
■ Electrical Characteristics (Typical Data)

100Vdc Series

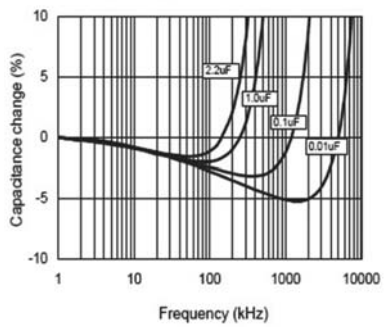
Temperature Characteristics

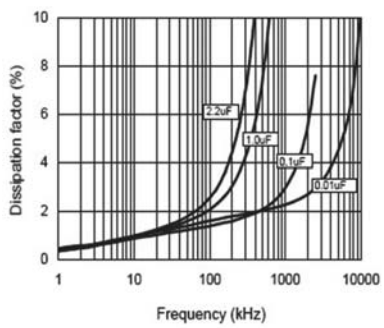


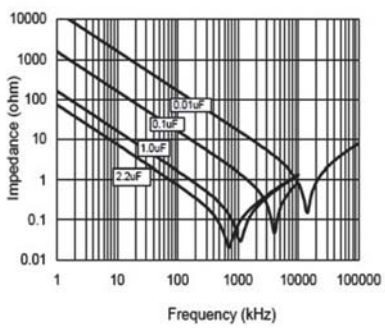




Frequency Characteristics

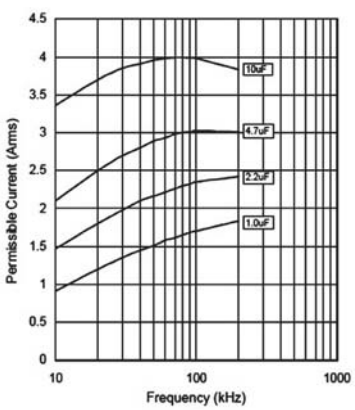




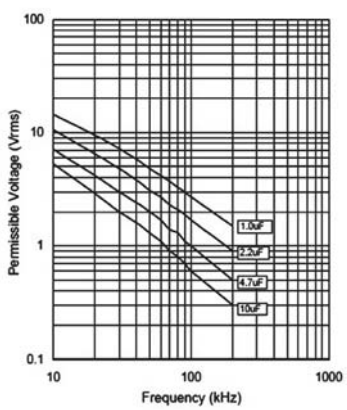


■ Applicable Specifications

Permissible Current



Permissible Voltage
(at sinewave)



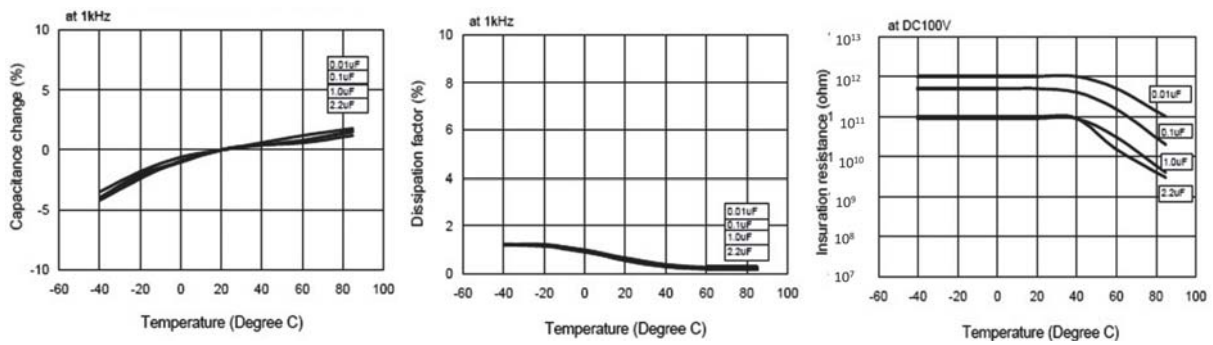
Pulse Handling Capability(dv/dt)
(Max 1000cycles)

Rating Voltage	Capacitance Value(uF)	Code	dV/dt(V/us)	Current(o-p) (A)
100VDC	0.56	564	22	12.32
	0.68	684		15.0
	0.82	824		18.0
	1.00	105		22.0
	1.20	125	11	13.2
	1.50	155		17.1
	1.80	185		19.8
	2.20	225		24.2
	2.70	275		29.7
	3.30	335		36.3
	3.90	395	6	23.4
	4.70	475		28.2
	5.60	565		33.6
	6.80	685		40.8
	8.20	825		49.2
	10.00	106		60.0

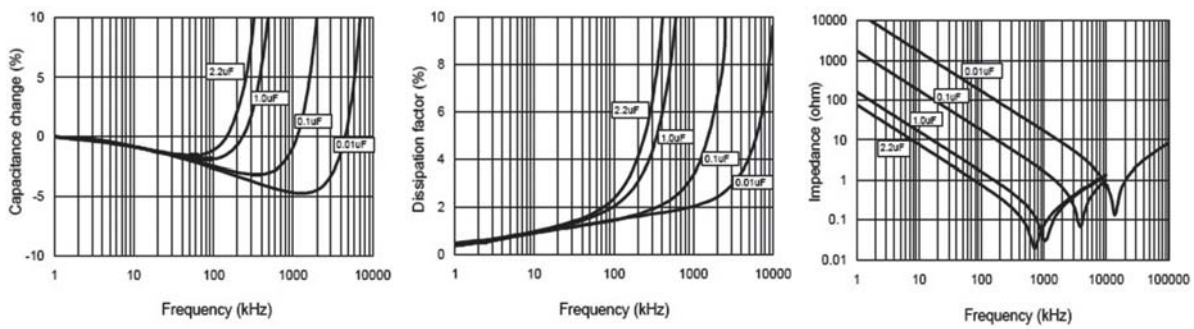
■ Electrical Characteristics (Typical Data)

250Vdc Series

Temperature Characteristics

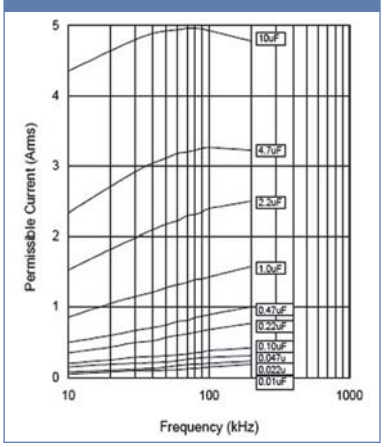


Frequency Characteristics

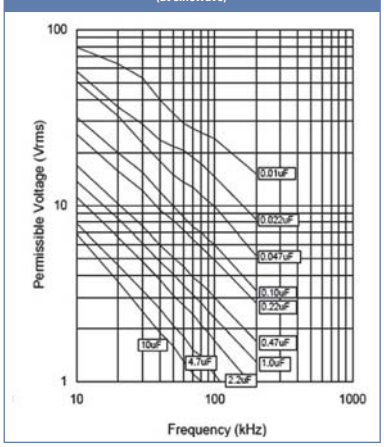


■ Applicable Specifications

Permissible Current



Permissible Voltage
(at sinewave)



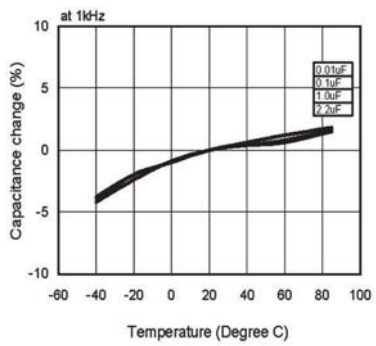
Pulse Handling Capability(dv/dt)
(Max 1000cycles)

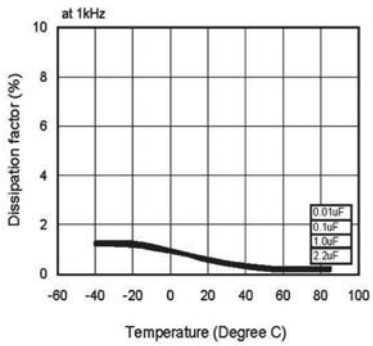
Rating Voltage	Capacitance Value(uF)	Code	dV/dt(V/us)	Current(o-p) (A)
250VDC	0.010	103	48	0.48
	0.015	153		0.72
	0.022	223		1.06
	0.033	333		1.58
	0.047	473		2.26
	0.068	683		3.26
	0.100	104		4.80
	0.150	154		7.20
	0.220	224	33	7.26
	0.330	334		10.89
	0.470	474	18	8.46
	0.680	684		12.24
	1.000	105		18.00
	1.500	155		27.00
	2.200	225	10	22.00
	3.300	335		33.00
	4.700	475		47.00
	6.800	685	8	54.40
	10.000	106		80.00

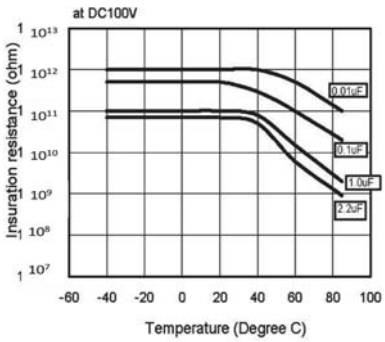
■ Electrical Characteristics (Typical Data)

400Vdc Series

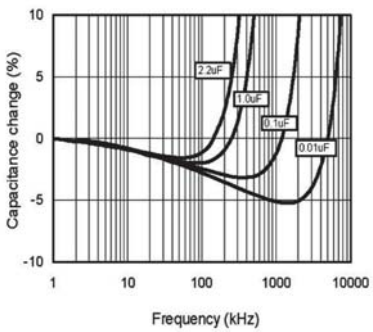
Temperature Characteristics

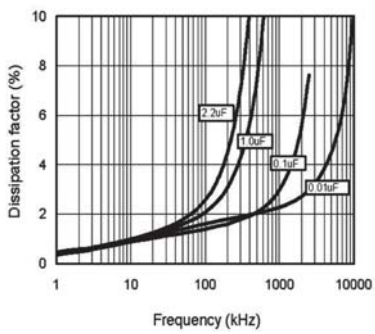


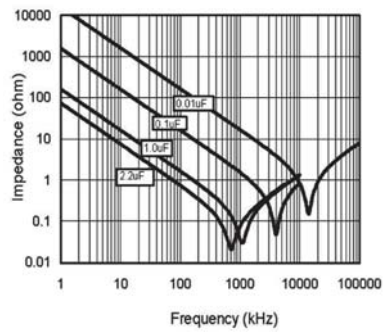




Frequency Characteristics

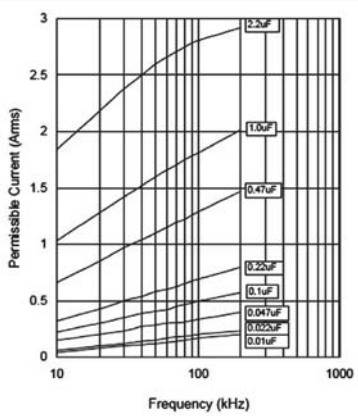




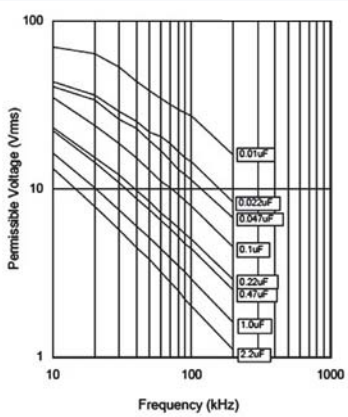


■ Applicable Specifications

Permissible Current



Permissible Voltage
(at sinewave)



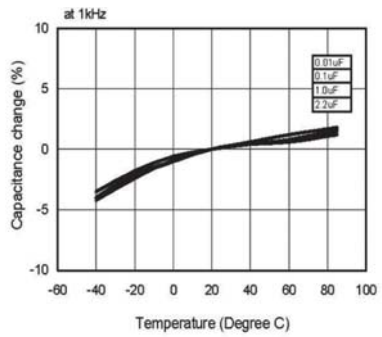
Pulse Handling Capability(dv/dt)
(Max 1000cycles)

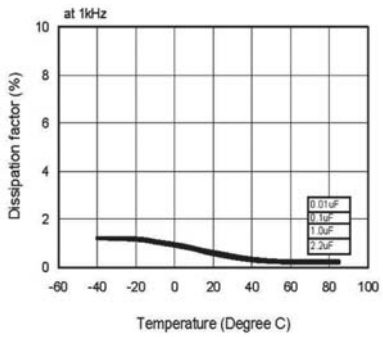
Rating Voltage	Capacitance Value(uF)	Code	dV/dt(V/us)	Current(o-p) (A)
400VDC	0.010	103	131	1.31
	0.015	153		1.97
	0.022	223		2.88
	0.033	333		4.32
	0.047	473	78	3.67
	0.068	683		5.30
	0.100	104		7.80
	0.150	154	37	5.55
	0.220	224		8.14
	0.330	334		12.21
	0.470	474		17.39
	0.680	684	22	14.96
	1.000	105		22.00
	1.200	155	18	27.00
	2.200	225		39.60

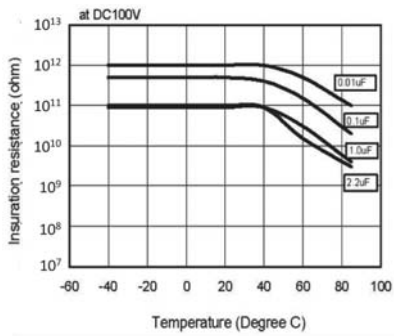
■ Electrical Characteristics (Typical Data)

630Vdc Series

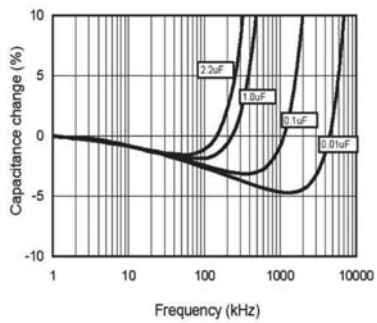
Temperature Characteristics

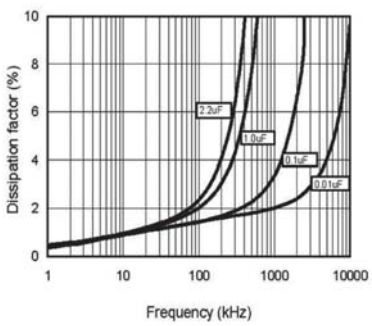


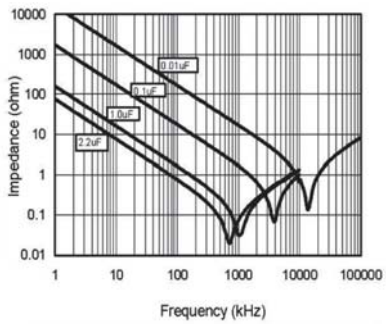




Frequency Characteristics

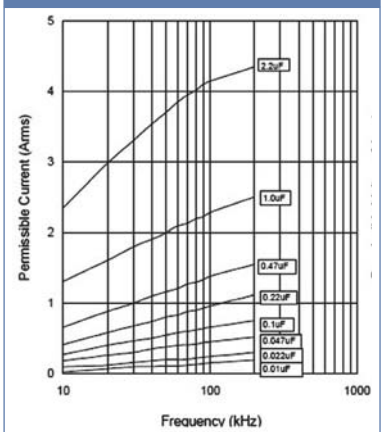




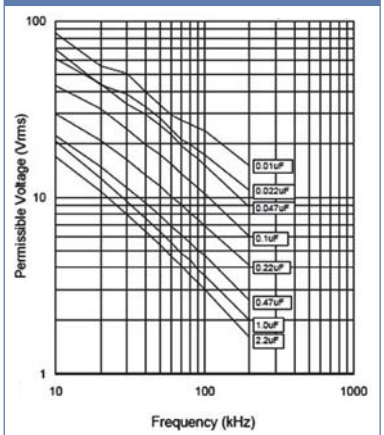


■ Applicable Specifications

Permissible Current



Permissible Voltage
(at sinewave)



Pulse Handling Capability(dv/dt)
(Max 1000cycles)

Rating Voltage	Capacitance Value(uF)	Code	dV/dt(V/us)	Current(o-p) (A)
630VDC	0.010	103	273	2.73
	0.015	153		4.10
	0.022	223		6.01
	0.033	333		9.01
	0.047	473		12.83
	0.068	683	116	7.89
	0.100	104		11.60
	0.150	154		17.40
	0.220	224		25.52
	0.330	334	63	20.79
	0.470	474		29.61
	0.680	684		42.84
	1.000	105	48	48.00
	1.500	155		72.00
	2.200	225		105.60

FMPE

Non-inductive construction using metallized Polyester film with flame retardant epoxy resin coating

■ Features

- Self-healing property.
- Safe-film construction.
- miniature size of MPE.
- Coated with flame-retardant(UL94 V-0) epoxy resin.
- RoHS directive compliant

■ Applications

- DC Multipurpose applications.
- Widely used in filter and low pulse circuits.

■ Specifications

Reference Standard		IEC 60384-2	
Climatic Category		40 / 105 / 21	
Rated Temperature		85℃	
Operation Temperature Range		-40℃~105℃ +85℃~+105℃ decreasing factor 1.0% / ℃ for V_R(dc)	
Rated Voltage		450V	
Capacitance Range		0.1μF~4.7μF	
Capacitance Tolerance		J : ±5% K : ±10% M : ±20% ※Standard : K : ±10%, Other Tolerance Grade : available on request.	
Voltage Proof		1.75U_R(dc) / 3sec	
Dissipation Factor		≤1.0%(at 1kHz 20℃)	
Rated Voltage	**DC-Type**	U_R(dc)〈500V	≥9,000MΩ C_R≤0.33μF 100Vdc 60sec 20℃
			≥3,000Ω·F C_R〉0.33μF 100Vdc 60sec 20℃
		U_R(dc)≥500V	≥9,000MΩ C_R≤0.33μF 500Vdc 60sec 20℃
			≥3,000Ω·F C_R〉0.33μF 500Vdc 60sec 20℃

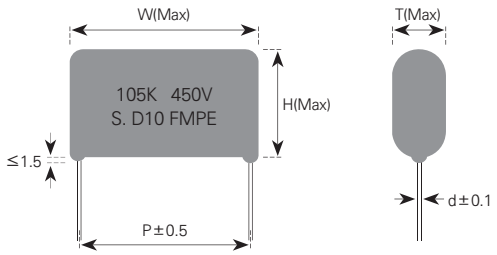
■ Part Number System

FMPE	450V	104	K	10	S	5	
Part-1	Part-2	Part-3	Part-4	Part-5	Part-6	Part-7	Part-8

Part-1 : Series Code(Series Name) - FMPE
Part-2 : Rated Voltage(DC : 450V)
Part-3 : Rated Capacitance Value(0.1μF~4.7μF / 104~475)
Part-4 : Capacitance Tolerance(J : ±5% K : ±10% M : ±20%)
Part-5 : Lead Spacing(10mm / 15mm / 22.5mm / 27.5mm)
Part-6 : Forming-Type and Packing Code
Part-7 : Size Number(1~4 : Min-Type / 5 : Standard-Type / 6~9 : Large-Type)
Part-8 : Internal Use

CODE	STYLE
B	Bending Forming
C	Straight Cutting
D	D-Type Forming
L	B-Type long Forming
M	C-Type long Forming
S	Straight
X	B-Type Forming
Y	C-Type Forming
Z	Z-Type Forming
T	A-Type Tapping
U	B-Type Tapping
V	C-Type Tapping

▪ Dimensions

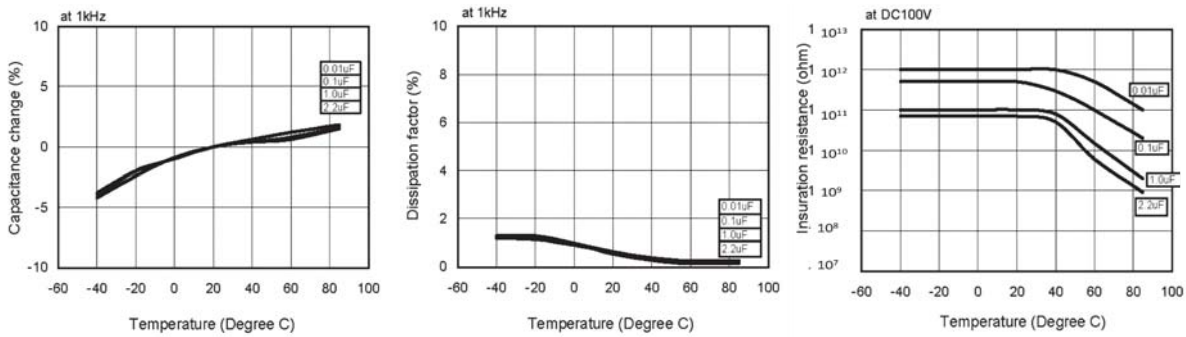


450Vdc					
Cap. (μF)	Dimen__ ion__(mm)			Pitch - d	PART NUMBER
	W (max.)	H (max.)	T (max.)		
0.1	13.0	10.5	6.0	10-0.6	FMPE450V104K10S5 ____
0.12	13.0	10.5	5.5	10-0.6	FMPE450V124K10S5 ____
0.15	13.0	11.0	6.0	10-0.6	FMPE450V154K10S5 ____
0.18	13.0	11.0	6.0	10-0.6	FMPE450V184K10S5 ____
0.22	13.0	12.0	6.0	10-0.6	FMPE450V224K10S5 ____
0.27	18.0	11.5	6.5	10-0.6	FMPE450V274K10S5 ____
0.33	18.0	11.5	6.0	15-0.8	FMPE450V334K15S5 ____
0.39	18.0	12.0	6.0	15-0.8	FMPE450V394K15S5 ____
0.47	18.0	14.0	6.5	15-0.8	FMPE450V474K15S5 ____
0.56	18.0	12.5	6.5	15-0.8	FMPE450V564K15S5 ____
0.68	18.0	14.0	6.5	15-0.8	FMPE450V684K15S5 ____
0.82	18.0	16.0	8.0	15-0.8	FMPE450V824K15S5 ____
1.0	18.0	16.5	9.0	15-0.8	FMPE450V105K15S5 ____
1.0	26.0	15.0	7.0	22.5-0.8	FMPE450V105K22.5S5 ____
1.2	26.0	15.5	7.5	22.5-0.8	FMPE450V125K22.5S5 ____
1.5	26.0	16.0	8.5	22.5-0.8	FMPE450V155K22.5S5 ____
1.8	26.0	17.0	9.0	22.5-0.8	FMPE450V185K22.5S5 ____
2.2	26.0	18.0	11.0	22.5-0.8	FMPE450V225K22.5S5 ____
2.5	26.0	18.5	10.5	22.5-0.8	FMPE450V255K22.5S5 ____
2.7	26.0	19.0	11.0	22.5-0.8	FMPE450V275K22.5S5 ____
3.3	26.0	22.0	11.0	22.5-0.8	FMPE450V335K22.5S5 ____
3.9	26.0	23.0	12.0	22.5-0.8	FMPE450V395K22.5S5 ____
4.7	26.0	24.0	13.0	22.5-0.8	FMPE450V475K22.5S5 ____

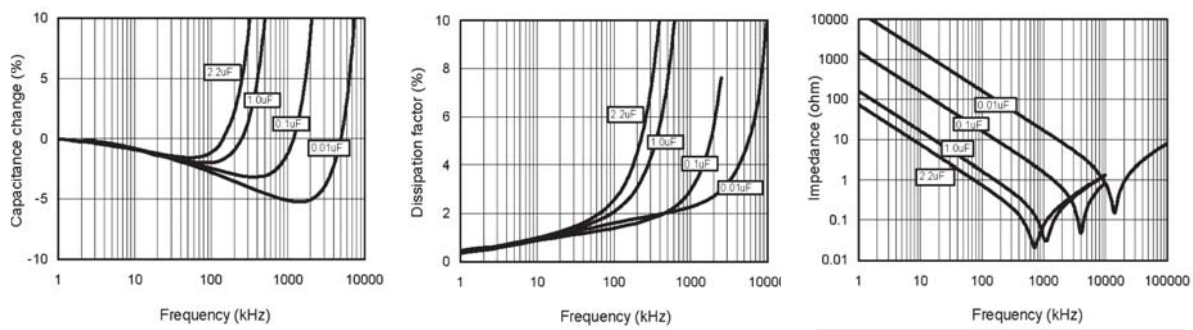
■ Electrical Characteristics (Typical Data)

450Vdc Series

Temperature Characteristics

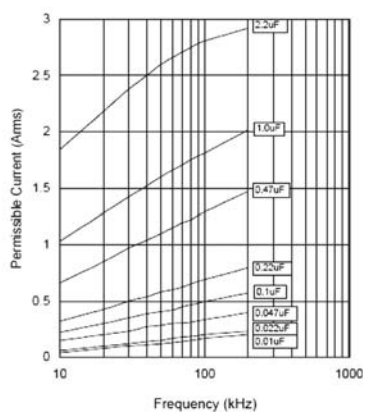


Frequency Characteristics

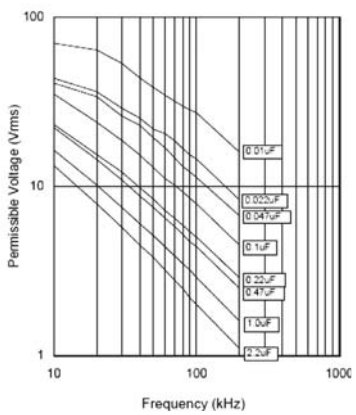


■ Applicable Specifications

Permissible Current



Permissible Voltage
(at sinewave)



Pulse Handling Capability(dv/dt)
(Max 1000cycles)

Rating Voltage	Capacitance Value(μF)	Code	dV/dt(V/μs)	Current(o-p) (A)
450VDC	0.1	104	78	7.8
	0.15	154	37	5.55
	0.22	224		8.14
	0.33	334		12.21
	0.47	474		17.39
	0.68	684	22	14.96
	1	105		22
	1.2	125	18	27
	2.2	225		39.6

BFMPE

Non-inductive construction using metallized Polyester film with flame retardant plastic case and epoxy resin filled.

■ Features

- Self-healing property.
- Safe-film construction.
- miniature size of BMPE.
- Plastic case(UL94 V-0), Epoxy resin sealing
- RoHS directive compliant

■ Applications

- DC Multipurpose applications.
- Widely used in filter and low pulse circuits.

■ Specifications

Reference Standard		IEC 60384-2		
Climatic Category		40 / 105 / 21		
Rated Temperature		85℃		
Operation Temperature Range		-40℃~105℃ +85℃~+105℃ decreasing factor 1.0% / ℃ for V_R(dc)		
Rated Voltage		450V		
Capacitance Range		0.1μF~4.7μF		
Capacitance Tolerance		J : ±5% K : ±10% M : ±20% ※Standard : K : ±10%, Other Tolerance Grade : available on request.		
Voltage Proof		1.75U_R(dc) / 3sec		
Dissipation Factor		≤1.0%(at 1kHz 20℃)		
Rated Voltage	**DC-Type**	U_R(dc)〈500V	≥9,000MΩ	C_R≤0.33μF 100Vdc 60sec 20℃
			≥3,000Ω·F	C_R〉0.33μF 100Vdc 60sec 20℃
		U_R(dc)≥500V	≥9,000MΩ	C_R≤0.33μF 500Vdc 60sec 20℃
			≥3,000Ω·F	C_R〉0.33μF 500Vdc 60sec 20℃

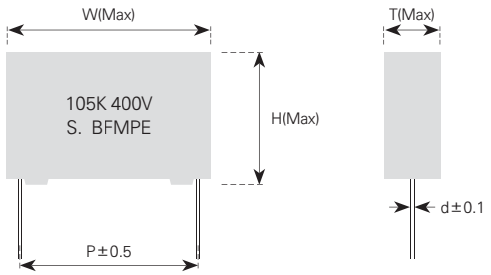
■ Part Number System

BFMPE	450V	104	K	10	S	5	
Part-1	Part-2	Part-3	Part-4	Part-5	Part-6	Part-7	Part-8

Part-1 : Series Code(Series Name) - FMPE
Part-2 : Rated Voltage(DC : 450V)
Part-3 : Rated Capacitance Value(0.1μF~4.7μF / 104~475)
Part-4 : Capacitance Tolerance(J : ±5% K : ±10% M : ±20%)
Part-5 : Lead Spacing(10mm / 15mm / 22.5mm / 27.5mm)
Part-6 : Forming-Type and Packing Code
Part-7 : Size Number(1~4 : Min-Type / 5 : Standard-Type / 6~9 : Large-Type)
Part-8 : Internal Use

CODE	STYLE
B	Bending Forming
C	Straight Cutting
D	D-Type Forming
L	B-Type long Forming
M	C-Type long Forming
S	Straight
X	B-Type Forming
Y	C-Type Forming
Z	Z-Type Forming
T	A-Type Tapping
U	B-Type Tapping
V	C-Type Tapping

▪ Dimensions

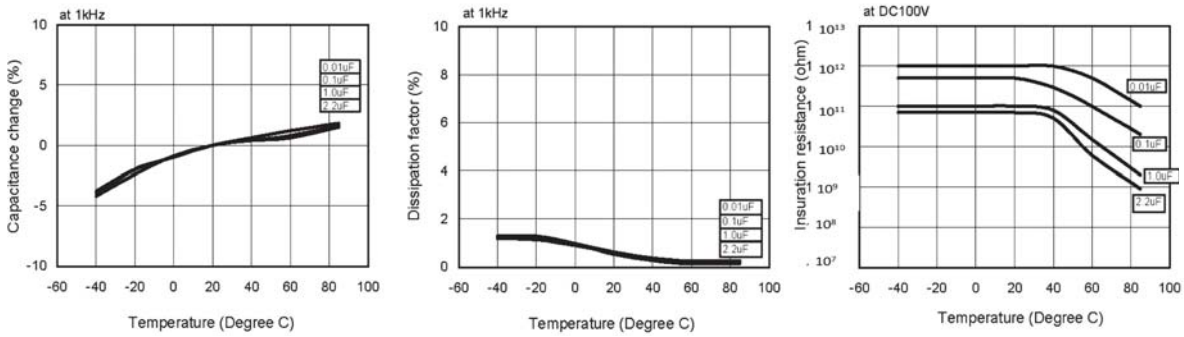


450Vdc					
Cap. (μF)	Dimensions(mm)			Pitch - d	PART NUMBER
	W (max.)	H (max.)	T (max.)		
0.1	13.0	11.0	5.0	10-0.6	BFMPE450V104K10S5 ____
0.12	13.0	11.0	5.5	10-0.6	BFMPE450V124K10S5 ____
0.15	13.0	12.0	6.0	10-0.6	BFMPE450V154K10S5 ____
0.18	13.0	12.0	6.0	10-0.6	BFMPE450V184K10S5 ____
0.22	13.0	13.0	7.0	10-0.6	BFMPE450V224K10S5 ____
0.27	13.0	13.0	7.0	10-0.6	BFMPE450V274K10S5 ____
0.33	18.0	12.0	6.0	15-0.8	BFMPE450V334K15S5 ____
0.39	18.0	12.0	7.0	15-0.8	BFMPE450V394K15S5 ____
0.47	18.0	13.0	6.0	15-0.8	BFMPE450V474K15S5 ____
0.56	18.0	13.0	7.0	15-0.8	BFMPE450V564K15S5 ____
0.68	18.0	14.0	7.5	15-0.8	BFMPE450V684K15S5 ____
0.82	18.0	14.0	8.0	15-0.8	BFMPE450V824K15S5 ____
1.0	18.0	15.0	9.0	15-0.8	BFMPE450V105K15S5 ____
1.0	26.0	14.5	7.0	22.5-0.8	BFMPE450V105K22.5S5 ____
1.2	26.0	16.0	7.0	22.5-0.8	BFMPE450V125K22.5S5 ____
1.5	26.0	15.0	8.0	22.5-0.8	BFMPE450V155K22.5S5 ____
1.8	26.0	16.0	10.0	22.5-0.8	BFMPE450V185K22.5S5 ____
2.2	26.0	18.0	9.0	22.5-0.8	BFMPE450V225K22.5S5 ____
2.5	26.0	19.0	10.0	22.5-0.8	BFMPE450V255K22.5S5 ____
2.7	26.0	19.0	10.0	22.5-0.8	BFMPE450V275K22.5S5 ____
3.3	26.0	20.0	11.0	22.5-0.8	BFMPE450V335K22.5S5 ____
3.9	26.0	22.0	12.0	22.5-0.8	BFMPE450V395K22.5S5 ____
4.7	26.0	23.0	12.5	22.5-0.8	BFMPE450V475K22.5S5 ____

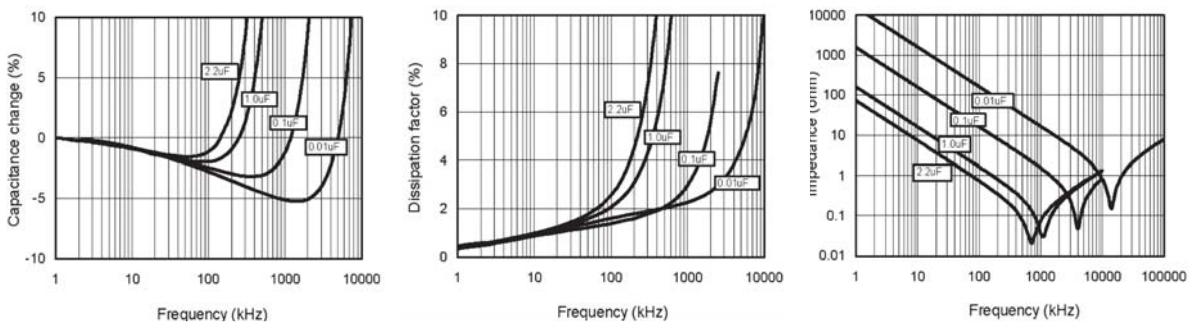
■ Electrical Characteristics (Typical Data)

450Vdc Series

Temperature Characteristics

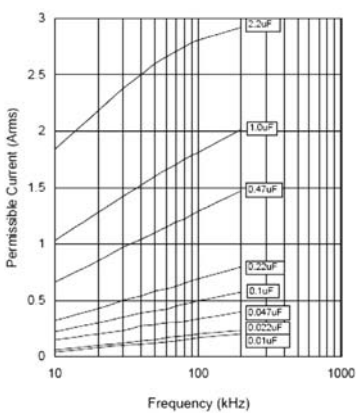


Frequency Characteristics

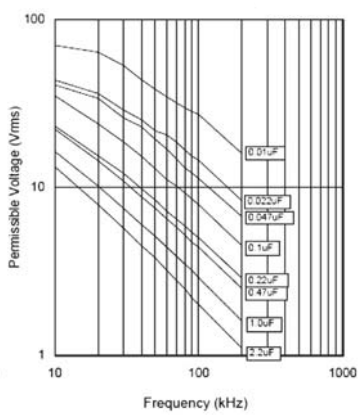


■ Applicable Specifications

Permissible Current



Permissible Voltage
(at sinewave)



Pulse Handling Capability(dv/dt)
(Max 1000cycles)

Rating Voltage	Capacitance Value(μF)	Code	dV/dt(V/μs)	Current(o-p) (A)
450VDC	0.1	104	78	7.8
	0.15	154	37	5.55
	0.22	224		8.14
	0.33	334		12.21
	0.47	474		17.39
	0.68	684	22	14.96
	1	105		22
	1.2	125	18	27
	2.2	225		39.6

MPE-R

Non-inductive construction using metallized Polyester film with flame retardant epoxy resin coating

■ Features

- Self-healing property
- Excellent electrical characteristics
- Coated with flame-retardant(UL94 V-0) epoxy resin.
- Moisture resistance 85 °C, 85 % RH
- RoHS directive compliant
- High humidity.

■ Applications

- General purpose usage

■ Specifications

Reference Standard		IEC 60384-2	
Climatic Category		40 / 105 / 21	
Rated Temperature		85℃	
Operation Temperature Range		-40℃~105℃ +85℃~+105℃ decreasing factor 1.0% / ℃ for V_R(dc)	
Rated Voltage	**DC-Type**	250 VDC,400 VDC, 630 VDC	
Capacitance Range		0.01μF~10.0μF	
Capacitance Tolerance		J : ±5% K : ±10% M : ±20% ※Standard : K : ±10%, Other Tolerance Grade : available on request.	
Voltage Proof	**DC-Type**	1.75U_R(dc) / 3sec	
Dissipation Factor		≤1.0%(at 1kHz 20℃)	
Rated Voltage	**DC-Type**	U_R(dc)〈500V	≥9,000MΩ C_R≤0.33μF 100Vdc 60sec 20℃
			≥3,000Ω·F C_R〉0.33μF 100Vdc 60sec 20℃
		U_R(dc)≥500V	≥9,000MΩ C_R≤0.33μF 500Vdc 60sec 20℃
			≥3,000Ω·F C_R〉0.33μF 500Vdc 60sec 20℃

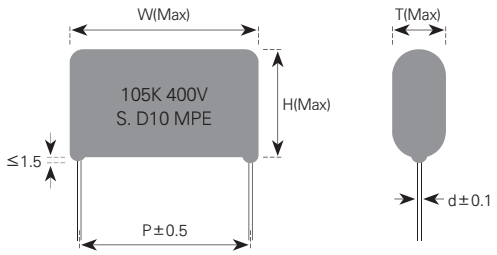
■ Part Number System

MPE	250V	184	K	10	S	5	R
Part-1	Part-2	Part-3	Part-4	Part-5	Part-6	Part-7	Part-8

Part-1 : Series Code(Series Name)-MPE
Part-2 : Rated Voltage(DC : 250V~630V / 125Vac~250Vac(Only for AC applications))
Part-3 : Rated Capacitance Value(0.001μF~10.0μF / 103~106)
Part-4 : Capacitance Tolerance(G : ±2% H : ±3% J : ±5% K : ±10% M : ±20%)
Part-5 : Lead Spacing(7.5mm / 10mm / 15mm / 22.5mm / 27.5mm)
Part-6 : Forming-Type and Packing Code
Part-7 : Size Number(1~4 : Min-Type / 5 : Standard-Type / 6~9 : Large-Type)
Part-8 : Internal Use

CODE	STYLE
B	Bending Forming
C	Straight Cutting
D	D-Type Forming
L	B-Type long Forming
M	C-Type long Forming
S	Straight
X	B-Type Forming
Y	C-Type Forming
Z	Z-Type Forming
T	A-Type Tapping
U	B-Type Tapping
V	C-Type Tapping

■ Dimensions



250Vdc

Cap. (μF)	Dimensions(mm) W (max.)	H (max.)	T (max.)	Pitch - d	PART NUMBER
0.18	12.5	10.3	5	10-0.6	MPE 250V184K10S5R
0.22	12.5	10.5	5.5	10-0.6	MPE 250V224K10S5R
0.27	12.5	11.5	6	10-0.6	MPE 250V274K10S5R
0.33	12.5	12	6.5	10-0.6	MPE 250V334K10S5R
0.39	19	12	4.9	15-0.6	MPE 250V394K15S5R
0.47	19	12.5	5.3	15-0.6	MPE 250V474K15S5R
0.56	19	13	5.5	15-0.6	MPE 250V564K15S5R
0.68	19	13.5	6	15-0.8	MPE 250V684K15S5R
0.82	19	14.5	6.5	15-0.8	MPE 250V824K15S5R
1.0	19	15	7.4	15-0.8	MPE 250V105K15S5R
1.2	19	15.9	8	15-0.8	MPE 250V125K15S5R
1.5	19	16.8	9	15-0.8	MPE 250V155K15S5R
1.8	26.5	15.5	7.5	22.5-0.8	MPE 250V185K22.5S5R
2.2	26.5	16.3	8.5	22.5-0.8	MPE 250V225K22.5S5R
2.7	26.5	17	9.4	22.5-0.8	MPE 250V275K22.5S5R
3.3	26.5	18	10.3	22.5-0.8	MPE 250V335K22.5S5R
3.9	26.5	20.5	11	22.5-0.8	MPE 250V395K22.5S5R
4.7	26.5	21.5	12	22.5-0.8	MPE 250V475K22.5S5R
5.6	31.5	21	11.8	27.5-0.8	MPE 250V565K27.5S5R
6.8	31.5	22.4	13	27.5-0.8	MPE 250V685K27.5S5R
8.2	31.5	23.5	14.3	27.5-0.8	MPE 250V825K27.5S5R
10.0	31.5	25.8	15.9	27.5-0.8	MPE 250V106K27.5S5R

400Vdc

Cap. (μF)	Dimensions(mm) W (max.)	H (max.)	T (max.)	Pitch - d	PART NUMBER
0.039	12.5	8	4.9	10-0.6	MPE 400V393K10S5R
0.047	12.5	8.3	5	10-0.6	MPE 400V473K10S5R
0.056	12.5	10	5	10-0.6	MPE 400V563K10S5R
0.068	12.5	10.5	5.4	10-0.6	MPE 400V683K10S5R
0.082	12.5	11	5.8	10-0.6	MPE 400V823K10S5R
0.1	12.5	12	6.3	10-0.6	MPE 400V104K10S5R
0.12	19	10	5	15-0.6	MPE 400V124K15S5R
0.15	19	12.4	5	15-0.6	MPE 400V154K15S5R
0.18	19	12.5	5.4	15-0.6	MPE 400V184K15S5R
0.22	19	13	5.9	15-0.6	MPE 400V224K15S5R
0.27	19	14.3	6.5	15-0.8	MPE 400V274K15S5R
0.33	19	14.9	7	15-0.8	MPE 400V334K15S5R
0.39	19	15.4	7.5	15-0.8	MPE 400V394K15S5R
0.47	19	17	7.8	15-0.8	MPE 400V474K15S5R
0.56	26.5	16	6.5	22.5-0.8	MPE 400V564K22.5S5R
0.68	26.5	16.5	7	22.5-0.8	MPE 400V684K22.5S5R
0.82	26.5	17.3	7.9	22.5-0.8	MPE 400V824K22.5S5R
1.0	26.5	18	8.5	22.5-0.8	MPE 400V105K22.5S5R
1.2	26.5	18.9	9.5	22.5-0.8	MPE 400V125K22.5S5R
1.5	31.5	19	9.5	27.5-0.8	MPE 400V155K27.5S5R
1.8	31.5	20.5	11	27.5-0.8	MPE 400V185K27.5S5R
2.2	31.5	22	11	27.5-0.8	MPE 400V225K27.5S5R

630Vdc

Cap. (μF)	Dimensions(mm) W (max.)	H (max.)	T (max.)	Pitch - d	PART NUMBER
0.01	12.5	7.5	4.5	10-0.6	MPE 630V103K10S5R
0.012	12.5	7.8	4.5	10-0.6	MPE 630V123K10S5R
0.015	12.5	8.2	5	10-0.6	MPE 630V153K10S5R
0.018	12.5	10	4.9	10-0.6	MPE 630V183K10S5R

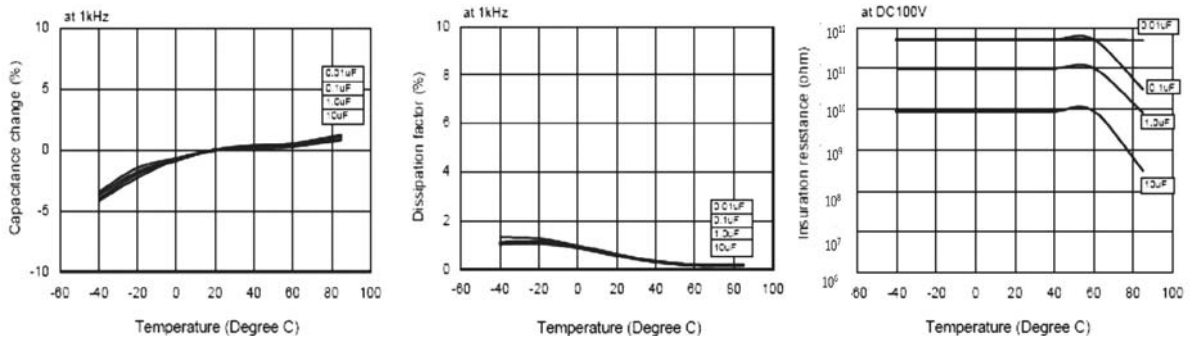
0.022	12.5	10.5	5.3	10-0.6	MPE 630V223K10S5R
0.027	12.5	10.9	5.5	10-0.6	MPE 630V273K10S5R
0.033	12.5	11.9	6	10-0.6	MPE 630V333K10S5R
0.039	12.5	13.4	6	10-0.6	MPE 630V393K10S5R
0.047	12.5	13.5	6.5	10-0.6	MPE 630V473K10S5R
0.056	19	10.5	5.4	15-0.6	MPE 630V563K15S5R
0.068	19	11	5.8	15-0.6	MPE 630V683K15S5R
0.082	19	12	6.5	15-0.6	MPE 630V823K15S5R
0.1	19	14	6.3	15-0.6	MPE 630V104K15S5R
0.12	19	14.5	6.3	15-0.8	MPE 630V124K15S5R
0.15	19	15.4	7.5	15-0.8	MPE 630V154K15S5R
0.18	19	16	8	15-0.8	MPE 630V184K15S5R
0.22	19	16.5	9	15-0.8	MPE 630V224K15S5R

0.27	26.5	16.5	7	22.5-0.8	MPE 630V274K22.5S5R
0.33	26.5	17	7.8	22.5-0.8	MPE 630V334K22.5S5R
0.39	26.5	17.9	8.5	22.5-0.8	MPE 630V394K22.5S5R
0.47	26.5	18.5	9.3	22.5-0.8	MPE 630V474K22.5S5R
0.56	26.5	20	10	22.5-0.8	MPE 630V564K22.5S5R
0.68	26.5	21	11.5	22.5-0.8	MPE 630V684K22.5S5R
0.82	31.5	20.5	11.3	27.5-0.8	MPE 630V824K27.5S5R
1.0	31.5	21.9	12.5	27.5-0.8	MPE 630V105K27.5S5R
1.2	31.5	23	13.5	27.5-0.8	MPE 630V125K27.5S5R
1.5	31.5	24.7	15.3	27.5-0.8	MPE 630V155K27.5S5R
1.8	31.5	27	16.8	27.5-0.8	MPE 630V185K27.5S5R
2.2	31.5	29	19.5	27.5-0.8	MPE 630V225K27.5S5R

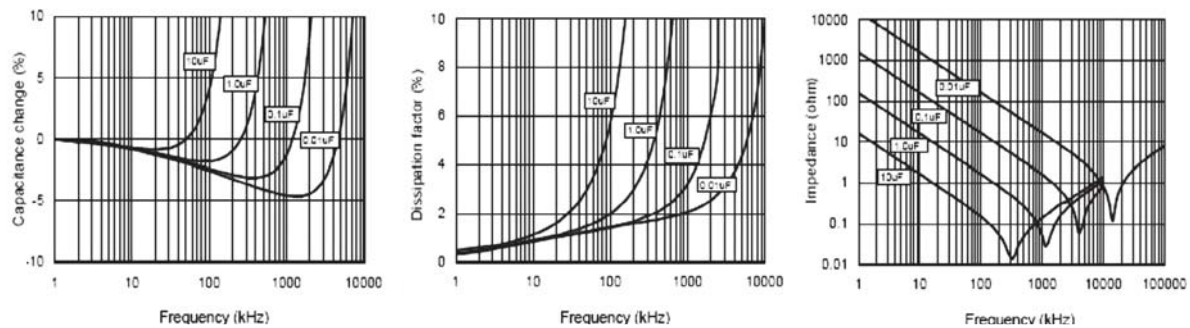
■ Electrical Characteristics (Typical Data)

250Vdc Series

Temperature Characteristics

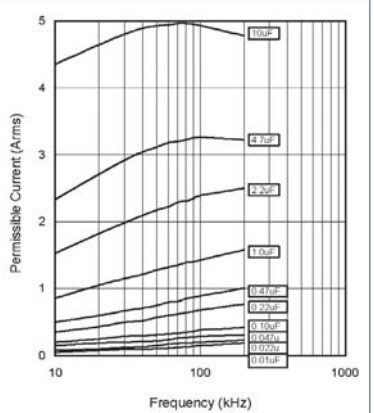


Frequency Characteristics

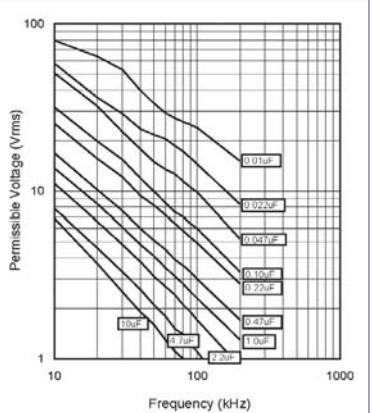


■ Applicable Specifications

Permissible Current



Permissible Voltage
(at sinewave)



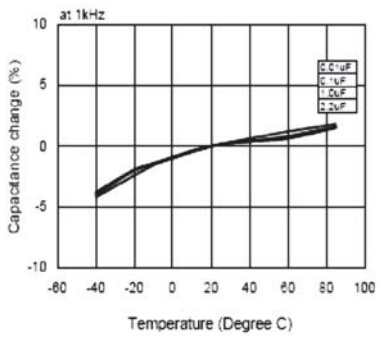
Pulse Handling Capability(dv/dt)
(Max 1000cycles)

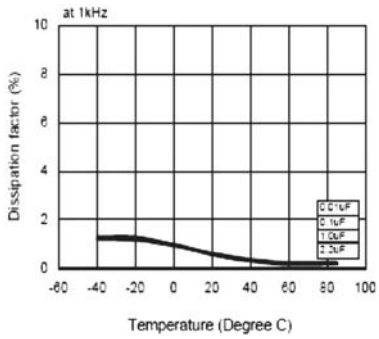
Rating Voltage	Capacitance Value(uF)	Code	dV/dt(V/us)	Current(o-p) (A)
250VDC	0.010	103	48	0.48
	0.015	153		0.72
	0.022	223		1.06
	0.033	333		1.58
	0.047	473		2.26
	0.068	683		3.26
	0.100	104		4.80
	0.150	154		7.20
	0.220	224	33	7.26
	0.330	334		10.89
	0.470	474	18	8.46
	0.680	684		12.24
	1.000	105		18.00
	1.500	155		27.00
	2.200	225	10	22.00
	3.300	335		33.00
	4.700	475		47.00
	6.800	685	8	54.40
	10.000	106		80.00

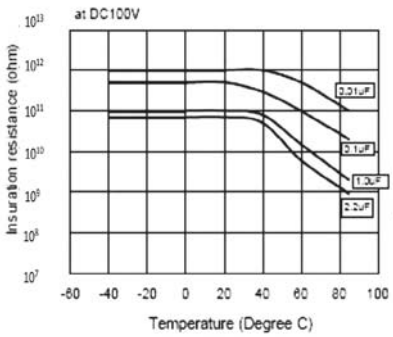
■ Electrical Characteristics (Typical Data)

400Vdc Series

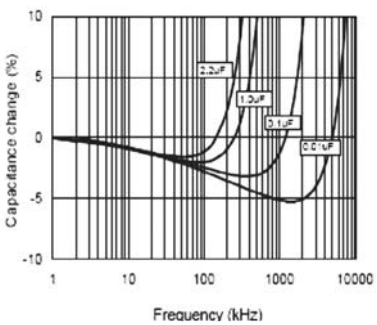
Temperature Characteristics

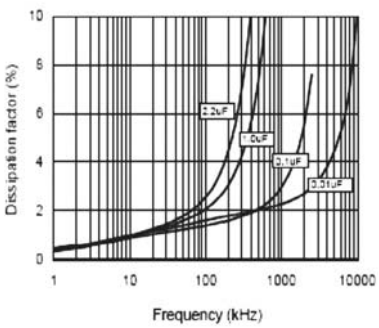


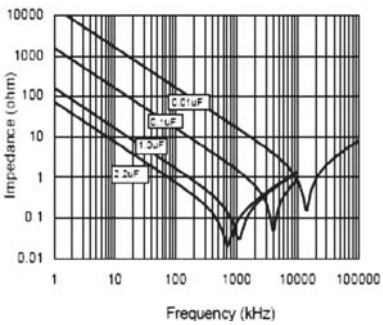




Frequency Characteristics

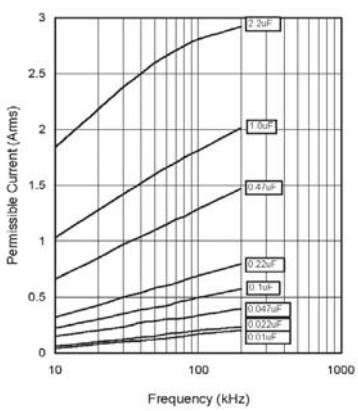




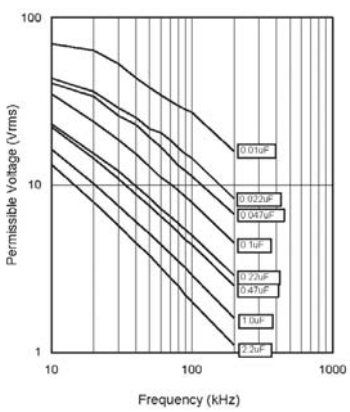


■ Applicable Specifications

Permissible Current



Permissible Voltage
(at sinewave)



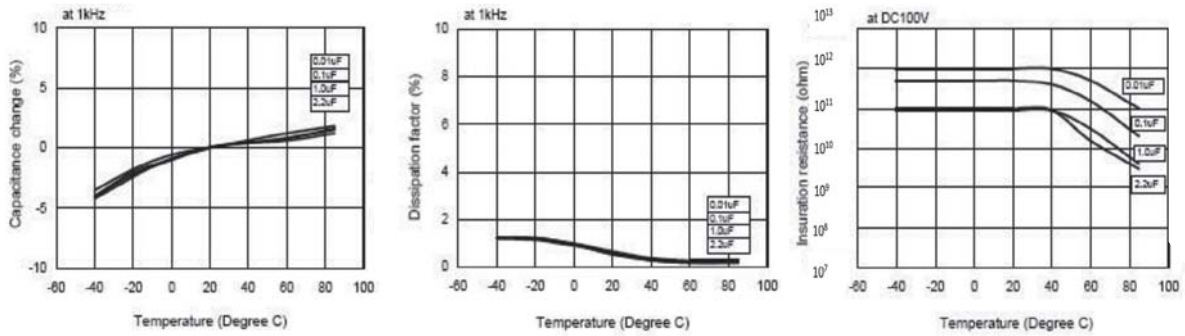
Pulse Handling Capability(dv/dt)
(Max 1000cycles)

Rating Voltage	Capacitance Value(uF)	Code	dV/dt(V/us)	Current(o-p) (A)
400VDC	0.010	103	131	1.31
	0.015	153		1.97
	0.022	223		2.88
	0.033	333		4.32
	0.047	473	78	3.67
	0.068	683		5.30
	0.100	104		7.80
	0.150	154	37	5.55
	0.220	224		8.14
	0.330	334		12.21
	0.470	474		17.39
	0.680	684	22	14.96
	1.000	105		22.00
	1.200	155	18	27.00
	2.200	225		39.60

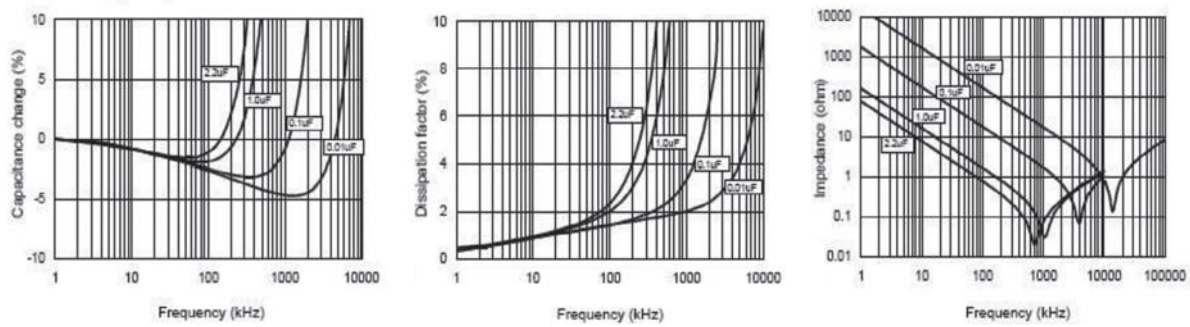
■ Electrical Characteristics (Typical Data)

630Vdc Series

Temperature Characteristics

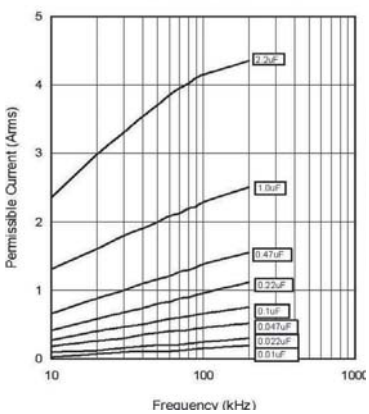


Frequency Characteristics

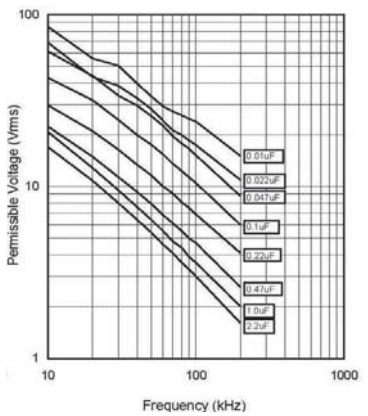


■ Applicable Specifications

Permissible Current



Permissible Voltage
(at sinewave)



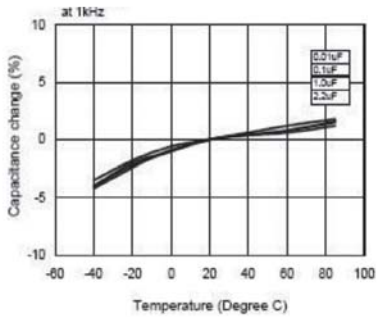
Pulse Handling Capability(dv/dt)
(Max 1000cycles)

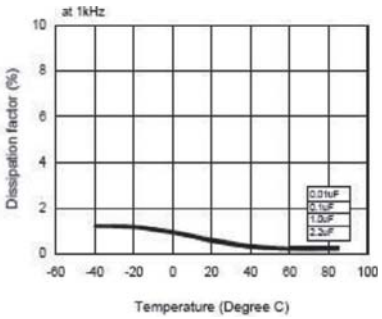
Rating Voltage	Capacitance Value(uF)	Code	dV/dt(V/us)	Current(o-p) (A)
630VDC	0.010	103	273	2.73
	0.015	153		4.10
	0.022	223		6.01
	0.033	333		9.01
	0.047	473		12.83
	0.068	683	116	7.89
	0.100	104		11.60
	0.150	154		17.40
	0.220	224		25.52
	0.330	334	63	20.79
	0.470	474		29.61
	0.680	684		42.84
	1.000	105	48	48.00
	1.500	155		72.00
	2.200	225		105.60

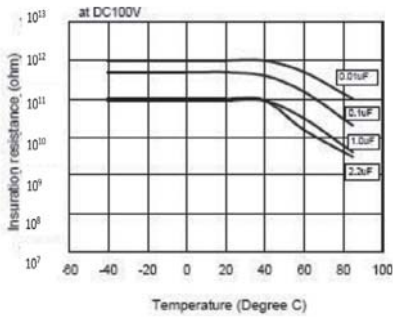
■ Electrical Characteristics (Typical Data)

125Vdc Series

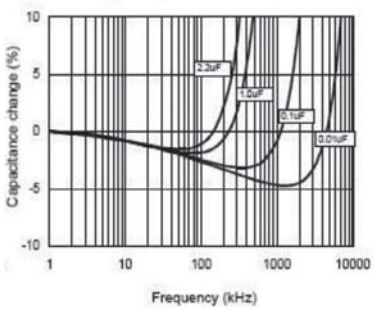
Temperature Characteristics

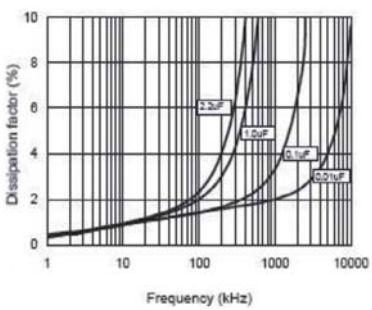


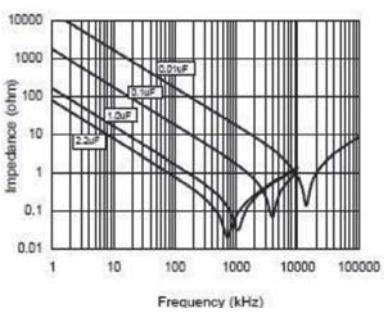




Frequency Characteristics



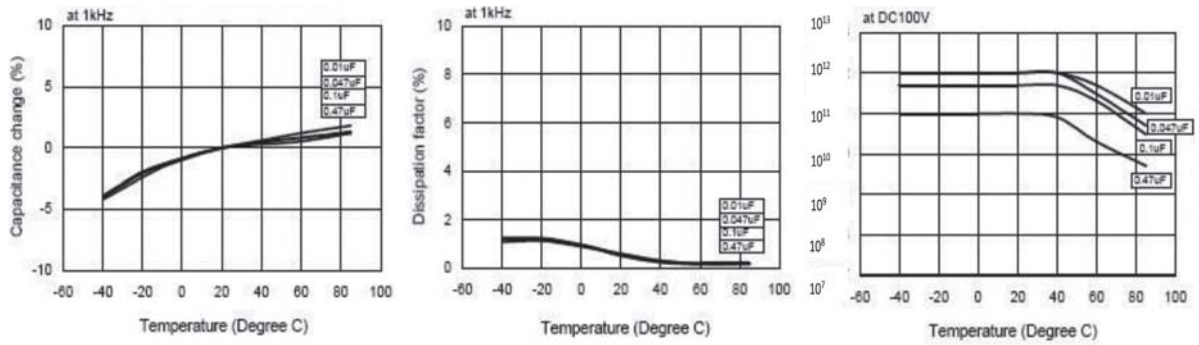




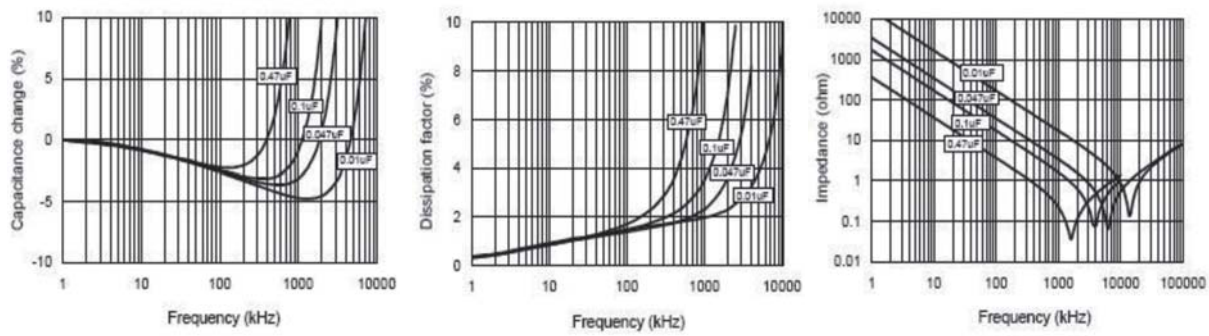
■ Electrical Characteristics (Typical Data)

250Vac Series

Temperature Characteristics



Frequency Characteristics



MPE-V

Non-inductive construction using metallized Polyester film with flame retardant epoxy resin coating

■ Features

- Smaller version of MPE series.
- For applications where high frequency, high current are required.
  (Switching power supply, lighting inverter, etc)
- Coated with flame-retardant(UL94 V-0) epoxy resin.
- RoHS directive compliant

■ Applications

- General purpose usage

■ Specifications

Reference Standard		IEC 60384-2	
Climatic Category		40 / 105 / 21	
Rated Temperature		85℃	
Operation Temperature Range		-40℃~105℃ +85℃~+105℃ decreasing factor 1.00% / ℃ for V_R(dc)	
Rated Voltage		100VDC, 450VDC, 630VDC	
Capacitance Range		0.18μF~10μF	
Capacitance Tolerance		J : ±5% K : ±10% M : ±20% ※Standard : K : ±10%, Other Tolerance Grade : available on request.	
Voltage Proof		1.75U_R(dc) / 3sec	
Dissipation Factor		≤1.0%(at 1kHz 20℃)	
Rated Voltage	**DC-Type**	U_R(dc)〈500V	≥9,000MΩ C_R≤0.33μF 100Vdc 60sec 20℃
			≥3,000Ω·F C_R〉0.33μF 100Vdc 60sec 20℃
		U_R(dc)≥500V	≥9,000MΩ C_R≤0.33μF 500Vdc 60sec 20℃
			≥3,000Ω·F C_R〉0.33μF 500Vdc 60sec 20℃

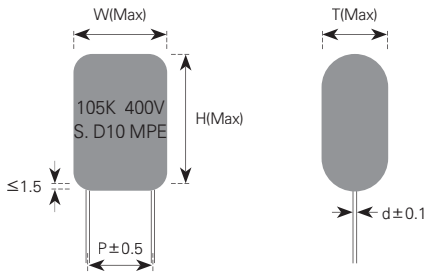
■ Part Number System

MPE	100V	395	K	15	S	5	V
Part-1	Part-2	Part-3	Part-4	Part-5	Part-6	Part-7	Part-8

Part-1 : Series Code(Series Name)-MPE
Part-2 : Rated Voltage(DC : 100VDC, 450VDC, 630VDC)
Part-3 : Rated Capacitance Value(0.18μF~10μF / 184~106)
Part-4 : Capacitance Tolerance(G : ±2% H : ±3% J : ±5% K : ±10% M : ±20%)
Part-5 : Lead Spacing(7.5mm / 10mm / 15mm / 22.5mm / 27.5mm)
Part-6 : Forming-Type and Packing Code
Part-7 : Size Number(1~4 : Min-Type / 5 : Standard-Type / 6~9 : Large-Type)
Part-8 : Internal Use

CODE	STYLE
B	Bending Forming
C	Straight Cutting
D	D-Type Forming
L	B-Type long Forming
M	C-Type long Forming
S	Straight
X	B-Type Forming
Y	C-Type Forming
Z	Z-Type Forming
T	A-Type Tapping
U	B-Type Tapping
V	C-Type Tapping

■ Dimensions



100Vdc

Cap. (μF)	Dimensions(mm) W (max.)	H (max.)	T (max.)	Pitch - d	PART NUMBER
4.7	19	22.5	11.5	15-0.8	MPE 100V475K15S5 V
5.6	19	23.5	12.5	15-0.8	MPE 100V565K15S5 V
6.8	19	25	14	15-0.8	MPE 100V685K15S5 V
8.2	19	26.5	15.5	15-0.8	MPE 100V825K15S5 V
10.0	19	29	17	15-0.8	MPE 100V106K15S5 V

450Vdc

Cap. (μF)	Dimensions(mm) W (max.)	H (max.)	T (max.)	Pitch - d	PART NUMBER
0.18	13	14	7	10-0.6	MPE 450V184K10S5 V
0.22	13	16	8	10-0.6	MPE 450V224K10S5 V
0.27	13	17.5	8	10-0.6	MPE 450V274K10S5 V
0.33	13	18.5	8.5	10-0.6	MPE 450V334K1.0S5 V
0.39	13	19	9	10-0.6	MPE 450V394K10S5 V
0.47	13	20	10.5	10-0.6	MPE 450V474K10S5 V
0.56	13	20.5	11	10-0.6	MPE 450V564K10S5 V
0.68	13	22.5	12	10-0.6	MPE 450V684K10S5 V
0.82	13	23.5	13	10-0.6	MPE 450V824K10S5 V
1.0	13.5	25	15	10-0.6	MPE 450V105K10S5 V
1.2	13.5	26.5	15.5	10-0.6	MPE 450V125K10S5 V
1.5	18.5	23.5	13.5	15-0.8	MPE 450V155K15S5 V
1.8	18.5	25	15	15-0.8	MPE 450V185K15S5 V
2.2	18.5	27	17	15-0.8	MPE 450V225K15S5 V
2.7	23.5	26	15.5	20-0.8	MPE 450V275K20S5 V
3.3	23.5	27.5	17	20-0.8	MPE 450V335K20S5 V
3.9	23.5	29	19	20-0.8	MPE 450V395K20S5 V
4.7	23.5	31	20.5	20-0.8	MPE 450V475K20S5 V

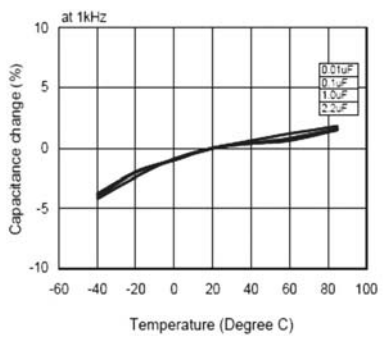
630Vdc

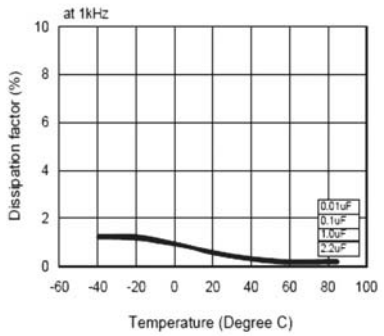
Cap. (μF)	Dimensions(mm) W (max.)	H (max.)	T (max.)	Pitch - d	PART NUMBER
0.27	18.5	19.5	9.5	15-0.8	MPE 630V274K15S5 V
0.33	18.5	20.5	10.5	15-0.8	MPE 630V334K15S5 V
0.39	18.5	21	11	15-0.8	MPE 630V394K15S5 V
0.47	18.5	22	12	15-0.8	MPE 630V474K15S5 V
0.56	18.5	23.5	13.5	15-0.8	MPE 630V564K15S5 V
0.68	18.5	24.5	14.5	15-0.8	MPE 630V684K15S5 V
0.82	18.5	26	16	15-0.8	MPE 630V824K15S5 V
1.0	18.5	28	17.5	15-0.8	MPE 630V105K15S5 V

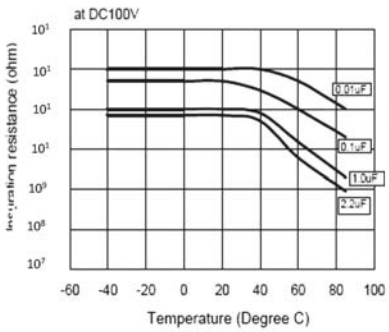
■ Electrical Characteristics (Typical Data)

100Vdc Series

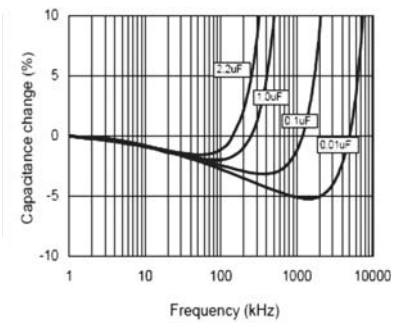
Temperature Characteristics

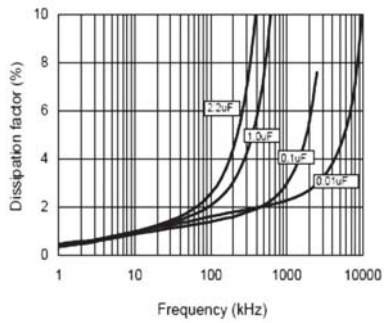


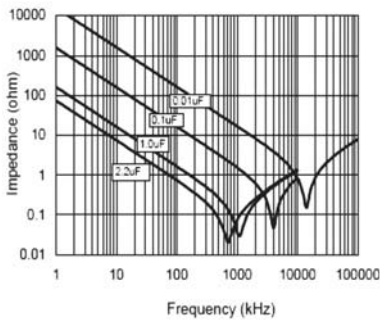




Frequency Characteristics

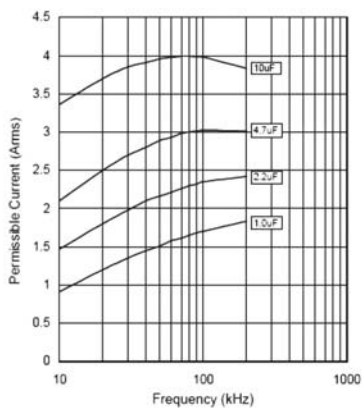




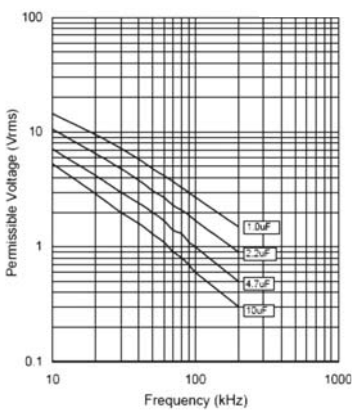


■ Applicable Specifications

Permissible Current



Permissible Voltage
(at sinewave)



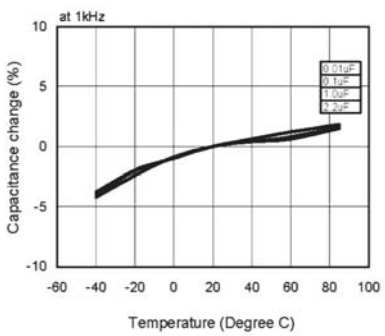
Pulse Handling Capability(dv/dt)
(Max 1000cycles)

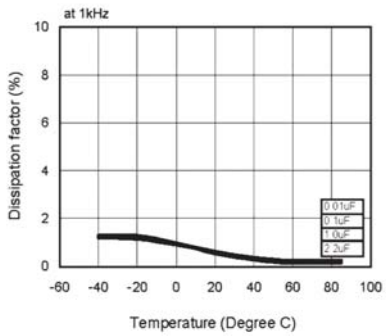
Rating Voltage	Capacitance Value(uF)	Code	dV/dt(V/us)	Current(o-p) (A)
100VDC	0.56	564	22	12.32
	0.68	684		15.0
	0.82	824		18.0
	1.00	105		22.0
	1.20	125	11	13.2
	1.50	155		17.1
	1.80	185		19.8
	2.20	225		24.2
	2.70	275		29.7
	3.30	335		36.3
	3.90	395	6	23.4
	4.70	475		28.2
	5.60	565		33.6
	6.80	685		40.8
	8.20	825		49.2
	10.00	106		60.0

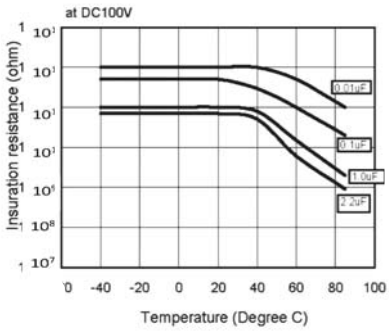
■ Electrical Characteristics (Typical Data)

450Vdc Series

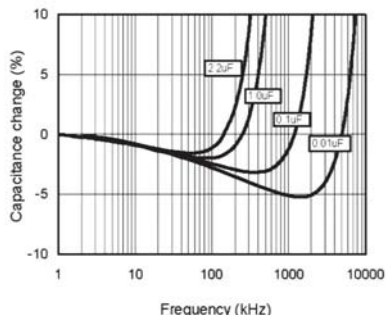
Temperature Characteristics

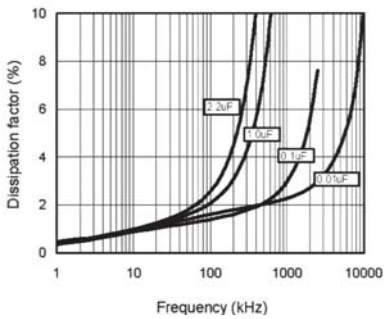


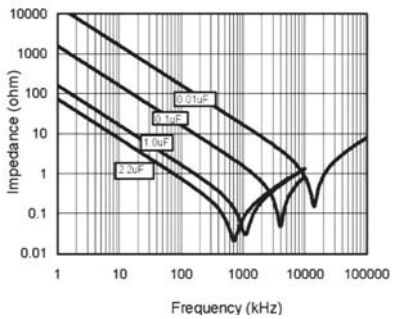




Frequency Characteristics

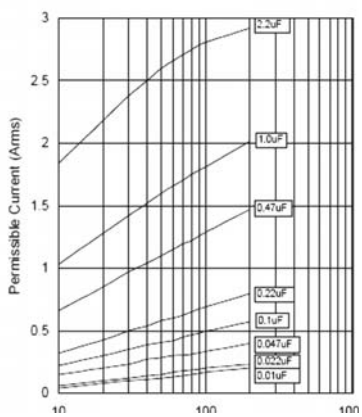




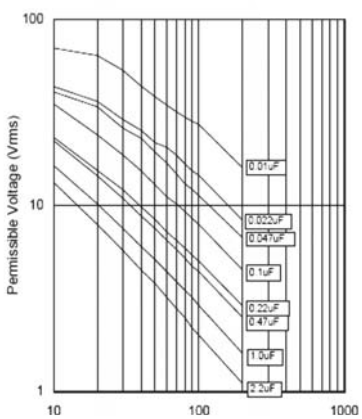


■ Applicable Specifications

Permissible Current



Permissible Voltage
(at sinewave)



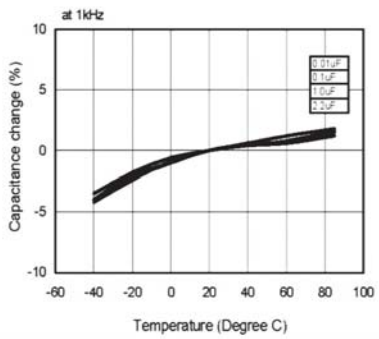
Pulse Handling Capability(dv/dt)
(Max 1000cycles)

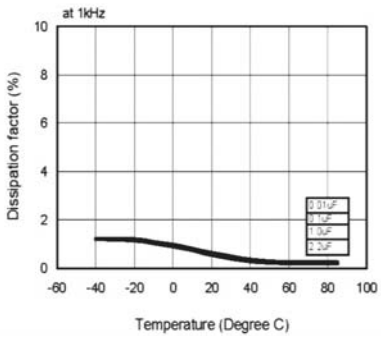
Rating Voltage	Capacitance Value(μF)	Code	dV/dt(V/μs)	Current(o-p) (A)
450VDC	0.1	104	78	7.8
	0.15	154	37	5.55
	0.22	224		8.14
	0.33	334		12.21
	0.47	474		17.39
	0.68	684	22	14.96
	1	105		22
	1.2	125	18	27
	2.2	225		39.6

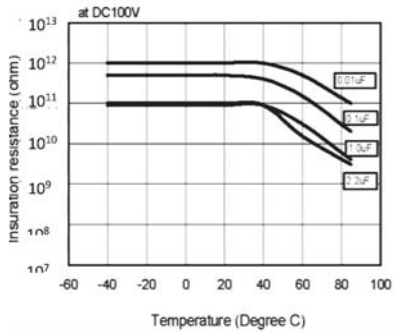
■ Electrical Characteristics (Typical Data)

630Vdc Series

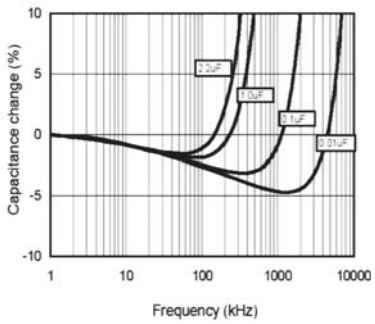
Temperature Characteristics

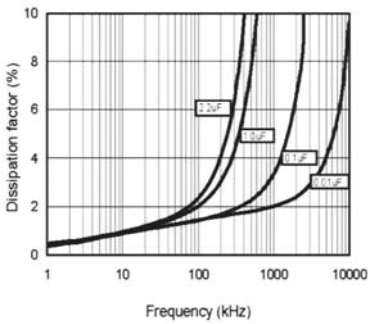


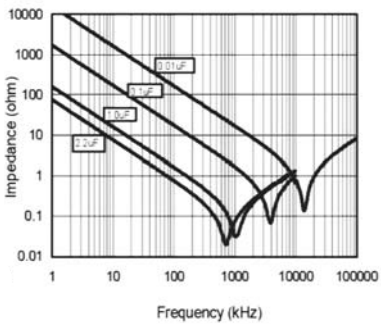




Frequency Characteristics

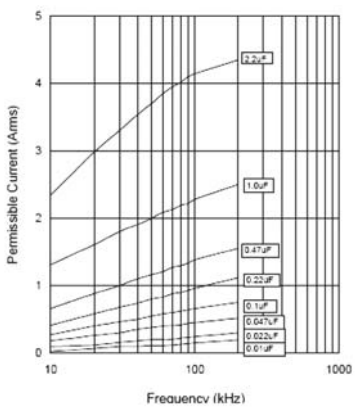




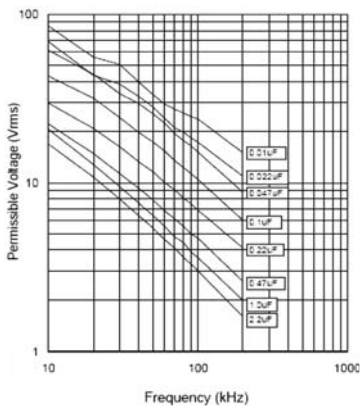


■ Applicable Specifications

Permissible Current



Permissible Voltage
(at sinewave)



Pulse Handling Capability(dv/dt)
(Max 1000cycles)

Rating Voltage	Capacitance Value(uF)	Code	dV/dt(V/us)	Current(o-p) (A)
630VDC	0.010	103	273	2.73
	0.015	153		4.10
	0.022	223		6.01
	0.033	333		9.01
	0.047	473		12.83
	0.068	683	116	7.89
	0.100	104		11.60
	0.150	154		17.40
	0.220	224		25.52
	0.330	334	63	20.79
	0.470	474		29.61
	0.680	684		42.84
	1.000	105	48	48.00
	1.500	155		72.00
	2.200	225		105.60

MPP

Non-inductive construction using metallized Polypropylene film with flame retardant epoxy resin coating

■ Features

- Low Dissipation Factor at high Frequency.
- High stability of capacitance & DF.
- Self-healing property.
- High insulation resistance.
- Coated with flame-retardant(UL94 V-0) epoxy resin.
- RoHS directive compliant

■ Applications

- Typical for S-correction in TV-set.
- Electronic ballast circuits.
- Switching power supply circuits.

■ Specifications

Reference Standard			IEC 60384-16(For-DC Type) IEC 60384-17(For-AC Type)
Climatic Category			40 / 105 / 21
Rated Temperature			105℃ +85℃~+105℃ decreasing factor 1.0% / ℃ for V_R(dc)
Operation Temperature Range			-40℃~105℃
Rated Voltage	**DC-Type**		100V, 250V, 400V, 520V, 630V
Capacitance Range			0.01μF~10.0μF
Capacitance Tolerance			J : ±5% K : ±10% M : ±20% ※Standard : J : ±5%, Other Tolerance Grade : available on request.
Voltage Proof	**DC-Type**		1.75U_R(dc) / 3sec
	AC-Type		4.3U_R(ac) / 3sec
Dissipation Factor			≤0.1%(at 1kHz 20℃)
Rated Voltage	**DC-Type**	U_R(dc)〈500V	≥30,000MΩ C_R≤0.33μF 100Vdc 60sec 20℃
			≥10,000Ω·F C_R〉0.33μF 100Vdc 60sec 20℃
		U_R(dc)≥500V	≥30,000MΩ C_R≤0.33μF 500Vdc 60sec 20℃
			≥10,000Ω·F C_R〉0.33μF 500Vdc 60sec 20℃
	AC-Type		≥30,000MΩ C_R≤0.33μF 250Vdc 60sec 20℃
			≥10,000Ω·F C_R〉0.33μF 250Vdc 60sec 20℃

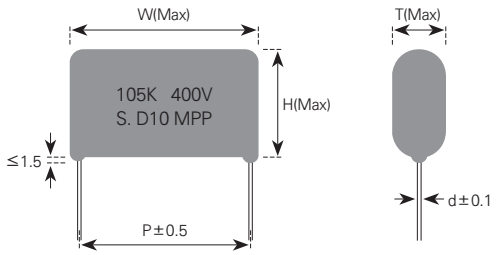
■ Part Number System

MPP	100V	473	J	7.5	S	5	
Part-1	Part-2	Part-3	Part-4	Part-5	Part-6	Part-7	Part-8

Part-1 : Series Code(Series Name) - MPP
Part-2 : Rated Voltage(DC : 100V~630V)
Part-3 : Rated Capacitance Value(0.01μF~10μF / 103~106)
Part-4 : Capacitance Tolerance(G : ±2% H : ±3% J : ±5% K : ±10% M : ±20%)
Part-5 : Lead Spacing(7.5mm / 10mm / 15mm / 22.5mm / 27.5mm)
Part-6 : Forming-Type and Packing Code
Part-7 : Size Number(1~4 : Min-Type / 5 : Standard-Type / 6~9 : Large-Type)
Part-8 : Internal Use

CODE	STYLE
B	Bending Forming
C	Straight Cutting
D	D-Type Forming
L	B-Type long Forming
M	C-Type long Forming
S	Straight
X	B-Type Forming
Y	C-Type Forming
Z	Z-Type Forming
T	A-Type Tapping
U	B-Type Tapping
V	C-Type Tapping

■ Dimensions



100Vdc

Cap. (μF)	Dimensions(mm) W (max.)	H (max.)	T (max.)	Pitch - d	PART NUMBER
0.047	10.5	7.5	4.0	7.5-0.6	MPP 100V 473J 7.5S 5 ____
0.056	10.5	8.0	4.0	7.5-0.6	MPP 100V 563J 7.5S 5 ____
0.068	10.5	9.0	4.5	7.5-0.6	MPP 100V 683J 7.5S 5 ____
0.082	10.5	9.5	4.5	7.5-0.6	MPP 100V 823J 7.5S 5 ____
0.1	10.5	10.0	5.0	7.5-0.6	MPP 100V 104J 7.5S 5 ____
0.12	10.5	10.0	5.5	7.5-0.6	MPP 100V 124J 7.5S 5 ____
0.15	10.5	11.0	6.0	7.5-0.6	MPP 100V 154J 7.5S 5 ____
0.18	10.5	11.5	6.5	7.5-0.6	MPP 100V 184J 7.5S 5 ____
0.22	10.5	12.5	7.5	7.5-0.6	MPP 100V 224J 7.5S 5 ____
0.27	10.5	13.5	8.0	7.5-0.6	MPP 100V 274J 7.5S 5 ____
0.18	13.0	10.0	6.0	10-0.6	MPP 100V 184J 10S 5 ____
0.22	13.0	11.5	6.0	10-0.6	MPP 100V 224J 10S 5 ____
0.27	13.0	12.0	6.5	10-0.6	MPP 100V 274J 10S 5 ____
0.33	13.0	13.0	7.0	10-0.6	MPP 100V 334J 10S 5 ____
0.39	13.0	13.5	7.5	10-0.6	MPP 100V 394J 10S 5 ____
0.47	13.0	14.0	8.5	10-0.6	MPP 100V 474J 10S 5 ____
0.33	18.0	10.5	6.0	15-0.8	MPP 100V 334J 15S 5 ____
0.39	18.0	10.5	6.0	15-0.8	MPP 100V 394J 15S 5 ____
0.47	18.0	11.0	6.5	15-0.8	MPP 100V 474J 15S 5 ____
0.56	18.0	14.0	7.0	15-0.8	MPP 100V 564J 15S 5 ____
0.68	18.0	15.0	7.5	15-0.8	MPP 100V 684J 15S 5 ____
0.82	18.0	15.5	8.0	15-0.8	MPP 100V 824J 15S 5 ____
1.0	18.0	16.5	9.0	15-0.8	MPP 100V 105J 15S 5 ____
1.2	18.0	17.5	10.0	15-0.8	MPP 100V 125J 15S 5 ____
1.5	18.0	18.5	11.5	15-0.8	MPP 100V 155J 15S 5 ____
2.2	18.0	21.0	11.0	15-0.8	MPP 100V 225J 15S 5 ____
2.7	18.0	22.0	12.0	15-0.8	MPP 100V 275J 15S 5 ____
1.0	26.0	13.0	7.5	15-0.8	MPP 100V 105J 22.5S 5 ____
1.2	26.0	13.0	8.0	15-1.8	MPP 100V 125J 22.5S 5 ____
1.5	26.0	15.0	8.5	15-0.8	MPP 100V 155J 22.5S 5 ____
1.8	25.5	18.0	9.0	22.5-0.8	MPP 100V 185J 22.5S 5 ____
2.2	25.5	19.0	10.0	22.5-0.8	MPP 100V 225J 22.5S 5 ____
2.7	25.5	20.0	11.5	22.5-0.8	MPP 100V 275J 22.5S 5 ____
3.3	25.5	24.5	15.1	22.5-0.8	MPP 100V 335J 22.5S 5 ____
3.9	26.0	24.5	14.5	22.5-0.8	MPP 100V 395J 22.5S 5 ____
4.7	26.0	25.5	16.0	22.5-0.8	MPP 100V 475J 22.5S 5 ____
5.6	26.0	27.5	17.5	22.5-0.8	MPP 100V 565J 22.5S 5 ____
6.8	26.0	25.5	16.0	22.5-0.8	MPP 100V 685J 22.5S 5 ____
8.2	26.0	27.5	17.5	22.5-0.8	MPP 100V 825J 22.5S 5 ____
2.2	31.0	17.5	10.5	27.5-0.8	MPP 100V 225J 27.5S 5 ____
2.7	31.0	18.5	11.5	27.5-0.8	MPP 100V 275J 27.5S 5 ____
3.3	31.0	20.5	12.0	27.5-0.8	MPP 100V 335J 27.5S 5 ____
3.9	31.0	22.5	12.5	27.5-0.8	MPP 100V 395J 27.5S 5 ____
4.7	31.0	24.0	14.0	27.5-0.8	MPP 100V 475J 27.5S 5 ____
5.6	31.0	25.0	15.5	27.5-0.8	MPP 100V 565J 27.5S 5 ____
6.8	31.0	27.0	17.0	27.5-0.8	MPP 100V 685J 27.5S 5 ____
8.2	31.0	25.5	15.5	27.5-0.8	MPP 100V 825J 27.5S 5 ____
10.0	31.0	24.5	14.5	27.5-0.8	MPP 100V 106J 27.5S 5 ____

250Vdc

Cap. (μF)	Dimensions(mm) W (max.)	H (max.)	T (max.)	Pitch - d	PART NUMBER
0.022	10.5	7.5	4.0	7.5-0.6	MPP 250V 223J 7.5S 5 ____
0.027	10.5	8.0	4.0	7.5-0.6	MPP 250V 273J 7.5S 5 ____
0.033	10.5	8.5	4.5	7.5-0.6	MPP 250V 333J 7.5S 5 ____
0.039	10.5	9.0	4.5	7.5-0.6	MPP 250V 393J 7.5S 5 ____
0.047	10.5	10.0	4.5	7.5-0.6	MPP 250V 473J 7.5S 5 ____
0.056	10.5	10.5	5.0	7.5-0.6	MPP 250V 563J 7.5S 5 ____
0.068	10.5	11.0	5.5	7.5-0.6	MPP 250V 683J 7.5S 5 ____
0.082	10.5	11.5	6.0	7.5-0.6	MPP 250V 823J 7.5S 5 ____
0.10	10.5	12.0	6.5	7.5-0.6	MPP 250V 104J 7.5S 5 ____
0.12	10.5	13.0	7.5	7.5-0.6	MPP 250V 124J 7.5S 5 ____
0.15	10.5	13.5	8.5	7.5-0.6	MPP 250V 154J 7.5S 5 ____
0.12	13.0	11.5	6.0	10-0.6	MPP 250V 124J 10S 5 ____

0.15	13.0	12.0	6.5	10-0.6	MPP 250V 154J 10S 5 ____
0.18	13.0	12.5	7.0	10-0.6	MPP 250V 184J 10S 5 ____
0.22	13.0	13.0	7.5	10-0.6	MPP 250V 224J 10S 5 ____
0.27	13.0	15.0	8.0	10-0.6	MPP 250V 274J 10S 5 ____
0.27	18.0	13.0	6.0	15-0.8	MPP 250V 274J 15S 5 ____
0.33	18.0	14.0	6.5	15-0.8	MPP 250V 334J 15S 5 ____
0.39	18.0	14.5	7.0	15-0.8	MPP 250V 394J 15S 5 ____
0.47	18.0	15.0	8.0	15-0.8	MPP 250V 474J 15S 5 ____
0.56	18.0	16.0	8.5	15-0.8	MPP 250V 564J 15S 5 ____
0.68	18.0	17.0	9.5	15-0.8	MPP 250V 684J 15S 5 ____
0.82	18.0	18.5	10.0	15-0.8	MPP 250V 824J 15S 5 ____
1.0	18.0	20.0	11.0	15-0.8	MPP 250V 105J 15S 5 ____
1.2	18.0	20.0	11.5	15-0.8	MPP 250V 125J 15S 5 ____
1.5	18.0	21.5	13.0	15-0.8	MPP 250V 155J 15S 5 ____
1.8	18.0	23.5	14.0	15-0.8	MPP 250V 185J 15S 5 ____
0.47	26.0	12.5	7.5	22.5-0.8	MPP 250V 474J 22.5S 5 ____
0.56	26.0	13.0	8.0	22.5-0.8	MPP 250V 564J 22.5S 5 ____
0.68	26.0	14.0	8.5	22.5-0.8	MPP 250V 684J 22.5S 5 ____
0.82	26.0	15.5	8.5	22.5-0.8	MPP 250V 824J 22.5S 5 ____
1.0	26.0	16.0	9.5	22.5-0.8	MPP 250V 105J 22.5S 5 ____
1.2	25.5	18.0	9.0	22.5-0.8	MPP 250V 125J 22.5S 5 ____
1.5	25.5	19.5	10.5	22.5-0.8	MPP 250V 155J 22.5S 5 ____
1.8	25.5	20.5	11.5	22.5-0.8	MPP 250V 185J 22.5S 5 ____
2.2	25.5	22.0	13.0	22.5-0.8	MPP 250V 225J 22.5S 5 ____
2.7	25.5	23.5	14.5	22.5-0.8	MPP 250V 275J 22.5S 5 ____
3.3	25.5	25.0	16.0	22.5-0.8	MPP 250V 335J 22.5S 5 ____
3.9	26.0	26.5	16.5	22.5-0.8	MPP 250V 395J 22.5S 5 ____
4.7	26.0	28.0	18.5	22.5-0.8	MPP 250V 475J 22.5S 5 ____
5.6	26.0	27.5	17.5	22.5-0.8	MPP 250V 565J 22.5S 5 ____
1.5	32.0	16.0	10.5	27.5-0.8	MPP 250V 155J 27.5S 5 ____
1.8	32.0	17.5	11.0	27.5-0.8	MPP 250V 185J 27.5S 5 ____
2.2	32.0	19.5	11.0	27.5-0.8	MPP 250V 225J 27.5S 5 ____
2.7	32.0	21.0	12.5	27.5-0.8	MPP 250V 275J 27.5S 5 ____
3.3	32.0	23.0	13.0	27.5-0.8	MPP 250V 335J 27.5S 5 ____
3.9	32.0	24.0	14.5	27.5-0.8	MPP 250V 395J 27.5S 5 ____
4.7	32.0	25.5	15.5	27.5-0.8	MPP 250V 475J 27.5S 5 ____
5.6	32.0	27.0	17.0	27.5-0.8	MPP 250V 565J 27.5S 5 ____
6.8	32.0	26.5	16.5	27.5-0.8	MPP 250V 685J 27.5S 5 ____
8.2	32.0	28.0	18.0	27.5-0.8	MPP 250V 825J 27.5S 5 ____
10.0	32.0	26.5	16.5	27.5-0.8	MPP 250V 106J 27.5S 5 ____

400Vdc

Cap. (μF)	Dimensions(mm)			Pitch - d	PART NUMBER
	W (max.)	H (max.)	T (max.)		
0.010	10.5	7.5	4	7.5-0.6	MPP 400V 103J 7.5S 5 ____
0.012	10.5	8.5	4	7.5-0.6	MPP 400V 123J 7.5S 5 ____
0.015	10.5	9	4.5	7.5-0.6	MPP 400V 153J 7.5S 5 ____
0.018	10.5	9.5	4.5	7.5-0.6	MPP 400V 183J 7.5S 5 ____
0.022	10.5	10	5	7.5-0.6	MPP 400V 223J 7.5S 5 ____
0.027	10.5	10.5	5.5	7.5-0.6	MPP 400V 273J 7.5S 5 ____
0.033	10.5	11	6	7.5-0.6	MPP 400V 333J 7.5S 5 ____
0.047	10.5	12	7	7.5-0.6	MPP 400V 473J 7.5S 5 ____
0.056	10.5	12.5	7.5	7.5-0.6	MPP 400V 563J 7.5S 5 ____
0.068	10.5	13	8	7.5-0.6	MPP 400V 683J 7.5S 5 ____
0.039	13	11	5.5	10-0.6	MPP 400V 393J 10S 5 ____
0.047	13	11	5.5	10-0.6	MPP 400V 473J 10S 5 ____
0.056	13	11.5	6	10-0.6	MPP 400V 563J 10S 5 ____
0.068	13	12.5	6.5	10-0.6	MPP 400V 683J 10S 5 ____
0.082	13	13	7	10-0.6	MPP 400V 823J 10S 5 ____
0.10	13	13.5	8	10-0.6	MPP 400V 104J 10S 5 ____
0.12	18	12	6	15-0.8	MPP 400V 124J 15S 5 ____
0.15	18	12.5	7	15-0.8	MPP 400V 154J 15S 5 ____
0.18	18	13.5	8.5	15-0.8	MPP 400V 184J 15S 5 ____
0.22	18	15	8	15-0.8	MPP 400V 224J 15S 5 ____
0.27	18	16	8.5	15-0.8	MPP 400V 274J 15S 5 ____
0.33	18	17	9.5	15-0.8	MPP 400V 334J 15S 5 ____
0.39	18	18	10.5	15-0.8	MPP 400V 394J 15S 5 ____
0.47	25.5	16	9	22.5-0.8	MPP 400V 474J 22.5S 5 ____
0.56	25.5	17	10	22.5-0.8	MPP 400V 564J 22.5S 5 ____
0.68	25.5	18	11	22.5-0.8	MPP 400V 684J 22.5S 5 ____
0.82	25.5	20	11	22.5-0.8	MPP 400V 824J 22.5S 5 ____
1.0	25.5	21.5	12.5	22.5-0.8	MPP 400V 105J 22.5S 5 ____
1.2	25.5	23	14	22.5-0.8	MPP 400V 125J 22.5S 5 ____
1.5	25.5	24.5	15.5	22.5-0.8	MPP 400V 155J 22.5S 5 ____
0.56	31	16	9.5	27.5-0.8	MPP 400V 564J 27.5S 5 ____
0.68	31	17	10.5	27.5-0.8	MPP 400V 1684J 27.5S 5 ____
0.82	31	18	11	27.5-0.8	MPP 400V 824J 27.5S 5 ____
1.00	31	19	12.5	27.5-0.8	MPP 400V 105J 27.5S 5 ____
1.20	31	20	13.5	27.5-0.8	MPP 400V 125J 27.5S 5 ____
1.50	31	22.5	14	27.5-0.8	MPP 400V 155J 27.5S 5 ____

1.8	31.0	24.0	15.5	27.5-0.8	MPP 400V 185J 27.5S 5 ____
2.2	31.0	26.5	16.5	27.5-0.8	MPP 400V 225J 27.5S 5 ____
2.7	31.0	28.5	18.5	27.5-0.8	MPP 400V 275J 27.5S 5 ____
3.3	31.0	31.5	20.5	27.5-0.8	MPP 400V 335J 27.5S 5 ____
3.9	31.0	28.0	18.0	27.5-0.8	MPP 400V 395J 27.5S 5 ____
4.7	31.0	30.0	20.0	27.5-0.8	MPP 400V 475J 27.5S 5 ____
5.6	31.0	27.5	17.5	27.5-0.8	MPP 400V 565J 27.5S 5 ____
6.8	31.0	29.5	19.5	27.5-0.8	MPP 400V 685J 27.5S 5 ____

520Vdc

Cap. (μF)	Dimensions(mm)			Pitch - d	PART NUMBER
	W (max.)	H (max.)	T (max.)		
0.039	12.5	7.8	4.1	10-0.6	MPP 520V 393J 10S 5 ____
0.047	12.5	8.0	4.4	10-0.6	MPP 520V 473J 10S 5 ____
0.056	12.5	8.8	4.4	10-0.6	MPP 520V 563J 10S 5 ____
0.068	12.5	9.2	4.7	10-0.6	MPP 520V 683J 10S 5 ____
0.082	12.5	9.5	5.1	10-0.6	MPP 520V 823J 10S 5 ____
0.100	12.5	10.5	5.6	10-0.6	MPP 520V 104J 10S 5 ____
0.120	12.5	10.9	6.0	10-0.6	MPP 520V 124J 10S 5 ____
0.150	12.5	11.5	6.6	10-0.6	MPP 520V 154J 10S 5 ____
0.180	12.5	12.0	7.1	10-0.6	MPP 520V 184J 10S 5 ____
0.100	17.8	9.4	4.8	15-0.8	MPP 520V 104J 15S 5 ____
0.120	17.8	9.7	5.1	15-0.8	MPP 520V 124J 15S 5 ____
0.150	17.8	10.1	5.5	15-0.8	MPP 520V 154J 15S 5 ____
0.180	17.8	10.5	5.9	15-0.8	MPP 520V 184J 15S 5 ____
0.220	17.8	11.0	6.4	15-0.8	MPP 520V 224J 15S 5 ____
0.270	17.8	12.1	6.6	15-0.8	MPP 520V 274J 15S 5 ____
0.330	17.8	12.6	7.2	15-0.8	MPP 520V 334J 15S 5 ____
0.390	17.8	14.7	7.2	15-0.8	MPP 520V 394J 15S 5 ____
0.470	17.8	15.4	7.9	15-0.8	MPP 520V 474J 15S 5 ____
0.560	17.8	16.1	8.6	15-0.8	MPP 520V 564J 15S 5 ____
0.680	17.8	16.9	9.4	15-0.8	MPP 520V 684J 15S 5 ____
0.820	17.8	17.8	10.3	15-0.8	MPP 520V 824J 15S 5 ____
1.000	17.8	18.9	11.9	15-0.8	MPP 520V 105J 15S 5 ____
0.330	25.5	11.3	5.9	22.5-0.8	MPP 520V 334J 22.5S 5 ____
0.390	25.5	11.7	6.3	22.5-0.8	MPP 520V 394J 22.5S 5 ____
0.470	25.5	13.8	6.3	22.5-0.8	MPP 520V 474J 22.5S 5 ____
0.560	25.5	14.3	6.8	22.5-0.8	MPP 520V 564J 22.5S 5 ____
0.680	25.5	16.0	6.9	22.5-0.8	MPP 520V 684J 22.5S 5 ____
0.820	25.5	16.6	7.6	22.5-0.8	MPP 520V 824J 22.5S 5 ____
1.000	25.5	17.4	8.9	22.5-0.8	MPP 520V 105J 22.5S 5 ____
1.200	25.5	18.2	9.7	22.5-0.8	MPP 520V 125J 22.5S 5 ____
1.500	25.5	20.3	10.2	22.5-0.8	MPP 520V 155J 22.5S 5 ____
1.800	25.5	21.3	11.2	22.5-0.8	MPP 520V 185J 22.5S 5 ____
2.200	25.5	22.5	12.4	22.5-0.8	MPP 520V 225J 22.5S 5 ____
0.470	30.7	11.6	6.2	27.5-0.8	MPP 520V 474J 27.5S 5 ____
0.560	30.7	12.1	6.6	27.5-0.8	MPP 520V 564J 27.5S 5 ____
0.680	30.7	12.6	7.2	27.5-0.8	MPP 520V 684J 27.5S 5 ____
0.820	30.7	13.8	7.8	27.5-0.8	MPP 520V 824J 27.5S 5 ____
1.000	30.7	14.5	9.1	27.5-0.8	MPP 520V 105J 27.5S 5 ____
1.200	30.7	16.2	9.2	27.5-0.8	MPP 520V 125J 27.5S 5 ____
1.500	30.7	17.2	10.2	27.5-0.8	MPP 520V 155J 27.5S 5 ____
1.800	30.7	19.0	10.5	27.5-0.8	MPP 520V 185J 27.5S 5 ____
2.200	30.7	21.1	11.0	27.5-0.8	MPP 520V 225J 27.5S 5 ____
2.700	30.7	24.4	11.1	27.5-0.8	MPP 520V 275J 27.5S 5 ____
3.300	30.7	25.6	12.4	27.5-0.8	MPP 520V 335J 27.5S 5 ____
3.900	30.7	26.8	13.6	27.5-0.8	MPP 520V 395J 27.5S 5 ____
4.700	30.7	28.3	15	27.5-0.8	MPP 520V 475J 27.5S 5 ____
5.600	30.7	29.8	16.6	27.5-0.8	MPP 520V 565J 27.5S 5 ____
6.800	30.7	31.7	18.4	27.5-0.8	MPP 520V 685J 27.5S 5 ____
8.200	30.7	33.7	20.5	27.5-0.8	MPP 520V 825J 27.5S 5 ____

630Vdc

Cap. (μF)	Dimensions(mm)			Pitch - d	PART NUMBER
	W (max.)	H (max.)	T (max.)		
0.010	10.5	9	5.5	7.5-0.6	MPP 630V 103J 7.5S 5 ____
0.012	10.5	9.5	6	7.5-0.6	MPP 630V 123J 7.5S 5 ____
0.015	10.5	10.5	6	7.5-0.6	MPP 630V 153J 7.5S 5 ____
0.018	10.5	11	6.5	7.5-0.6	MPP 630V 183J 7.5S 5 ____
0.022	10.5	12.5	7.5	7.5-0.6	MPP 630V 223J 7.5S 5 ____
0.027	10.5	13.5	8	7.5-0.6	MPP 630V 273J 7.5S 5 ____
0.033	10.5	14	9	7.5-0.6	MPP 630V 333J 7.5S 5 ____
0.039	10.5	14.5	9.5	7.5-0.6	MPP 630V 393J 7.5S 5 ____
0.022	13	10	6	10-0.6	MPP 630V 223J 10S 5 ____
0.027	13	11	6.5	10-0.6	MPP 630V 273J 10S 5 ____
0.033	13	11.5	7	10-0.6	MPP 630V 333J 10S 5 ____

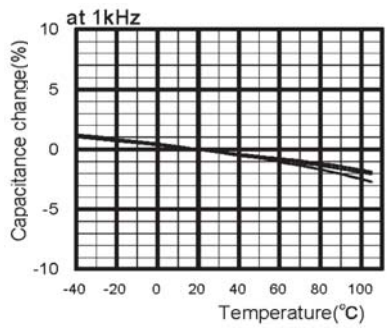
0.039	13	12	8	10-0.6	MPP 630V 393J 10S 5 _____
0.047	13	13	8	10-0.6	MPP 630V 473J 10S 5 _____
0.056	13	14	9	10-0.6	MPP 630V 563J 10S 5 _____
0.068	13	14.5	9	10-0.6	MPP 630V 683J 10S 5 _____
0.047	18	11	6.5	15-0.8	MPP 630V 473J 15S 5 _____
0.056	18	11	7	15-0.8	MPP 630V 563J 15S 5 _____
0.068	18	12.5	7	15-0.8	MPP 630V 683J 15S 5 _____
0.082	18	13	7.5	15-0.8	MPP 630V 823J 15S 5 _____
0.10	18	14	8	15-0.8	MPP 630V 104J 15S 5 _____
0.12	18	15.5	8	15-0.8	MPP 630V 124J 15S 5 _____
0.15	18	16.5	9	15-0.8	MPP 630V 154J 15S 5 _____
0.18	18	17.5	10	15-0.8	MPP 630V 184J 15S 5 _____
0.22	18	18.5	11.5	15-0.8	MPP 630V 224J 15S 5 _____
0.27	18	19.5	11	15-0.8	MPP 630V 274J 15S 5 _____
0.33	18	21.5	11.5	15-0.8	MPP 630V 334J 15S 5 _____
0.39	18	22.5	13	15-0.8	MPP 630V 394J 15S 5 _____
0.1	26	12.5	7	22.5-0.8	MPP 630V 104J 22.5S 5 _____
0.12	26	13	7.5	22.5-0.8	MPP 630V 124J 22.5S 5 _____
0.15	26	13.5	8	22.5-0.8	MPP 630V 154J 22.5S 5 _____
0.18	26	14	9	22.5-0.8	MPP 630V 184J 22.5S 5 _____
0.22	26	14.5	9.5	22.5-0.8	MPP 630V 224J 22.5S 5 _____
0.27	25.5	18	9	22.5-0.8	MPP 630V 274J 22.5S 5 _____

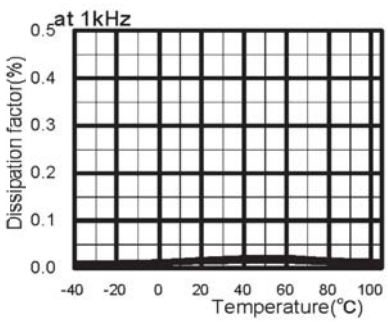
0.33	25.5	19	10	22.5-0.8	MPP 630V 334J 22.5S 5 _____
0.39	25.5	20	11	22.5-0.8	MPP 630V 394J 22.5S 5 _____
0.47	25.5	21	12	22.5-0.8	MPP 630V 474J 22.5S 5 _____
0.56	25.5	22.5	13.5	22.5-0.8	MPP 630V 564J 22.5S 5 _____
0.68	25.5	24	15	22.5-0.8	MPP 630V 684J 22.5S 5 _____
0.82	25.5	25.5	16.5	22.5-0.8	MPP 630V 824J 22.5S 5 _____
1.0	26	26.5	16.5	22.5-0.8	MPP 630V 105J 22.5S 5 _____
1.2	26	28	18	22.5-0.8	MPP 630V 125J 22.5S 5 _____
0.33	31	15.5	10	27.5-0.8	MPP 630V 334J 27.5S 5 _____
0.39	31	18	11.5	27.5-0.8	MPP 630V 394J 27.5S 5 _____
0.47	31	18	11	27.5-0.8	MPP 630V 474J 27.5S 5 _____
0.56	31	19	12	27.5-0.8	MPP 630V 564J 27.5S 5 _____
0.68	31	20	13	27.5-0.8	MPP 630V 684J 27.5S 5 _____
0.82	31	22	13.5	27.5-0.8	MPP 630V 824J 27.5S 5 _____
1.0	31	25	16	27.5-0.8	MPP 630V 105J 27.5S 5 _____
1.2	31	27	18	27.5-0.8	MPP 630V 125J 27.5S 5 _____
1.5	31.0	27.5	17.5	27.5-0.8	MPP 630V 155J 27.5S 5 _____
1.8	31.0	29.5	19.5	27.5-0.8	MPP 630V 185J 27.5S 5 _____
2.2	31.0	28.0	18.0	27.5-0.8	MPP 630V 225J 27.5S 5 _____
2.7	31.0	30.0	20.5	27.5-0.8	MPP 630V 275J 27.5S 5 _____
3.3	31.0	30.5	20.5	27.5-0.8	MPP 630V 335J 27.5S 5 _____
3.9	31.0	28.0	18.0	27.5-0.8	MPP 630V 395J 27.5S 5 _____

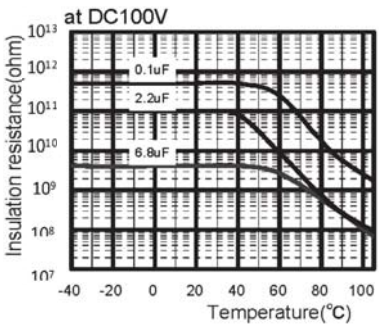
■ Electrical Characteristics (Typical Data)

250Vdc Series

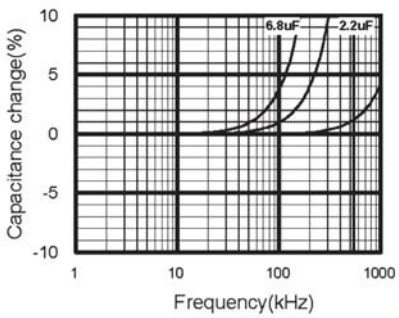
Temperature Characteristics

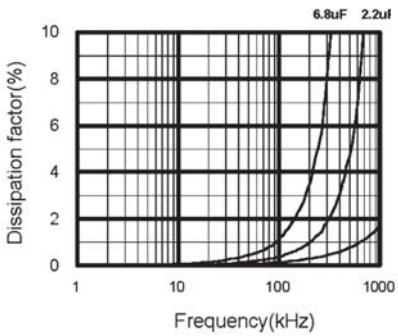


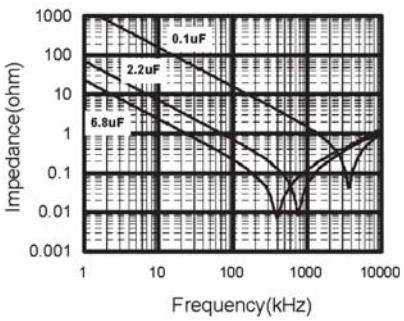




Frequency Characteristics

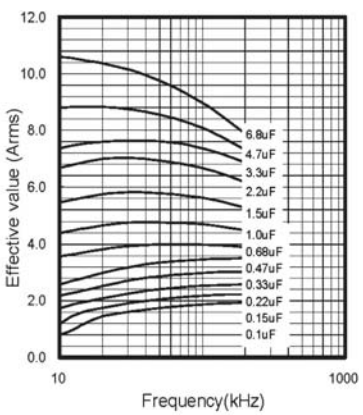






■ Applicable Specifications

Permissible Current



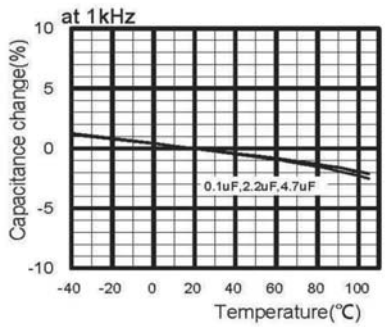
Pulse Handling Capability(dv/dt)
(Max 1000cycles)

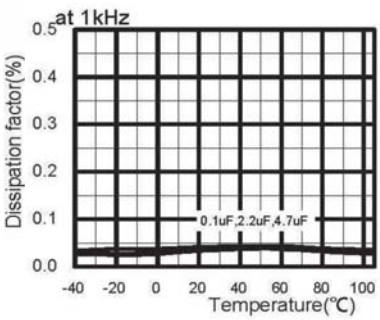
Rating Voltage	Capacitance Value(μF)	Code	dV/dt(V/μs)	Current(o-p) (A)
DC 250V	0.10	104	135	13.5
	0.15	154		20.2
	0.22	224		29.7
	0.33	334		44.5
	0.47	474		63.4
	0.68	684	82	55.7
	1.00	105		82.0
	1.50	155		123.0
	2.20	225		180.4
	3.30	335	57	188.1
	6.80	685		387.6

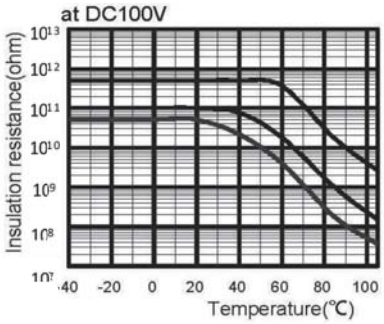
■ Electrical Characteristics (Typical Data)

400Vdc Series

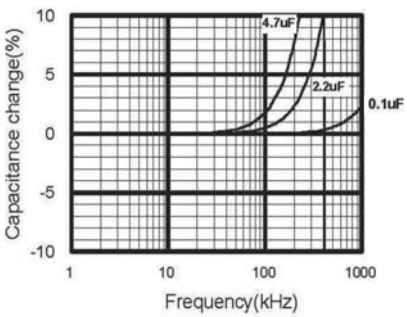
Temperature Characteristics

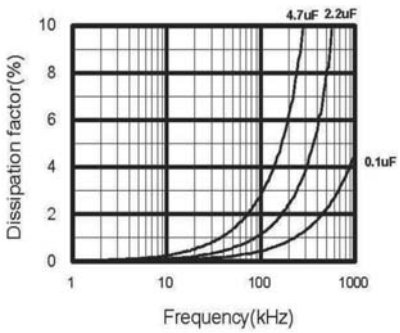


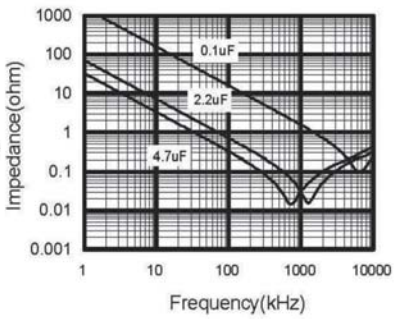




Frequency Characteristics

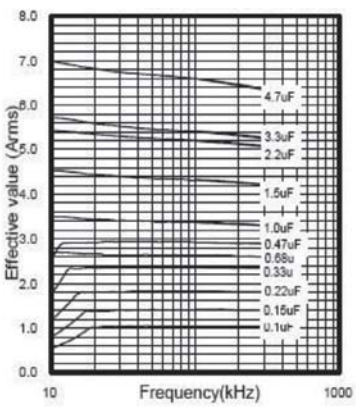






■ Applicable Specifications

Permissible Current



Pulse Handling Capability(dv/dt)

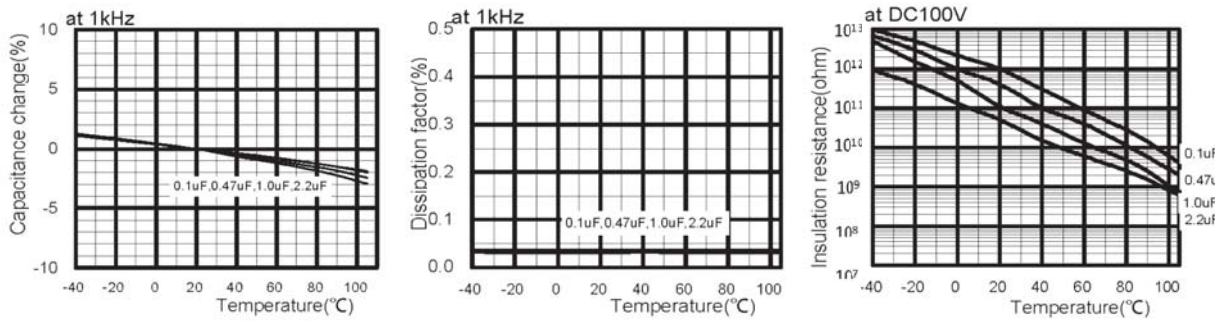
(Max 1000cycles)

Rating Voltage	Capacitance Value(μF)	Code	dV/dt(V/μS)	Current(o-p) (A)
400Vdc Series	0.10	104	41.6	4.2
	0.15	154		6.2
	0.22	224		9.2
	0.33	334		13.7
	0.47	474		19.6
	0.68	684	24.3	16.5
	1.00	105		24.3
	1.50	155		36.4
	2.20	225		53.4
	3.30	335	14.3	47.2
	4.70	475		67.3

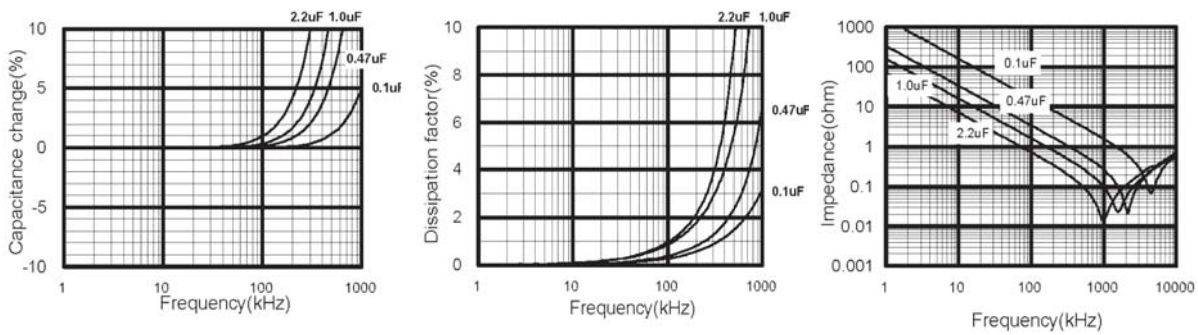
■ Electrical Characteristics (Typical Data)

630Vdc Series

Temperature Characteristics

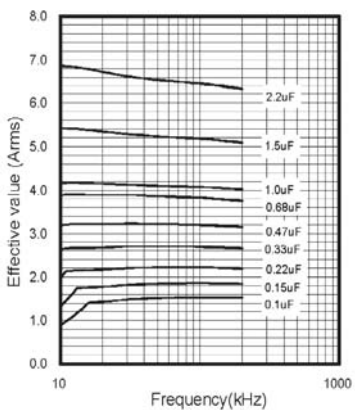


Frequency Characteristics



■ Applicable Specifications

Permissible Current



Pulse Handling Capability(dv/dt)
(Max 1000cycles)

Rating Voltage	Capacitance Value(㎌)	Code	dV/dt(V/㎲)	Current(o-p) (A)
DC 630V	0.10	104	155	15.5
	0.12	124		18.6
	0.15	154		23.3
	0.18	184		27.9
	0.22	224		34.1
	0.27	274		41.9
	0.33	334		51.2
	0.39	394		60.5
	0.47	474		72.9
	0.56	564		86.8
	0.68	684		105.4
	0.82	824	65	53.3
	1.00	105		65.0
	1.20	125		78.0
	1.50	155		97.5
	1.80	185		117
	2.20	225		143

BMPP

Non-inductive construction using metallized Polypropylene film with flame retardant plastic case and epoxy resin filled.

■ Features

- Low Dissipation Factor at high Frequency.
- High stability of capacitance & DF.
- Self-healing property.
- High insulation resistance.
- Plastic case(UL94 V-0), Epoxy resin sealing
- RoHS directive compliant

■ Applications

- Typical applications include pulse operation in switched mode
- power supply(SMPS), televisions, computers, monitors, electrical ballasts and other high frequency applications demanding stable operation.

■ Specifications

Reference Standard		IEC 60384-16(For-DC Type) IEC 60384-17(For-AC Type)	
Climatic Category		40 / 105 / 21	
Rated Temperature		105℃ +85℃~+105℃ decreasing factor 1.0% / ℃ for V_R(dc)	
Operation Temperature Range		-40℃~105℃	
Rated Voltage	**DC-Type**	160V, 250V, 400V, 630V	
	AC-Type	90Vac, 160Vac, 220Vac, 250Vac	
Capacitance Range		0.01μF~10.0μF	
Capacitance Tolerance		J : ±5% K : ±10% M : ±20% ※Standard : J : ±5%, Other Tolerance Grade : available on request.	
Voltage Proof	**DC-Type**	1.75U_R(dc) / 3sec	
	AC-Type	4.3U_R(ac) / 3sec	
Dissipation Factor		≤0.1%(at 1kHz 20℃)	
Rated Voltage	**DC-Type**	U_R(dc)〈500V	≥30,000MΩ C_R≤0.33μF 100Vdc 60sec 20℃
			≥10,000Ω·F C_R〉0.33μF 100Vdc 60sec 20℃
		U_R(dc)≥500V	≥30,000MΩ C_R≤0.33μF 500Vdc 60sec 20℃
			≥10,000Ω·F C_R〉0.33μF 500Vdc 60sec 20℃
	AC-Type		≥30,000MΩ C_R≤0.33μF 250Vdc 60sec 20℃
			≥10,000Ω·F C_R〉0.33μF 250Vdc 60sec 20℃

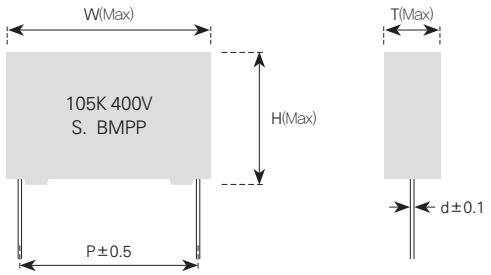
■ Part Number System

BMPP	160V	184	J	10	S	5	
Part-1	Part-2	Part-3	Part-4	Part-5	Part-6	Part-7	Part-8

Part-1 : Series Code(Series Name)-BMPP
Part-2 : Rated Voltage(DC : 160V~630V / 90Vac~250Vac(Only for AC applications))
Part-3 : Rated Capacitance Value(0.01μF~10.0μF / 103~106)
Part-4 : Capacitance Tolerance(G : ±2% H : ±3% J : ±5% K : ±10% M : ±20%)
Part-5 : Lead Spacing(10mm / 15mm / 22.5mm / 27.5mm)
Part-6 : Forming-Type and Packing Code →
Part-7 : Size Number(1~4 : Min-Type / 5 : Standard-Type / 6~9 : Large-Type)
Part-8 : Internal Use

CODE	STYLE
B	Bending Forming
C	Straight Cutting
D	D-Type Forming
L	B-Type long Forming
M	C-Type long Forming
S	Straight
X	B-Type Forming
Y	C-Type Forming
Z	Z-Type Forming
T	A-Type Tapping
U	B-Type Tapping
V	C-Type Tapping

■ Dimensions



160Vdc(90Vac)

Cap. (μF)	Dimensions(mm) W (max.)	H (max.)	T (max.)	Pitch - d	PART NUMBER
0.1	10.5	11.0	5.0	7.5-0.6	BMPP160V104J7.5S5 ____
0.12	10.5	11.0	5.0	7.5-0.6	BMPP160V124J7.5S5 ____
0.15	10.5	11.0	5.0	7.5-0.6	BMPP160V154J7.5S5 ____
0.18	10.5	12.0	6.0	7.5-0.6	BMPP160V184J7.5S5 ____
0.22	10.5	12.0	6.0	7.5-0.6	BMPP160V224J7.5S5 ____
0.27	10.5	13.0	7.0	7.5-0.6	BMPP160V274J7.5S5 ____
0.18	13.0	11.0	5.0	10-0.6	BMPP160V184J10S5 ____
0.22	13.0	11.0	5.0	10-0.6	BMPP160V224J10S5 ____
0.27	13.0	11.0	5.0	10-0.6	BMPP160V274J10S5 ____
0.33	13.0	12.0	6.0	10-0.6	BMPP160V334J10S5 ____
0.39	13.0	12.0	6.0	10-0.6	BMPP160V394J10S5 ____
0.47	13.0	13.0	7.0	10-0.6	BMPP160V474J10S5 ____
0.33	18.0	11.0	5.0	15-0.8	BMPP160V334J15S5 ____
0.39	18.0	11.0	5.0	15-0.8	BMPP160V394J15S5 ____
0.47	18.0	11.0	5.0	15-0.8	BMPP160V474J15S5 ____
0.56	18.0	11.0	5.0	15-0.8	BMPP160V564J15S5 ____
0.68	18.0	12.0	6.0	15-0.8	BMPP160V684J15S5 ____
0.82	18.0	12.0	6.0	15-0.8	BMPP160V824J15S5 ____
1	18.0	13.0	7.0	15-0.8	BMPP160V105J15S5 ____
1.2	18.0	13.5	7.5	15-0.8	BMPP160V125J15S5 ____
1.5	18.0	15.0	8.5	15-0.8	BMPP160V155J15S5 ____
2.2	18.0	16.5	10.0	15-0.8	BMPP160V225J15S5 ____
2.7	18.0	19.0	11.0	15-0.8	BMPP160V275J15S5 ____
1	26.0	15.0	6.0	22.5-0.8	BMPP160V105J22.5S5 ____
1.2	26.0	15.0	6.0	22.5-0.8	BMPP160V125J22.5S5 ____
1.5	26.0	15.0	6.0	22.5-0.8	BMPP160V155J22.5S5 ____
1.8	26.0	16.5	7.0	22.5-0.8	BMPP160V185J22.5S5 ____
2.2	26.0	16.5	7.0	22.5-0.8	BMPP160V225J22.5S5 ____
2.7	26.0	17.0	8.5	22.5-0.8	BMPP160V275J22.5S5 ____
3.3	26.0	18.0	9.0	22.5-0.8	BMPP160V335J22.5S5 ____
3.9	26.0	19.0	10.0	22.5-0.8	BMPP160V395J22.5S5 ____
4.7	26.0	20.0	11.0	22.5-0.8	BMPP160V475J22.5S5 ____
5.6	26.0	22.0	12.5	22.5-0.8	BMPP160V565J21.5S5 ____
6.8	26.0	24.0	13.5	22.5-0.8	BMPP160V685J22.5S5 ____
8.2	26.0	25.0	15.0	22.5-0.8	BMPP160V825J22.5S5 ____
2.2	31.0	18.0	9.0	27.5-0.8	BMPP160V225J27.5S5 ____
2.7	31.0	18.0	9.0	27.5-0.8	BMPP160V275J27.5S5 ____
3.3	31.0	18.0	9.0	27.5-0.8	BMPP160V335J27.5S5 ____
3.9	31.0	18.0	9.0	27.5-0.8	BMPP160V395J27.5S5 ____
4.7	31.0	19.0	10.0	27.5-0.8	BMPP160V475J27.5S5 ____
5.6	31.0	20.0	11.0	27.5-0.8	BMPP160V565J27.5S5 ____
6.8	31.0	22.0	13.0	27.5-0.8	BMPP160V685J27.5S5 ____
8.2	31.0	23.5	14.0	27.5-0.8	BMPP160V825J27.5S5 ____
10	31.0	24.5	15.0	27.5-0.8	BMPP160V106J27.5S5 ____

250Vdc(160Vac)

Cap. (μF)	Dimensions(mm) W (max.)	H (max.)	T (max.)	Pitch - d	PART NUMBER
0.068	10.5	11.0	5.0	7.5-0.6	BMPP250V683J7.5S5 ____
0.082	10.5	11.0	5.0	7.5-0.6	BMPP250V823J7.5S5 ____
0.1	10.5	11.0	5.0	7.5-0.6	BMPP160V104J7.5S5 ____
0.12	10.5	11.0	5.0	7.5-0.6	BMPP250V124J7.5S5 ____
0.15	10.5	11.0	5.0	7.5-0.6	BMPP250V154J7.5S5 ____
0.12	13.0	11.0	5.0	10-0.6	BMPP250V124J10S5 ____
0.15	13.0	11.0	5.0	10-0.6	BMPP250V154J10S5 ____
0.18	13.0	11.0	5.5	10-0.6	BMPP250V184J10S5 ____
0.22	13.0	12.0	6.0	10-0.6	BMPP250V224J10S5 ____
0.27	13.0	13.0	7.0	10-0.6	BMPP250V274J10S5 ____
0.22	18.0	11.0	5.0	15-0.8	BMPP250V224J15S5 ____
0.27	18.0	11.0	5.0	15-0.8	BMPP250V274J15S5 ____
0.33	18.0	11.0	5.0	15-0.8	BMPP250V334J15S5 ____
0.39	18.0	11.0	5.0	15-0.8	BMPP250V394J15S5 ____
0.47	18.0	11.0	5.0	15-0.8	BMPP250V474J15S5 ____
0.56	18.0	11.0	5.0	15-0.8	BMPP250V564J15S5 ____

0.68	18.0	12.0	6.0	15-0.8	BMPP250V684J15S5 ____
0.82	18.0	12.0	6.0	15-0.8	BMPP250V824J15S5 ____
1	18.0	13.0	7.0	15-0.8	BMPP250V105J15S5 ____
1.2	18.0	13.5	7.5	15-0.8	BMPP250V125J15S5 ____
1.5	18.0	15.0	8.5	15-0.8	BMPP250V155J15S5 ____
1.8	18.0	18.0	9.0	15-0.8	BMPP250V185J15S5 ____
0.47	26.0	15.0	6.0	22.5-0.8	BMPP250V474J22.5S5 ____
0.56	26.0	15.0	6.0	22.5-0.8	BMPP250V564J22.5S5 ____
0.68	26.0	15.0	6.0	22.5-0.8	BMPP250V684J22.5S5 ____
0.82	26.0	15.0	6.0	22.5-0.8	BMPP250V824J22.5S5 ____
1	26.0	16.5	7.0	22.5-0.8	BMPP250V105J22.5S5 ____
1.2	26.0	16.5	7.0	22.5-0.8	BMPP250V125J22.5S5 ____
1.5	26.0	16.5	7.0	22.5-0.8	BMPP250V155J22.5S5 ____
1.8	26.0	16.5	7.0	22.5-0.8	BMPP250V185J22.5S5 ____
2.2	26.0	16.5	7.0	22.5-0.8	BMPP250V225J22.5S5 ____
2.7	26.0	17.0	8.5	22.5-0.8	BMPP250V275J22.5S5 ____
3.3	26.0	18.0	9.0	22.5-0.8	BMPP250V335J22.5S5 ____
3.9	26.0	19.0	10.0	22.5-0.8	BMPP250V395J22.5S5 ____
4.7	26.0	20.0	11.0	22.5-0.8	BMPP250V475J22.5S5 ____
5.6	26.0	22.0	12.5	22.5-0.8	BMPP250V565J22.5S5 ____
1.5	31.0	18.0	9.0	27.5-0.8	BMPP250V155J27.5S5 ____
1.8	31.0	18.0	9.0	27.5-0.8	BMPP250V185J27.5S5 ____
2.2	31.0	18.0	9.0	27.5-0.8	BMPP250V225J27.5S5 ____
2.7	31.0	19.0	10.0	27.5-0.8	BMPP250V275J27.5S5 ____
3.3	31.0	20.0	11.0	27.5-0.8	BMPP250V335J27.5S5 ____
3.9	31.0	22.0	13.0	27.5-0.8	BMPP250V395J27.5S5 ____
4.7	31.0	23.5	14.0	27.5-0.8	BMPP250V475J27.5S5 ____
5.6	31.0	24.5	15.0	27.5-0.8	BMPP250V565J27.5S5 ____
6.8	31.0	26.0	18.0	27.5-0.8	BMPP250V685J27.5S5 ____
8.2	31.0	28.0	19.0	27.5-0.8	BMPP250V825J27.5S5 ____
10	31.0	31.0	21.0	27.5-0.8	BMPP250V106J27.5S5 ____

400Vdc(220Vac)

Cap. (μF)	Dimensions(mm)			Pitch - d	PART NUMBER
	W (max.)	H (max.)	T (max.)		
0.027	10.5	11.0	5.0	7.5-0.6	BMPP400V273J7.5S5 ____
0.033	10.5	11.0	5.0	7.5-0.6	BMPP400V333J7.5S5 ____
0.039	10.5	11.0	5.0	7.5-0.6	BMPP400V393J7.5S5 ____
0.047	10.5	12.0	6.0	7.5-0.6	BMPP400V473J7.5S5 ____
0.056	10.5	12.0	6.0	7.5-0.6	BMPP400V563J7.5S5 ____
0.068	10.5	12.0	6.0	7.5-0.6	BMPP400V683J7.5S5 ____
0.047	13.0	11.0	5.0	10-0.6	BMPP400V473J10S5 ____
0.056	13.0	11.0	5.0	10-0.6	BMPP400V563J10S5 ____
0.068	13.0	11.0	5.0	10-0.6	BMPP400V683J10S5 ____
0.082	13.0	11.0	5.0	10-0.6	BMPP400V823J10S5 ____
0.1	13.0	11.0	5.5	10-0.6	BMPP400V104J10S5 ____
0.12	13.0	12.0	6.0	10-0.6	BMPP400V124J10S5 ____
0.082	18.0	11.0	5.0	15-0.8	BMPP400V823J15S5 ____
0.1	18.0	11.0	5.0	15-0.8	BMPP400V104J15S5 ____
0.12	18.0	11.0	5.0	15-0.8	BMPP400V124J15S5 ____
0.15	18.0	11.0	5.0	15-0.8	BMPP400V154J15S5 ____
0.18	18.0	11.0	5.0	15-0.8	BMPP400V184J15S5 ____
0.22	18.0	12.0	6.0	15-0.8	BMPP400V224J15S5 ____
0.27	18.0	12.0	6.0	15-0.8	BMPP400V274J15S5 ____
0.33	18.0	13.0	7.0	15-0.8	BMPP400V334J15S5 ____
0.39	18.0	13.5	7.5	15-0.8	BMPP400V394J15S5 ____
0.47	18.0	15.0	8.5	15-0.8	BMPP400V474J15S5 ____
0.56	18.0	17.0	8.0	15-0.8	BMPP400V564J15S5 ____
0.68	18.0	16.0	10.0	15-0.8	BMPP400V684J15S5 ____
0.82	18.0	18.0	10.0	15-0.8	BMPP400V824J15S5 ____
0.22	26.0	15.0	6.0	22.5-0.8	BMPP400V224J22.5S5 ____
0.27	26.0	15.0	6.0	22.5-0.8	BMPP400V274J22.5S5 ____
0.33	26.0	15.0	6.0	22.5-0.8	BMPP400V334J22.5S5 ____
0.39	26.0	15.0	6.0	22.5-0.8	BMPP400V394J22.5S5 ____
0.47	26.0	15.0	6.0	22.5-0.8	BMPP400V474J22.5S5 ____
0.56	26.0	16.5	7.0	22.5-0.8	BMPP400V564J22.5S5 ____
0.68	26.0	16.5	7.0	22.5-0.8	BMPP400V684J22.5S5 ____
0.82	26.0	17.0	8.5	22.5-0.8	BMPP400V824J22.5S5 ____
1	26.0	17.0	8.5	22.5-0.8	BMPP400V105J22.5S5 ____
1.2	26.0	19.0	10.0	22.5-0.8	BMPP400V125J22.5S5 ____
1.5	26.0	20.0	11.0	22.5-0.8	BMPP400V155J22.5S5 ____
1.8	26.0	22.0	12.5	22.5-0.8	BMPP400V185J22.5S5 ____
2.2	26.0	24.0	13.5	22.5-0.8	BMPP400V225J22.5S5 ____
0.56	31.0	18.0	9.0	27.5-0.8	BMPP400V564J27.5S5 ____
0.68	31.0	18.0	9.0	27.5-0.8	BMPP400V684J27.5S5 ____
0.82	31.0	18.0	9.0	27.5-0.8	BMPP400V824J27.5S5 ____
1	31.0	19.0	10.0	27.5-0.8	BMPP400V105J27.5S5 ____
1.2	31.0	19.0	10.0	27.5-0.8	BMPP400V125J27.5S5 ____

1.5	31.0	19.0	10.0	27.5-0.8	BMPP400V155J22.5S5 ____
1.8	31.0	20.0	11.0	27.5-0.8	BMPP400V185J27.5S5 ____
2.2	31.0	24.5	15.0	27.5-0.8	BMPP400V225J27.5S5 ____
2.7	31.0	25.5	16.0	27.5-0.8	BMPP400V275J27.5S5 ____
3.3	31.0	26.0	18.0	27.5-0.8	BMPP400V335J27.5S5 ____
3.9	31.0	25.5	16.0	27.5-0.8	BMPP400V395J27.5S5 ____
4.7	31.0	26.0	18.0	27.5-0.8	BMPP400V475J27.5S5 ____
5.6	31.0	28.0	19.0	27.5-0.8	BMPP400V56J27.5S5 ____
6.8	31.0	31.0	21.0	27.5-0.8	BMPP400V685J27.5S5 ____

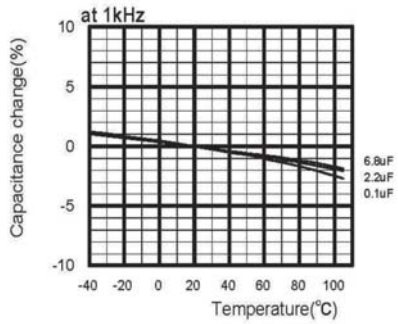
630Vdc

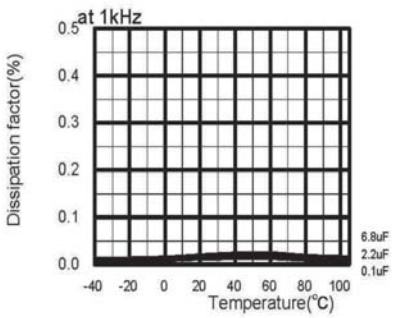
Cap. (μF)	Dimensions(mm)			Pitch - d	PART NUMBER
	W (max.)	H (max.)	T (max.)		
0.012	10.5	11.0	5.0	7.5-0.6	BMPP630V123J7.5S5 ____
0.015	10.5	11.0	5.0	7.5-0.6	BMPP630V153J7.5S5 ____
0.018	10.5	11.0	5.0	7.5-0.6	BMPP630V183J7.5S5 ____
0.022	10.5	11.0	5.0	7.5-0.6	BMPP630V223J7.5S5 ____
0.027	10.5	11.0	5.0	7.5-0.6	BMPP630V273J7.5S5 ____
0.033	10.5	11.0	5.0	7.5-0.6	BMPP630V333J7.5S5 ____
0.039	10.5	12.0	6.0	7.5-0.6	BMPP630V393J7.5S5 ____
0.027	13.0	11.0	5.0	10-0.6	BMPP630V273J10S5 ____
0.033	13.0	11.0	5.0	10-0.6	BMPP630V333J10S5 ____
0.039	13.0	11.0	5.0	10-0.6	BMPP630V393J10S5 ____
0.047	13.0	11.0	5.5	10-0.6	BMPP630V473J10S5 ____
0.056	13.0	12.0	6.0	10-0.6	BMPP630V563J10S5 ____
0.068	13.0	12.5	6.5	10-0.6	BMPP630V683J10S5 ____
0.047	18.0	11.0	5.0	15-0.8	BMPP630V473J15S5 ____
0.056	18.0	11.0	5.0	15-0.8	BMPP630V563J15S5 ____
0.063	18.0	11.0	5.0	15-0.8	BMPP630V633J15S5 ____
0.068	18.0	12.0	6.0	15-0.8	BMPP630V683J15S5 ____
0.082	18.0	12.0	6.0	15-0.8	BMPP630V823J15S5 ____
0.1	18.0	12.0	6.0	15-0.8	BMPP630V104J15S5 ____
0.12	18.0	12.0	6.0	15-0.8	BMPP630V124J15S5 ____
0.15	18.0	13.0	7.0	15-0.8	BMPP630V154J15S5 ____
0.18	18.0	13.0	7.0	15-0.8	BMPP630V184J15S5 ____
0.22	18.0	14.0	8.0	15-0.8	BMPP630V224J15S5 ____
0.27	18.0	17.0	8.0	15-0.8	BMPP630V274J15S5 ____
0.33	18.0	16.0	10.0	15-0.8	BMPP630V334J15S5 ____
0.37	18.0	19.0	11.0	15-0.8	BMPP630V394J15S5 ____
0.1	26.0	15.0	6.0	22.5-0.8	BMPP630V104J22.5S5 ____
0.12	26.0	15.0	6.0	22.5-0.8	BMPP630V124J22.5S5 ____
0.15	26.0	15.0	6.0	22.5-0.8	BMPP630V154J22.5S5 ____
0.18	26.0	15.0	6.0	22.5-0.8	BMPP630V184J22.5S5 ____
0.22	26.0	15.0	6.0	22.5-0.8	BMPP630V224J22.5S5 ____
0.27	26.0	16.5	7.0	22.5-0.8	BMPP630V274J22.5S5 ____
0.33	26.0	16.5	7.0	22.5-0.8	BMPP630V334J22.5S5 ____
0.39	26.0	17.0	8.5	22.5-0.8	BMPP630V394J22.5S5 ____
0.47	26.0	18.0	9.0	22.5-0.8	BMPP630V474J22.5S5 ____
0.56	26.0	19.0	10.0	22.5-0.8	BMPP630V564J22.5S5 ____
0.68	26.0	20.0	11.0	22.5-0.8	BMPP630V684J22.5S5 ____
0.82	26.0	22.0	12.5	22.5-0.8	BMPP630V824J22.5S5 ____
1	26.0	22.0	12.5	22.5-0.8	BMPP630V105J22.5S5 ____
1.2	26.0	24.5	15.0	22.5-0.8	BMPP630V125J22.5S5 ____
0.33	31.0	18.0	9.0	27.5-0.8	BMPP630V334J27.5S5 ____
0.39	31.0	18.0	9.0	27.5-0.8	BMPP630V394J27.5S5 ____
0.47	31.0	18.0	9.0	27.5-0.8	BMPP630V474J27.5S5 ____
0.56	31.0	19.0	10.0	27.5-0.8	BMPP630V564J27.5S5 ____
0.68	31.0	20.0	11.0	27.5-0.8	BMPP630V684J275S5 ____
0.82	31.0	22.0	13.0	27.5-0.8	BMPP630V824J27.5S5 ____
1	31.0	22.0	13.0	27.5-0.8	BMPP630V105J27.5S5 ____
1.2	31.0	24.5	15.0	27.5-0.8	BMPP630V125J27.5S5 ____
1.5	31.0	25.5	16.0	27.5-0.8	BMPP630V155J27.5S5 ____
1.8	31.0	26.0	18.0	27.5-0.8	BMPP630V185J27.5S5 ____
2.2	31.0	28.0	19.0	27.5-0.8	BMPP630V225J27.5S5 ____
2.7	31.0	31.0	21.0	27.5-0.8	BMPP630V275J27.5S5 ____
3.3	31.0	31.0	21.0	27.5-0.8	BMPP630V335J27.5S5 ____
3.9	31.0	31.0	21.0	27.5-0.8	BMPP630V395J27.5S5 ____

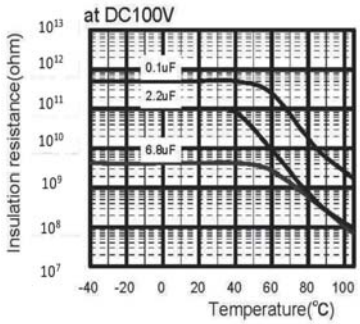
■ Electrical Characteristics (Typical Data)

250Vdc Series

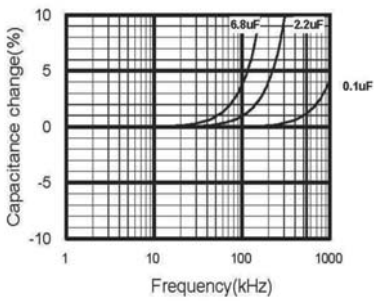
Temperature Characteristics

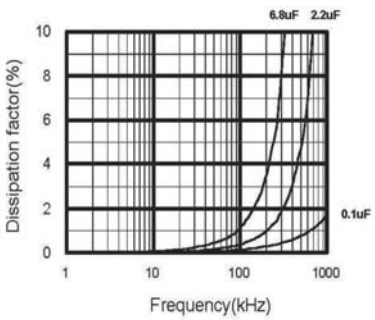


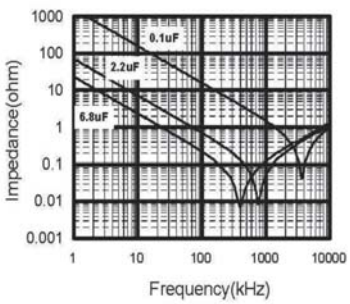




Frequency Characteristics

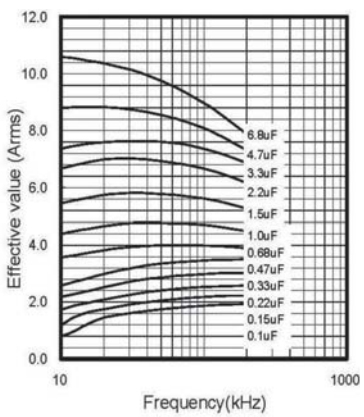






■ Applicable Specifications

Permissible Current



Pulse Handling Capability(dv/dt)

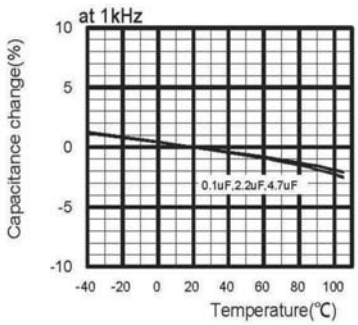
(Max 1000cycles)

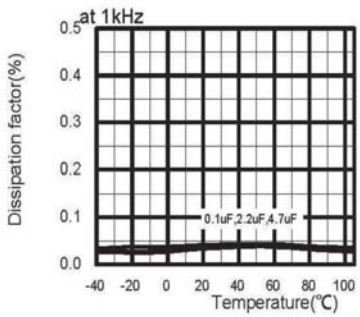
Rating Voltage	Capacitance Value(㎌)	Code	dV/dt(V/㎲)	Current(o-p) (A)
DC 250V	0.10	104	135	13.5
	0.15	154		20.2
	0.22	224		29.7
	0.33	334		44.5
	0.47	474		63.4
	0.68	684	82	55.7
	1.00	105		82.0
	1.50	155		123.0
	2.20	225		180.4
	3.30	335	57	188.1
	6.80	685		387.6

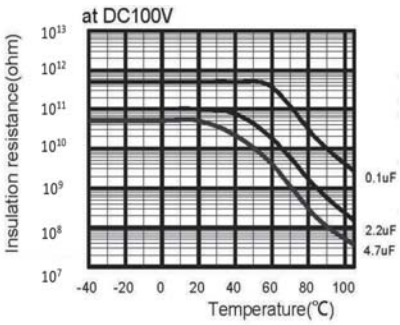
■ Electrical Characteristics (Typical Data)

400Vdc Series

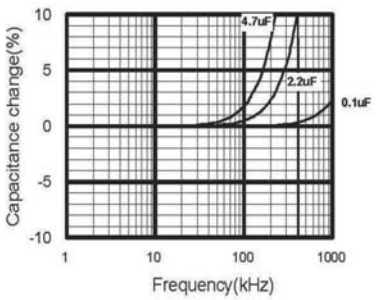
Temperature Characteristics

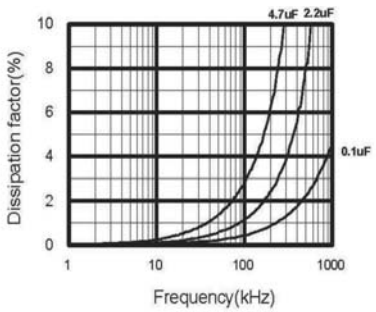


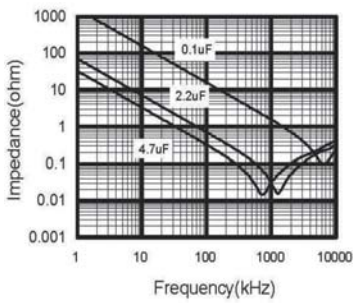




Frequency Characteristics

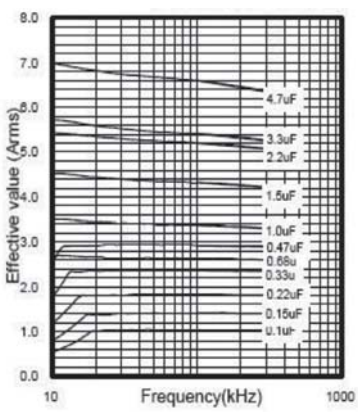






■ Applicable Specifications

Permissible Current



Pulse Handling Capability(dv/dt)

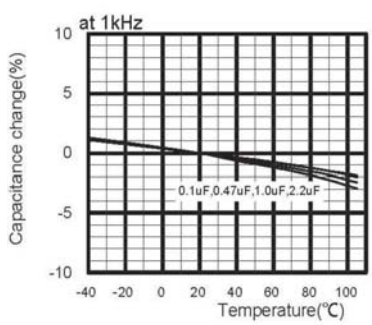
(Max 1000cycles)

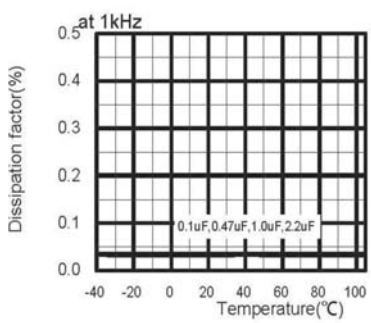
Rating Voltage	Capacitance Value(㎌)	Code	dV/dt(V/㎲)	Current(o-p) (A)
400Vdc Series	0.10	104	41.6	4.2
	0.15	154		6.2
	0.22	224		9.2
	0.33	334		13.7
	0.47	474		19.6
	0.68	684	24.3	16.5
	1.00	105		24.3
	1.50	155		36.4
	2.20	225		53.4
	3.30	335	14.3	47.2
	4.70	475		67.3

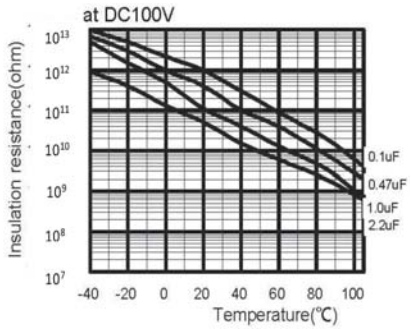
■ Electrical Characteristics (Typical Data)

630Vdc Series

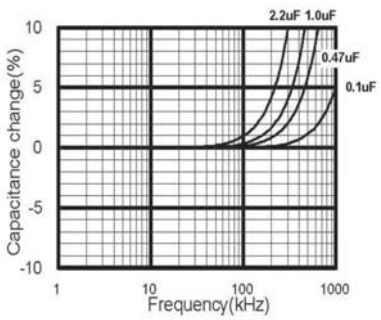
Temperature Characteristics

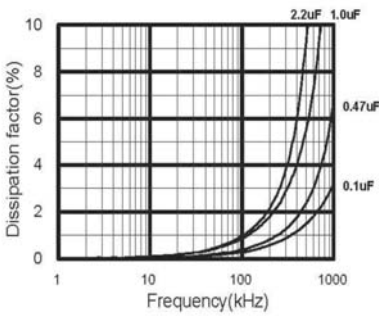


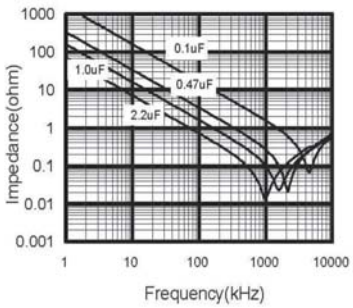




Frequency Characteristics

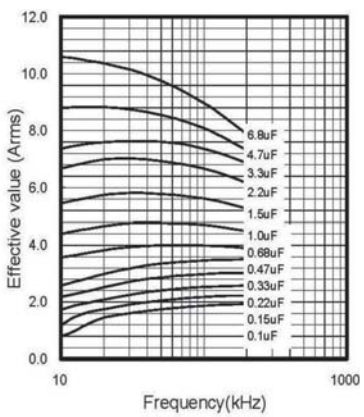






■ Applicable Specifications

Permissible Current



Pulse Handling Capability(dv/dt)

(Max 1000cycles)

Rating Voltage	Capacitance Value(μF)	Code	dV/dt(V/μs)	Current(o-p) (A)
DC 630V	0.10	104	155	15.5
	0.12	124		18.6
	0.15	154		23.3
	0.18	184		27.9
	0.22	224		34.1
	0.27	274		41.9
	0.33	334		51.2
	0.39	394		60.5
	0.47	474		72.9
	0.56	564		86.8
	0.68	684		105.4
	0.82	824	65	53.3
	1.00	105		65.0
	1.20	125		78.0
	1.50	155		97.5
	1.80	185		117
	2.20	225		143

BMPP(P=7.5)

Non-inductive construction using metallized Polypropylene film with flame retardant plastic case and epoxy resin filled.

■ Features

- low Dissipation Factor at high Frequency.
- high stability of capacitance & DF.
- self-healing property.
- high insulation resistance.
- Plastic case(UL94 V-0), Epoxy resin sealing
- RoHS directive compliant

■ Applications

- Typical applications include pulse operation in switched mode
- power supply(SMPS), televisions, computers, monitors, electrical ballasts and other high frequency applications demanding stable operation.

■ Specifications

Reference Standard		IEC 60384-16(For-DC Type) IEC 60384-17(For-AC Type)	
Climatic Category		40 / 105 / 21	
Rated Temperature		105℃ +85℃~+105℃ decreasing factor 1.0% / ℃ for V_R(dc)	
Operation Temperature Range		-40℃~105℃	
Rated Voltage	**DC-Type**	100V, 250V, 400V, 630V	
	AC-Type	63Vac, 160Vac, 200Vac, 220Vac	
Capacitance Range		0.001μF~0.018μF	
Capacitance Tolerance		G : ±2% H : ±3% J : ±5% K : ±10% M : ±20% ※Standard : J : ±5%, Other Tolerance Grade : available on request.	
Voltage Proof	**DC-Type**	1.75U_R(dc) / 3sec	
	AC-Type	4.3U_R(ac) / 3sec	
Dissipation Factor		≤0.1%(at 1kHz 20℃)	
Rated Voltage	**DC-Type**	U_R(dc)〈500V	≥30,000MΩ C_R≤0.33μF 100Vdc 60sec 20℃
			≥10,000Ω·F C_R〉0.33μF 100Vdc 60sec 20℃
		U_R(dc)≥500V	≥30,000MΩ C_R≤0.33μF 500Vdc 60sec 20℃
			≥10,000Ω·F C_R〉0.33μF 500Vdc 60sec 20℃
	AC-Type		≥30,000MΩ C_R≤0.33μF 250Vdc 60sec 20℃
			≥10,000Ω·F C_R〉0.33μF 250Vdc 60sec 20℃

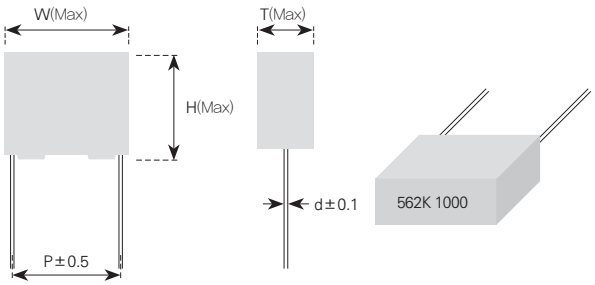
■ Part Number System

BMPP	100V	223	K	7.5	S	5	
Part-1	Part-2	Part-3	Part-4	Part-5	Part-6	Part-7	Part-8

Part-1 : Series Code(Series Name) - BMPP
Part-2 : Rated Voltage(DC:100V~630V / 63Vac~220Vac(Only for AC applications))
Part-3 : Rated Capacitance Value(0.001μF~0.018μF / 102~183)
Part-4 : Capacitance Tolerance(G : ±2% H : ±3% J : ±5% K : ±10% M : ±20%)
Part-5 : Lead Spacing(7.5mm)
Part-6 : Forming-Type and Packing Code →
Part-7 : Size Number(1~4 : Min-Type / 5 : Standard-Type / 6~9 : Large-Type)
Part-8 : Internal Use

CODE	STYLE
B	Bending Forming
C	Straight Cutting
D	D-Type Forming
L	B-Type long Forming
M	C-Type long Forming
S	Straight
X	B-Type Forming
Y	C-Type Forming
Z	Z-Type Forming
T	A-Type Tapping
U	B-Type Tapping
V	C-Type Tapping

■ Dimensions



100Vdc(63Vac)

Cap. (μF)	Dimensions(mm) W (max.)	H (max.)	T (max.)	Pitch - d	PART NUMBER
0.022	10.5	9	4	7.5-0.6	BMPP 100V 223K 7.5S 5 ____
0.027	10.5	9	4	7.5-0.6	BMPP 100V 273K 7.5S 5 ____
0.033	10.5	9	4	7.5-0.6	BMPP 100V 333K 7.5S 5 ____
0.039	10.5	9	4	7.5-0.6	BMPP 100V 393K 7.5S 5 ____
0.047	10.5	11	5	7.5-0.6	BMPP 100V 473K 7.5S 5 ____
0.056	10.5	11	5	7.5-0.6	BMPP 100V 563K 7.5S 5 ____
0.068	10.5	11	5	7.5-0.6	BMPP 100V 683K 7.5S 5 ____

250Vdc(160Vac)

Cap. (μF)	Dimensions(mm) W (max.)	H (max.)	T (max.)	Pitch - d	PART NUMBER
0.012	10.5	9	4	7.5-0.6	BMPP 250V 123K 7.5S 5 ____
0.015	10.5	9	4	7.5-0.6	BMPP 250V 153K 7.5S 5 ____
0.018	10.5	9	4	7.5-0.6	BMPP 250V 183K 7.5S 5 ____
0.022	10.5	12	6	7.5-0.6	BMPP 250V 223K 7.5S 5 ____
0.027	10.5	12	6	7.5-0.6	BMPP 250V 273K 7.5S 5 ____

400Vdc(200Vac)

Cap. (μF)	Dimensions(mm) W (max.)	H (max.)	T (max.)	Pitch - d	PART NUMBER
0.0056	10.5	9	4	7.5-0.6	BMPP 400V 562K 7.5S 5 ____
0.0068	10.5	9	4	7.5-0.6	BMPP 400V 682K 7.5S 5 ____
0.0082	10.5	9	4	7.5-0.6	BMPP 400V 822K 7.5S 5 ____
0.01	10.5	9	4	7.5-0.6	BMPE 400V 103K 7.5S 5 ____
0.012	10.5	11	5	7.5-0.6	BMPP 400V 123K 7.5S 5 ____
0.015	10.5	12	6	7.5-0.6	BMPP 400V 153K 7.5S 5 ____
0.018	10.5	12	6	7.5-0.6	BMPP 400V 183K 7.5S 5 ____

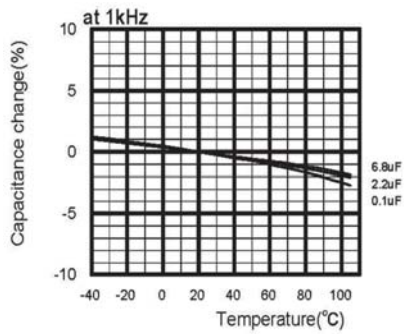
250Vdc(160Vac)

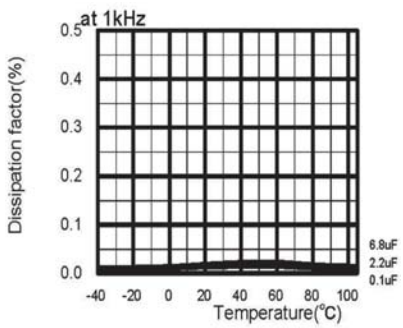
Cap. (μF)	Dimensions(mm) W (max.)	H (max.)	T (max.)	Pitch - d	PART NUMBER
0.001	10.5	6.5	3.5	7.5-0.6	BMPP 630V 102K 7.5S 5 ____
0.0012	10.5	6.5	3.5	7.5-0.6	BMPP 630V 122K 7.5S 5 ____
0.0015	10.5	6.5	3.5	7.5-0.6	BMPP 630V 152K 7.5S 5 ____
0.0018	10.5	6.5	3.5	7.5-0.6	BMPP 630V 182K 7.5S 5 ____
0.0022	10.5	6.5	3.5	7.5-0.6	BMPP 630V 222K 7.5S 5 ____
0.0027	10.5	6.5	3.5	7.5-0.6	BMPP 630V 272K 7.5S 5 ____
0.0033	10.5	6.5	3.5	7.5-0.6	BMPP 630V 332K 7.5S 5 ____
0.0039	10.5	6.5	3.5	7.5-0.6	BMPP 630V 392K 7.5S 5 ____
0.0047	10.5	6.5	3.5	7.5-0.6	BMPP 630V 472K 7.5S 5 ____
0.0056	10.5	11	5	7.5-0.6	BMPP 630V 562K 7.5S 5 ____
0.0068	10.5	11	5	7.5-0.6	BMPP 630V 682K 7.5S 5 ____
0.0082	10.5	11	5	7.5-0.6	BMPP 630V 822K 7.5S 5 ____

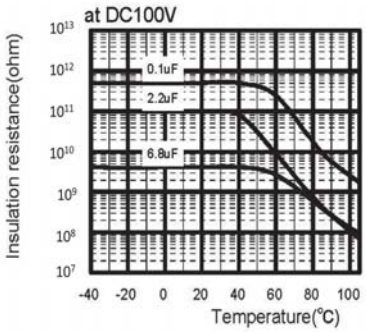
■ Electrical Characteristics (Typical Data)

250Vdc Series

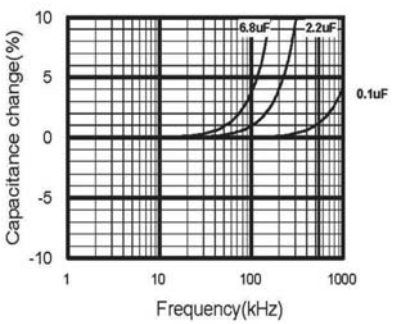
Temperature Characteristics

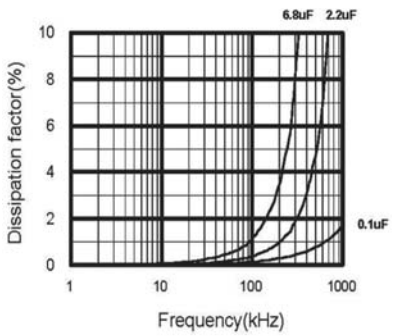


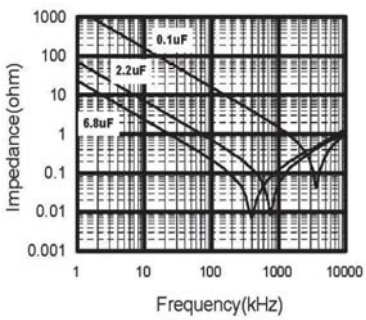




Frequency Characteristics

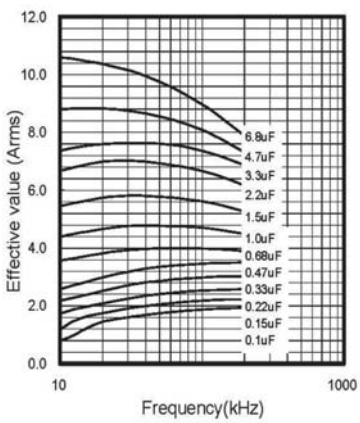






■ Applicable Specifications

Permissible Current



Pulse Handling Capability(dv/dt)

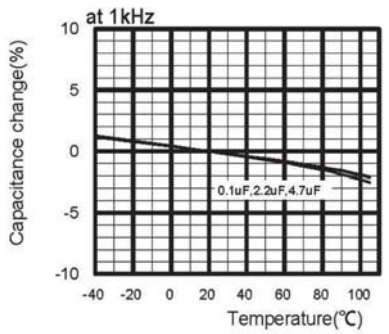
(Max 1000cycles)

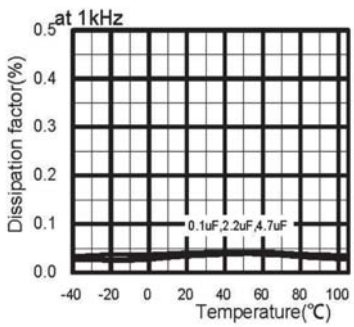
Rated Voltage	Capacitance (μF)	Code	dV/dt (V/μs)	Current (A0-P)
DC 250V	0.10	104	135	13.5
	0.15	154		20.2
	0.22	224		29.7
	0.33	334		44.5
	0.47	474		63.4
	0.68	684	82	55.7
	1.00	105		82.0
	1.50	155		123.0
	2.20	225		180.4
	3.30	335	57	188.1
	6.80	685		387.6

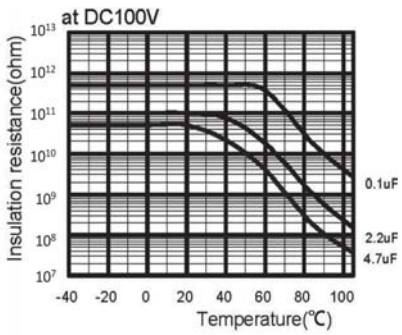
■ Electrical Characteristics (Typical Data)

450Vdc Series

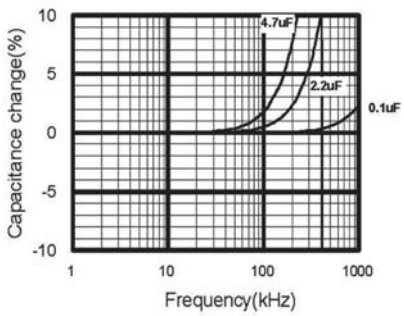
Temperature Characteristics

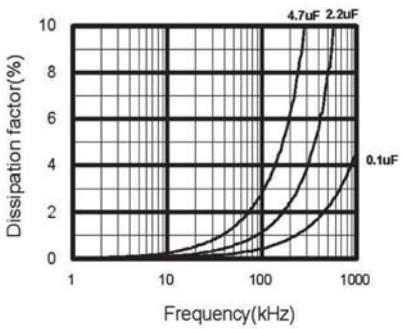


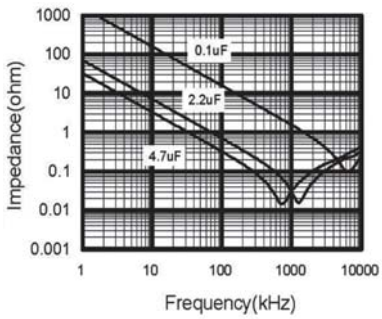




Frequency Characteristics

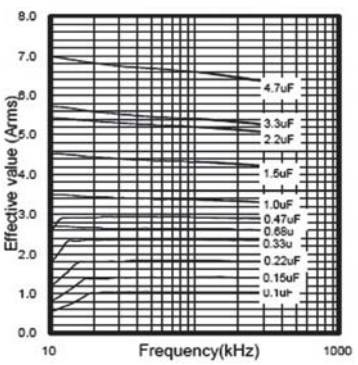






■ Applicable Specifications

Permissible Current



Pulse Handling Capability(dv/dt)

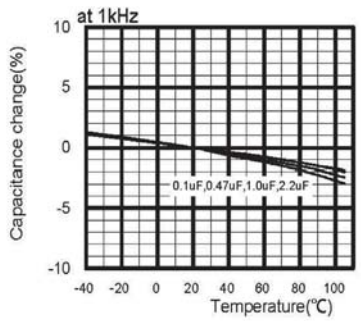
(Max 1000cycles)

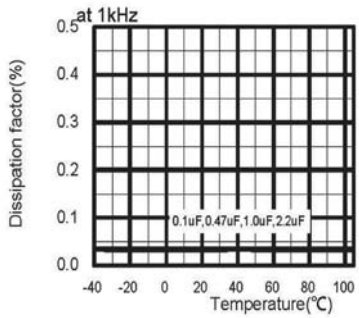
Rated Voltage	Capacitance (μF)	Code	dV/dt (V/μs)	Current (A0-P)
DC 450V	0.10	104	41.6	4.2
	0.15	154		6.2
	0.22	224		9.2
	0.33	334		13.7
	0.47	474		19.6
	0.68	684	24.3	16.5
	1.00	105		24.3
	1.50	155		36.4
	2.20	225		53.4
	2.20	335	14.3	47.2
	4.70	475		67.3

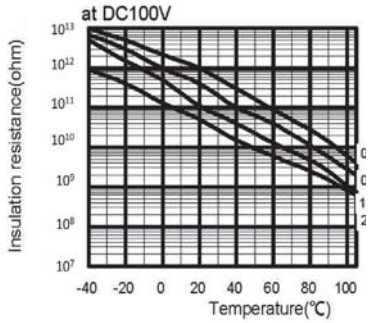
■ Electrical Characteristics (Typical Data)

630Vdc Series

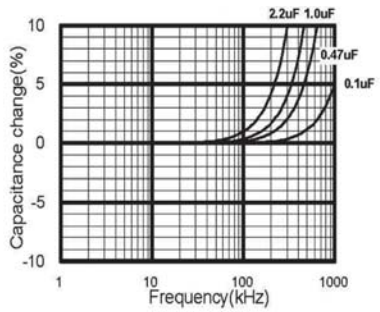
Temperature Characteristics

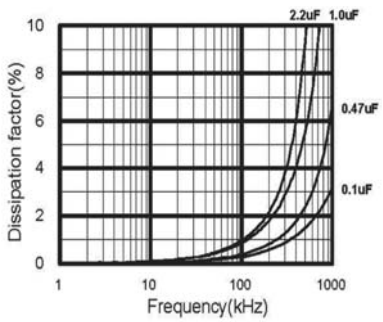


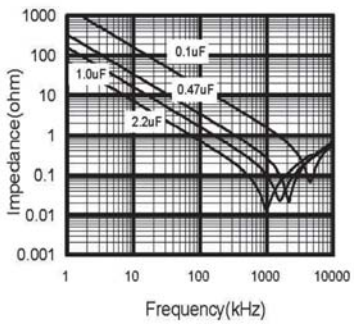




Frequency Characteristics

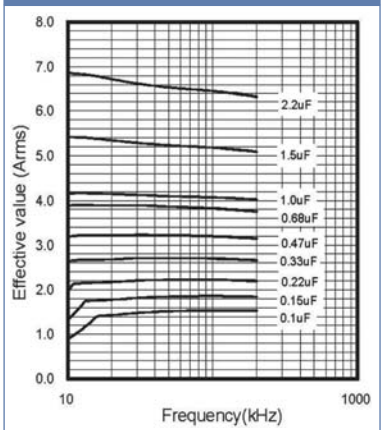






■ Applicable Specifications

Permissible Current



Pulse Handling Capability(dv/dt)

(Max 1000cycles)

Rated Voltage	Capacitance (μF)	Code	dV/dt (V/μs)	Current (A0-P)
DC 630V	0.10	104	155	15.5
	0.12	124		18.6
	0.15	154		23.3
	0.18	184		27.9
	0.22	224		34.1
	0.27	274		41.9
	0.33	334		51.2
	0.39	394		60.5
	0.47	474		72.9
	0.56	564		86.8
	0.68	684		105.4
	0.82	824	65	53.3
	1.00	105		65.0
	1.20	125		78.0
	1.50	155		97.5
	1.80	185		117.0
	2.20	225		143.0

FMPP

Non-inductive construction using metallized Polypropylene film with flame retardant epoxy resin coating

■ Features

- Self-healing property.
- Safe-film construction.
- miniature size of MPP.
- Coated with flame-retardant(UL94 V-0) epoxy resin.
- RoHS directive compliant

■ Applications

- DC Multipurpose.
- Widely used in SMPS.
- Used in DC-filter.

■ Specifications

Reference Standard		IEC 60384-16		
Climatic Category		40 / 105 / 21		
Rated Temperature		105℃ +85℃~+105℃ decreasing factor 1.0% / ℃ for V_R(dc)		
Operation Temperature Range		-40℃~105℃		
Rated Voltage		450V, 500V		
Capacitance Range		0.01μF~4.7μF		
Capacitance Tolerance		J : ±5% K : ±10% M : ±20% ※Standard : J : ±5%, Other Tolerance Grade : available on request.		
Voltage Proof		1.75U_R(dc) / 3sec		
Dissipation Factor		≤0.1%(at 1kHz 20℃)		
Rated Voltage	**DC-Type**	U_R(dc)〈500V	≥30,000MΩ C_R≤0.33μF 100Vdc 60sec 20℃	
			≥10,000Ω·F C_R〉0.33μF 100Vdc 60sec 20℃	
		U_R(dc)≥500V	≥30,000MΩ C_R≤0.33μF 500Vdc 60sec 20℃	
			≥10,000Ω·F C_R〉0.33μF 500Vdc 60sec 20℃	

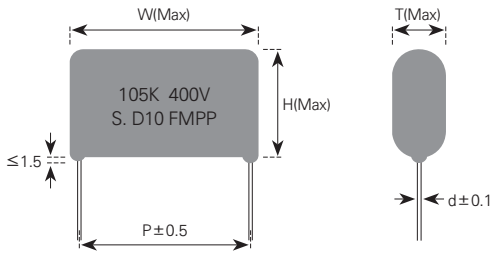
■ Part Number System

FMPP	450V	334	J	10	S	5	
Part-1	Part-2	Part-3	Part-4	Part-5	Part-6	Part-7	Part-8

Part-1 : Series Code(Series Name) - FMPP
Part-2 : Rated Voltage(DC : 400V~630V)
Part-3 : Rated Capacitance Value(0.01μF~4.7μF / 103~475)
Part-4 : Capacitance Tolerance(J : ±5% K : ±10% M : ±20%)
Part-5 : Lead Spacing(10mm / 15mm / 22.5mm / 27.5mm)
Part-6 : Forming-Type and Packing Code
Part-7 : Size Number(1~4 : Min-Type / 5 : Standard-Type / 6~9 : Large-Type)
Part-8 : Internal Use

CODE	STYLE
B	Bending Forming
C	Straight Cutting
D	D-Type Forming
L	B-Type long Forming
M	C-Type long Forming
S	Straight
X	B-Type Forming
Y	C-Type Forming
Z	Z-Type Forming
T	A-Type Tapping
U	B-Type Tapping
V	C-Type Tapping

■ Dimensions



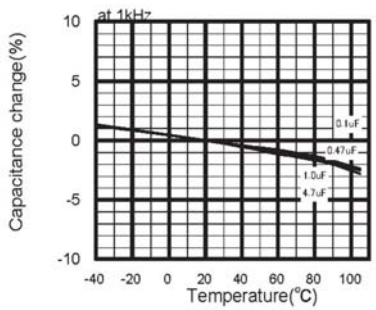
450Vdc					
Cap. (μF)	Dimensions(mm) W (max.)	H (max.)	T (max.)	Pitch - d	PART NUMBER
0.33	13.0	15.0	7.5	10-0.6	FMPP 450V 334J 10 S 5 ____
0.47	13.0	16.0	7.5	10-0.6	FMPP 450V 474J 10 S 5 ____
0.68	13.0	16.0	7.5	10-0.6	FMPP 450V 684J 10 S 5 ____
1.0	13.0	18.0	9.0	10-0.6	FMPP 450V 105J 10 S 5 ____
0.47	18.0	10.5	6.0	15-0.6	FMPP 450V 474J 15 S 5 ____
0.68	18.0	11.0	6.5	15-0.8	FMPP 450V 684J 15 S 5 ____
0.82	18.0	14.0	7.0	15-0.8	FMPP 450V 824J 15 S 5 ____
1.0	18.0	12.0	7.5	15-0.8	FMPP 450V 105J 15 S 5 ____
1.3	18.0	13.5	10.0	15-0.8	FMPP 450V 135J 15 S 5 ____
1.5	18.0	14.5	10.5	15-0.8	FMPP 450V 155J 15 S 5 ____
2.2	18.0	16.0	11.0	15-0.8	FMPP 450V 225J 15 S 5 ____
4.7	26.0	20.5	12.5	22.5-0.8	FMPP 450V 475J 22.5 S 5 ____

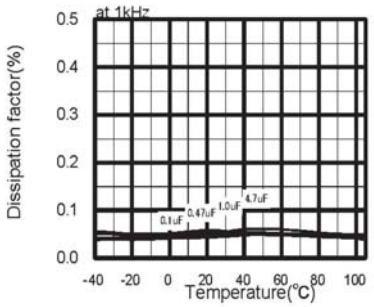
500Vdc					
Cap. (μF)	Dimensions(mm) W (max.)	H (max.)	T (max.)	Pitch - d	PART NUMBER
0.01	13.0	10.0	6.5	10-0.6	FMPP 500V 103J 10 S 5 ____
0.022	13.0	10.0	6.5	10-0.6	FMPP 500V 223J 10 S 5 ____
0.033	13.0	10.0	6.5	10-0.6	FMPP 500V 333J 10 S 5 ____
0.047	13.0	10.0	6.5	10-0.6	FMPP 500V 473J 10 S 5 ____
0.068	13.0	10.0	6.5	10-0.6	FMPP 500V 683J 10 S 5 ____
0.1	13.0	9.0	6.0	10-0.6	FMPP 500V 104J 10 S 5 ____
0.15	13.0	11.0	6.7	10-0.6	FMPP 500V 154J 10 S 5 ____
0.22	13.0	12.0	7.5	10-0.6	FMPP 500V 224J 10 S 5 ____
0.33	13.0	13.5	9.0	10-0.6	FMPP 500V 334J 10 S 5 ____
0.47	13.5	17.3	8.4	10-0.6	FMPP 500V 474J 10 S 5 ____
0.56	13.0	18.0	9.5	10-0.6	FMPP 500V 564J 10 S 5 ____
0.68	13.0	20.0	11.0	10-0.6	FMPP 500V 684J 10 S 5 ____
0.22	18.0	12.0	7.0	15-0.8	FMPP 500V 224J 15 S 5 ____
0.33	18.5	13.5	7.0	15-0.8	FMPP 500V 334J 15 S 5 ____
0.47	18.5	15.0	6.5	15-0.8	FMPP 500V 474J 15 S 5 ____
0.56	18.0	16.0	7.0	15-0.8	FMPP 500V 564J 15 S 5 ____
0.68	18.0	16.8	8.0	15-0.8	FMPP 500V 684J 15 S 5 ____
0.82	18.0	17.5	8.5	15-0.8	FMPP 500V 824J 15 S 5 ____
1.0	18.0	19.6	9.2	15-0.8	FMPP 500V 105J 15 S 5 ____
1.5	18.5	22.0	10.0	15-0.8	FMPP 500V 155J 15 S 5 ____
1.5	26.0	19.5	9.0	22.5-0.8	FMPP 500V 155J 22.5 S 5 ____
2.2	26.0	21.5	11.0	22.5-0.8	FMPP 500V 225J 22.5 S 5 ____
3.3	26.0	22.0	14.0	22.5-0.8	FMPP 500V 335J 22.5 S 5 ____
4.7	26.0	25.5	17.0	22.5-0.8	FMPP 500V 475J 22.5 S 5 ____

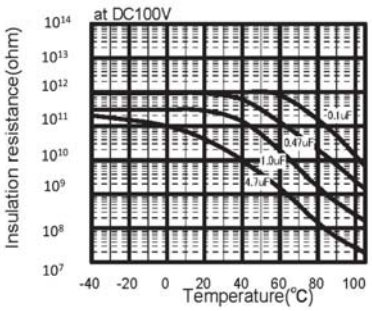
■ Electrical Characteristics (Typical Data)

450/500Vdc Series

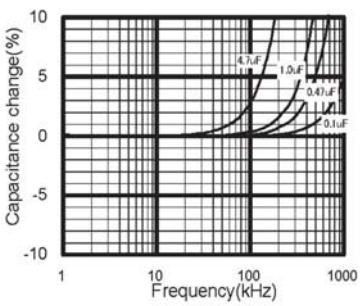
Temperature Characteristics

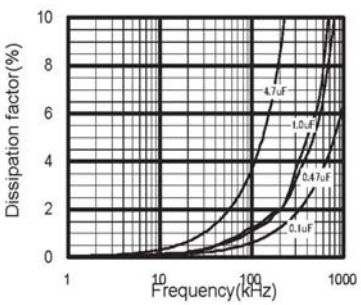


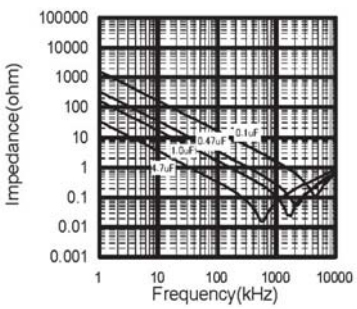




Frequency Characteristics

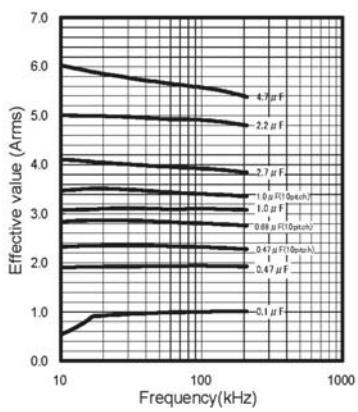






■ Applicable Specifications

Permissible Current



Pulse Handling Capability(dv/dt)
(Max 1000cycles)

Rated Voltage	Pitch (mm)	Capacitance (μF)	Code	dV/dt (V/μs)	Current (Ao-p)
DC 450V/ 500V	10.0	0.10	104	41.6	4.2
		0.15	154		6.2
		0.22	224		9.2
		0.47	474		19.6
		0.68	684		28.3
		1.00	105		41.6
	15.0	0.47	474	24.3	11.4
		1.0	105		24.3
		1.5	155		36.4
		2.2	225		53.4
	22.5	2.7	275	14.3	38.7
		4.7	475		67.3

BFMPP

Non-inductive construction using metallized Polypropylene film with flame retardant plastic case and epoxy resin filled.

■ Features

- Self-healing property.
- Safe-film construction.
- miniature size of BMPP.
- Plastic case(UL94 V-0), Epoxy resin sealing
- RoHS directive compliant

■ Applications

- DC Multipurpose.
- Widely used in SMPS.
- Used in DC-filter.

■ Specifications

Reference Standard		IEC 60384-16		
Climatic Category		40 / 105 / 21		
Rated Temperature		105℃ +85℃~+105℃ decreasing factor 1.0% / ℃ for V_R(dc)		
Operation Temperature Range		-40℃~105℃		
Rated Voltage		450V, 500V		
Capacitance Range		0.01μF~4.7μF		
Capacitance Tolerance		J : ±5% K : ±10% M : ±20% ※Standard : J : ±5%, Other Tolerance Grade : available on request.		
Voltage Proof		1.75U_R(dc) / 3sec		
Dissipation Factor		≤0.1%(at 1kHz 20℃)		
Rated Voltage	**DC-Type**	U_R(dc)〈500V	≥30,000MΩ C_R≤0.33μF 100Vdc 60sec 20℃	
			≥10,000Ω·F C_R〉0.33μF 100Vdc 60sec 20℃	
		U_R(dc)≥500V	≥30,000MΩ C_R≤0.33μF 500Vdc 60sec 20℃	
			≥10,000Ω·F C_R〉0.33μF 500Vdc 60sec 20℃	

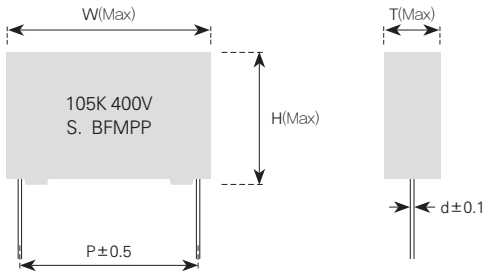
■ Part Number System

BFMPP	450V	224	J	10	S	5	
Part-1	Part-2	Part-3	Part-4	Part-5	Part-6	Part-7	Part-8

Part-1 : Series Code(Series Name) - BFMPP
Part-2 : Rated Voltage(DC : 400V~630V)
Part-3 : Rated Capacitance Value(0.0220μF~10.0μF / 223~106)
Part-4 : Capacitance Tolerance(J : ±5% K : ±10% M : ±20%)
Part-5 : Lead Spacing(10mm / 15mm / 22.5mm / 27.5mm)
Part-6 : Forming-Type and Packing Code →
Part-7 : Size Number(1~4 : Min-Type / 5 : Standard-Type / 6~9 : Large-Type)
Part-8 : Internal Use

CODE	STYLE
B	Bending Forming
C	Straight Cutting
D	D-Type Forming
L	B-Type long Forming
M	C-Type long Forming
S	Straight
X	B-Type Forming
Y	C-Type Forming
Z	Z-Type Forming
T	A-Type Tapping
U	B-Type Tapping
V	C-Type Tapping

■ Dimensions



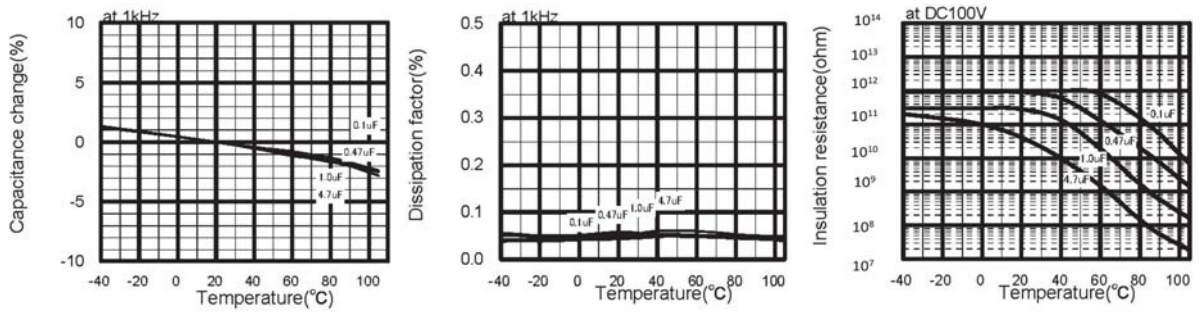
450Vdc					
Cap. (μF)	Dimensions(mm)			Pitch - d	PART NUMBER
	W (max.)	H (max.)	T (max.)		
0.47	13.0	13.0	7.0	10-0.6	BFMPP 450V474K 10S5 ____
0.68	13.0	14.0	8.0	10-0.6	BFMPP 450V684K 10S5 ____
0.47	18.0	11.0	5.0	15-0.8	BFMPP 450V474K 15S5 ____
0.68	18.0	12.0	6.0	15-0.8	BFMPP 450V684K 15S5 ____
1	13.0	17.0	8.0	10-0.6	BFMPP 450V105K 10S5 ____
1	18.0	14.5	7.0	15-0.8	BFMPP 450V105K 15S5 ____
1.5	18.0	15.0	8.5	15-0.8	BFMPP 450V155K 15S5 ____
2.2	18.0	16.5	10.0	15-0.8	BFMPP 450V225K 15S5 ____

500Vdc					
Cap. (μF)	Dimensions(mm)			Pitch - d	PART NUMBER
	W (max.)	H (max.)	T (max.)		
0.01	13.0	12.0	6.0	10-0.6	BFMPP 500V103J 10S5 ____
0.022	13.0	12.0	6.0	10-0.6	BFMPP 500V223J 10S5 ____
0.033	13.0	13.0	7.0	10-0.6	BFMPP 500V333J 10S5 ____
0.047	13.0	14.0	8.0	10-0.6	BFMPP 500V473J 10S5 ____
0.068	13.0	13.0	7.0	10-0.6	BFMPP 500V683J 10S5 ____
0.1	13.0	11.0	5.0	10-0.6	BFMPP 500V104J 10S5 ____
0.15	13.0	12.0	6.0	10-0.6	BFMPP 500V154J 10S5 ____
0.22	13.0	13.0	7.0	10-0.6	BFMPP 500V224J 10S5 ____
0.33	13.0	14.0	9.5	10-0.6	BFMPP 500V334J 10S5 ____
0.47	13.0	18.0	10.0	10-0.6	BFMPP 500V474J 10S5 ____
0.56	13.0	19.0	10.0	10-0.6	BFMPP 500V564J 10S5 ____
0.68	13.0	20.0	11.0	10-0.6	BFMPP 500V684J 10S5 ____
0.22	18.0	12.0	6.0	15-0.76	BFMPP 500V224J 15S5 ____
0.33	18.0	13.0	6.0	15-0.76	BFMPP 500V334J 15S5 ____
0.47	18.0	16.0	7.0	15-0.76	BFMPP 500V474J 15S5 ____
0.56	18.0	16.0	7.0	15-0.76	BFMPP 500V564J 15S5 ____
0.68	18.0	17.0	8.0	15-0.76	BFMPP 500V684J 15S5 ____
0.82	18.0	17.5	8.5	15-0.76	BFMPP 500V824J 15S5 ____
1.0	18.0	18.0	10.0	15-0.76	BFMPP 500V105J 15S5 ____
1.5	18.0	20.0	12.5	15-0.76	BFMPP 500V155J 15S5 ____
1.5	26.0	18.0	9.0	22.5-0.76	BFMPP 500V155J 22.5S5 ____
2.2	26.0	20.0	11.0	22.5-0.76	BFMPP 500V225J 22.5S5 ____
3.3	26.0	22.0	15.0	22.5-0.76	BFMPP 500V335J 22.5S5 ____
4.7	26.0	25.5	16.5	22.5-0.76	BFMPP 500V475J 22.5S5 ____

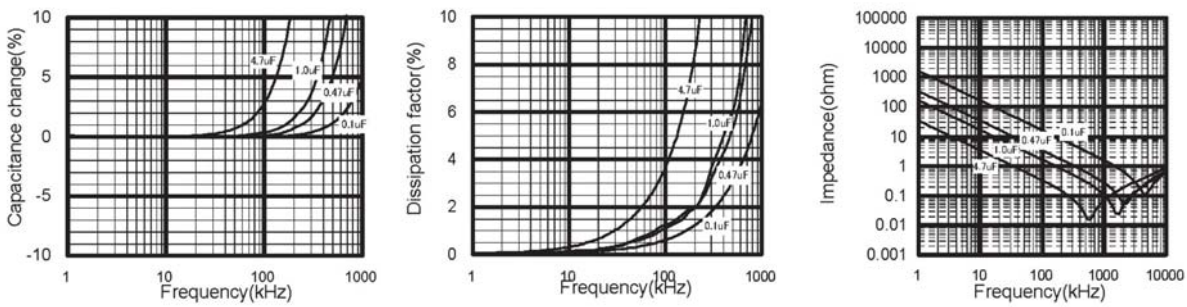
■ Electrical Characteristics (Typical Data)

450/500Vdc Series

Temperature Characteristics

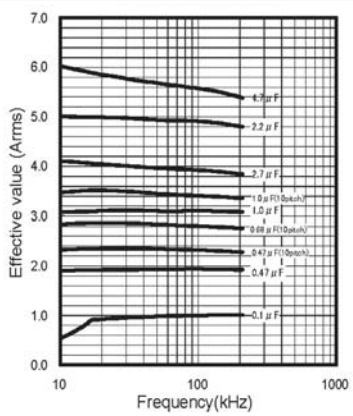


Frequency Characteristics



■ Applicable Specifications

Permissible Current



Pulse Handling Capability(dv/dt)
(Max 1000cycles)

Rated Voltage	Pitch (mm)	Capacitance (μF)	Code	dV/dt (V/μs)	Current (A0-p)
DC 450V/ 500V	10.0	0.10	104	41.6	4.2
		0.15	154		6.2
		0.22	224		9.2
		0.47	474		19.6
		0.68	684		28.3
		1.00	105		41.6
	15.0	0.47	474	24.3	11.4
		1.0	105		24.3
		1.5	155		36.4
		2.2	225		53.4
	22.5	2.7	275	14.3	38.7
		4.7	475		67.3

Metallized Polypropylene Film Capacitor

RMPP

※ Old Series Name "MPP®" has been changed to "RMPP". This is not a change in the feature, construction, materials and other elements related to the product but a change just in 'Series Name'.

Non-inductive construction using metallized Polypropylene film with flame retardant epoxy resin coating

■ Features

- Round type of MPP
- Low noise
- Low Dissipation Factor at high Frequency.
- High stability of capacitance & DF.
- Self-healing property.
- High insulation resistance.
- Coated with flame-retardant(UL94 V-0) epoxy resin.
- RoHS directive compliant

■ Applications

- Typical for S-correction in TV-set.
- Electronic ballast circuits.
- Switching power supply circuits.

■ Specifications

Reference Standard		EC 60384-16(For-DC Type) IEC 60384-17(For-A.C Type)	
Climatic Category		40 / 105 / 21	
Rated Temperature		105℃ +85℃~+105℃ decreasing factor 1.0% / ℃ for V_R(dc)	
Operation Temperature Range		-40℃~105℃	
Rated Voltage	**DC-Type**	100V, 160V, 250V, 400V, 630V	
	AC-Type	250Vac, 300Vac	
Capacitance Range		0.01μF~10μF	
Capacitance Tolerance		J : ±5% K : ±10% M : ±20% ※Standard : J : ±5%, Other Tolerance Grade : available on request.	
Voltage Proof	**DC-Type**	1.75U_R(dc) / 3sec	
	AC-Type	4.3U_R(ac) / 3sec	
Dissipation Factor		≤0.1%(at 1kHz 20℃)	
Rated Voltage	**DC-Type**	U_R(dc)〈500V	≥30,000MΩ C_R≤0.33μF 100Vdc 60sec 20℃
			≥10,000Ω·F C_R〉0.33μF 100Vdc 60sec 20℃
		U_R(dc)≥500V	≥30,000MΩ C_R≤0.33μF 500Vdc 60sec 20℃
			≥10,000Ω·F C_R〉0.33μF 500Vdc 60sec 20℃
	AC-Type		≥30,000MΩ C_R≤0.33μF 250Vdc 60sec 20℃
			≥10,000Ω·F C_R〉0.33μF 250Vdc 60sec 20℃

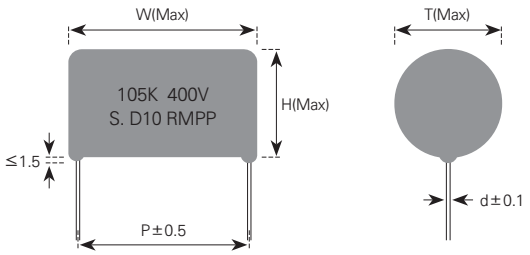
■ Part Number System

RMPP	100V	473	J	7.5	S	5	
Part-1	Part-2	Part-3	Part-4	Part-5	Part-6	Part-7	Part-8

Part-1 : Series Code(Series Name) - RMPP
Part-2 : Rated Voltage((DC : 100V~630V / 250Vac~300Vac(Only for AC applications))
Part-3 : Rated Capacitance Value(0.01μF~10.0μF / 103~106)
Part-4 : Capacitance Tolerance(G : ±2% H : ±3% J : ±5% K : ±10% M : ±20%)
Part-5 : Lead Spacing(7.5mm / 10mm / 15mm / 22.5mm / 27.5mm)
Part-6 : Forming-Type and Packing Code
Part-7 : Size Number(1~4 : Min-Type / 5 : Standard-Type / 6~9 : Large-Type)
Part-8 : Internal Use

CODE	STYLE
B	Bending Forming
C	Straight Cutting
D	D-Type Forming
L	B-Type long Forming
M	C-Type long Forming
S	Straight
X	B-Type Forming
Y	C-Type Forming
Z	Z-Type Forming
T	A-Type Tapping
U	B-Type Tapping
V	C-Type Tapping

■ Dimensions



100Vdc(63Vac)

Cap. (μF)	Dimensions(mm) W (max.)	H (max.)	T (max.)	Pitch - d	PART NUMBER
0.047	10.5	7.5	7.0	7.5-0.6	RMPP 100V 473J 7.5S 5 ____
0.056	10.5	8.0	7.5	7.5-0.6	RMPP 100V 563J 7.5S 5 ____
0.068	10.5	7.5	7.0	7.5-0.6	RMPP 100V 683J 7.5S 5 ____
0.082	10.5	8.0	7.5	7.5-0.6	RMPP 100V 823J 7.5S 5 ____
0.1	10.5	8.0	7.5	7.5-0.6	RMPP 100V 104J 7.5S 5 ____
0.12	10.5	8.0	7.5	7.5-0.6	RMPP 100V 124J 7.5S 5 ____
0.15	10.5	8.5	8.0	7.5-0.6	RMPP 100V 154J 7.5S 5 ____
0.18	10.5	9.0	8.5	7.5-0.6	RMPP 100V 184J 7.5S 5 ____
0.22	10.5	9.5	9.0	7.5-0.6	RMPP 100V 224J 7.5S 5 ____
0.27	10.5	10.0	9.5	7.5-0.6	RMPP 100V 274J 7.5S 5 ____
0.18	13.0	8.0	7.5	10.0-0.6	RMPP 100V 184J 10S 9 ____
0.22	13.0	8.5	8.0	10.0-0.6	RMPP 100V 224J 10S 5 ____
0.27	13.0	9.0	8.5	10.0-0.6	RMPP 100V 274J 10S 5 ____
0.33	13.0	9.5	9.0	10.0-0.6	RMPP 100V 334J 10S 5 ____
0.39	13.0	9.5	9.0	10.0-0.6	RMPP 100V 394J 10S 5 ____
0.47	13.0	10.5	10.0	10.0-0.6	RMPP 100V 474J 10S 5 ____
0.33	18.0	8.5	8.0	15.0-0.8	RMPP 100V 334J 15S 5 ____
0.39	18.0	9.0	8.5	15.0-0.8	RMPP 100V 394J 15S 5 ____
0.47	18.0	8.5	8.0	15.0-0.8	RMPP 100V 474J 15S 5 ____
0.56	18.0	9.0	8.5	15.0-0.8	RMPP 100V 564J 15S 5 ____
0.68	18.0	9.5	9.0	15.0-0.8	RMPP 100V 684J 15S 5 ____
0.82	18.0	10.0	9.5	15.0-0.8	RMPP 100V 824J 15S 5 ____
1.0	18.0	11.0	10.5	15.0-0.8	RMPP 100V 105J 15S 5 ____
1.2	18.0	11.5	11.0	15.0-0.8	RMPP 100V 125J 15S 5 ____
1.5	18.0	12.5	12.0	15.0-0.8	RMPP 100V 155J 15S 5 ____
2.2	18.0	14.5	14.0	15.0-0.8	RMPP 100V 225J 15S 5 ____
2.7	18.0	15.5	15.0	15.0-0.8	RMPP 100V 275J 15S 5 ____
1.0	26.0	10.0	9.5	22.5-0.8	RMPP 100V 105J 22.5S 5 ____
1.2	26.0	10.5	10.0	22.5-0.8	RMPP 100V 125J 22.5S 5 ____
1.5	26.0	11.0	10.5	22.5-0.8	RMPP 100V 155J 22.5S 5 ____
1.8	26.0	11.5	11.0	22.5-0.8	RMPP 100V 185J 22.5S 5 ____
2.2	26.0	12.5	12.0	22.5-0.8	RMPP 100V 225J 22.5S 5 ____
2.7	26.0	13.5	13.0	22.5-0.8	RMPP 100V 275J 22.5S 5 ____
3.3	26.0	14.5	14.0	22.5-0.8	RMPP 100V 335J 22.5S 5 ____
3.9	26.0	15.5	15.0	22.5-0.8	RMPP 100V 395J 22.5S 5 ____
4.7	26.0	18.5	18.0	22.5-0.8	RMPP 100V 475J 22.5S 5 ____
5.6	26.0	16.5	16.0	22.5-0.8	RMPP 100V 565J 22.5S 5 ____
6.8	26.0	17.5	17.0	22.5-0.8	RMPP 100V 685J 22.5S 5 ____
8.2	26.0	19.0	18.5	22.5-0.8	RMPP 100V 825J 22.5S 5 ____
2.2	32.0	11.0	10.5	27.5-0.8	RMPP 100V 225J 27.5S 5 ____
2.7	32.0	11.5	11.0	27.5-0.8	RMPP 100V 275J 27.5S 5 ____
3.3	32.0	12.5	12.0	27.5-0.8	RMPP 100V 335J 27.5S 5 ____
3.9	32.0	13.0	12.5	27.5-0.8	RMPP 100V 395J 27.5S 5 ____
4.7	32.0	14.0	13.5	27.5-0.8	RMPP 100V 475J 27.5S 5 ____
5.6	32.0	15.0	14.5	27.5-0.8	RMPP 100V 565J 27.5S 5 ____
6.8	32.0	16.0	15.5	27.5-0.8	RMPP 100V 685J 27.5S 5 ____
8.2	32.0	17.0	16.5	27.5-0.8	RMPP 100V 825J 27.5S 5 ____
10.0	32.0	18.5	18.0	27.5-0.8	RMPP 100V 106J 27.5S 5 ____

250Vdc(160Vac)

Cap. (μF)	Dimensions(mm) W (max.)	H (max.)	T (max.)	Pitch - d	PART NUMBER
0.022	10.5	8.0	7.5	7.5-0.6	RMPP 250V 223J 7.5S 5 ____
0.027	10.5	8.5	8.0	7.5-0.6	RMPP 250V 273J 7.5S 5 ____
0.033	10.5	7.5	7.0	7.5-0.6	RMPP 250V 333J 7.5S 5 ____
0.039	10.5	8.0	7.5	7.5-0.6	RMPP 250V 393J 7.5S 5 ____
0.047	10.5	8.5	8.0	7.5-0.6	RMPP 250V 473J 7.5S 5 ____
0.056	10.5	8.0	7.5	7.5-0.6	RMPP 250V 563J 7.5S 5 ____
0.068	10.5	7.5	7.0	7.5-0.6	RMPP 250V 683J 7.5S 5 ____
0.082	10.5	8.0	7.5	7.5-0.6	RMPP 250V 823J 7.5S 5 ____
0.1	10.5	8.5	8.0	7.5-0.6	RMPP 250V 104J 7.5S 5 ____
0.12	10.5	9.0	8.5	7.5-0.6	RMPP 250V 124J 7.5S 5 ____
0.15	10.5	9.5	9.0	7.5-0.6	RMPP 250V 154J 7.5S 5 ____
0.12	13.0	8.0	7.5	10.0-0.6	RMPP 250V 124J 10S 5 ____

0.15	13.0	8.0	7.5	10.0-0.6	RMPP 250V 154J 10S 5 ____
0.18	13.0	8.5	8.0	10.0-0.6	RMPP 250V 184J 10S 5 ____
0.22	13.0	9.0	8.5	10.0-0.6	RMPP 250V 224J 10S 5 ____
0.27	13.0	9.5	9.0	10.0-0.6	RMPP 250V 274J 10S 5 ____
0.27	18.0	9.0	8.5	15.0-0.8	RMPP 250V 274J 15S 5 ____
0.33	18.0	8.5	8.0	15.0-0.8	RMPP 250V 334J 15S 5 ____
0.39	18.0	9.0	8.5	15.0-0.8	RMPP 250V 394J 15S 5 ____
0.47	18.0	9.5	9.0	15.0-0.8	RMPP 250V 474J 15S 5 ____
0.56	18.0	10.0	9.5	15.0-0.8	RMPP 250V 564J 15S 5 ____
0.68	18.0	10.5	10.0	15.0-0.8	RMPP 250V 684J 15S 5 ____
0.82	18.0	11.5	11.0	15.0-0.8	RMPP 250V 824J 15S 5 ____
1.0	18.0	12.0	11.5	15.0-0.8	RMPP 250V 105J 15S 5 ____
1.2	18.0	13.0	12.5	15.0-0.8	RMPP 250V 125J 15S 5 ____
1.5	18.0	14.0	13.5	15.0-0.8	RMPP 250V 155J 15S 5 ____
1.8	18.0	15.0	14.5	15.0-0.8	RMPP 250V 185J 15S 5 ____
0.47	26.0	9.5	9.0	22.5-0.8	RMPP 250V 474J 22.5S 5 ____
0.56	26.0	10.0	9.5	22.5-0.8	RMPP 250V 564J 22.5S 5 ____
0.68	26.0	9.5	9.0	22.5-0.8	RMPP 250V 684J 22.5S 5 ____
0.82	26.0	10.0	9.5	22.5-0.8	RMPP 250V 824J 22.5S 5 ____
1.0	26.0	11.0	10.5	22.5-0.8	RMPP 250V 105J 22.5S 5 ____
1.2	26.0	11.5	11.0	22.5-0.8	RMPP 250V 125J 22.5S 5 ____
1.5	26.0	12.5	12.0	22.5-0.8	RMPP 250V 155J 22.5S 5 ____
1.8	26.0	13.0	12.5	22.5-0.8	RMPP 250V 185J 22.5S 5 ____
2.2	26.0	14.0	13.5	22.5-0.8	RMPP 250V 225J 22.5S 5 ____
2.7	26.0	15.0	14.5	22.5-0.8	RMPP 250V 275J 22.5S 5 ____
3.3	26.0	16.0	15.5	22.5-0.8	RMPP 250V 335J 22.5S 5 ____
3.9	26.0	17.0	16.5	22.5-0.8	RMPP 250V 395J 22.5S 5 ____
4.7	26.0	18.5	18.0	22.5-0.8	RMPP 250V 475J 22.5S 5 ____
5.6	26.0	20.0	19.5	22.5-0.8	RMPP 250V 565J 22.5S 5 ____
1.5	32.0	11.0	10.5	27.5-0.8	RMPP 250V 155J 27.5S 5 ____
1.8	32.0	12.0	11.5	27.5-0.8	RMPP 250V 185J 27.5S 5 ____
2.2	32.0	12.5	12.0	27.5-0.8	RMPP 250V 225J 27.5S 5 ____
2.7	32.0	13.5	13.0	27.5-0.8	RMPP 250V 275J 27.5S 5 ____
3.3	32.0	14.5	14.0	27.5-0.8	RMPP 250V 335J 27.5S 5 ____
3.9	32.0	15.5	15.0	27.5-0.8	RMPP 250V 395J 27.5S 5 ____
4.7	32.0	16.5	16.0	27.5-0.8	RMPP 250V 475J 27.5S 5 ____
5.6	32.0	17.5	17.0	27.5-0.8	RMPP 250V 565J 27.5S 5 ____
6.8	32.0	19.0	18.5	27.5-0.8	RMPP 250V 685J 27.5S 5 ____
8.2	32.0	20.5	20.0	27.5-0.8	RMPP 250V 825J 27.5S 5 ____
10.0	32.0	22.5	22.0	27.5-0.8	RMPP 250V 106J 27.5S 5 ____

400Vdc(200Vac)

Cap. (μF)	Dimensions(mm)			Pitch - d	PART NUMBER
	W (max.)	H (max.)	T (max.)		
0.01	10.5	7.5	7.0	7.5-0.6	RMPP 400V 103J 7.5S 5 ____
0.012	10.5	8.0	7.5	7.5-0.6	RMPP 400V 123J 7.5S 5 ____
0.015	10.5	7.5	7.0	7.5-0.6	RMPP 400V 153J 7.5S 5 ____
0.018	10.5	8.0	7.5	7.5-0.6	RMPP 400V 183J 7.5S 5 ____
0.022	10.5	8.0	7.5	7.5-0.6	RMPP 400V 223J 7.5S 5 ____
0.027	10.5	8.5	8.0	7.5-0.6	RMPP 400V 273J 7.5S 5 ____
0.033	10.5	7.5	7.0	7.5-0.6	RMPP 400V 333J 7.5S 5 ____
0.047	10.5	8.5	8.0	7.5-0.6	RMPP 400V 473J 7.5S 5 ____
0.056	10.5	8.5	8.0	7.5-0.6	RMPP 400V 563J 7.5S 5 ____
0.068	10.5	9.0	8.5	7.5-0.6	RMPP 400V 683J 7.5S 5 ____
0.039	13.0	8.0	7.5	10.0-0.6	RMPP 400V 393J 10S 5 ____
0.047	13.0	8.5	8.0	10.0-0.6	RMPP 400V 473J 10S 5 ____
0.056	13.0	9.0	8.5	10.0-0.6	RMPP 400V 563J 10S 5 ____
0.068	13.0	8.0	7.5	10.0-0.6	RMPP 400V 683J 10S 5 ____
0.082	13.0	8.5	8.0	10.0-0.6	RMPP 400V 823J 10S 5 ____
0.1	13.0	9.0	8.5	10.0-0.6	RMPP 400V 104J 10S 5 ____
0.12	18.0	9.0	8.5	15.0-0.8	RMPP 400V 124J 15S 5 ____
0.15	18.0	8.5	8.0	15.0-0.8	RMPP 400V 154J 15S 5 ____
0.18	18.0	9.0	8.5	15.0-0.8	RMPP 400V 184J 15S 5 ____
0.22	18.0	9.5	9.0	15.0-0.8	RMPP 400V 224J 15S 5 ____
0.27	18.0	10.0	9.5	15.0-0.8	RMPP 400V 274J 15S 5 ____
0.33	18.0	10.5	10.0	15.0-0.8	RMPP 400V 334J 15S 5 ____
0.39	18.0	11.0	10.5	15.0-0.8	RMPP 400V 394J 15S 5 ____
0.47	26.0	10.5	10.0	22.5-0.8	RMPP 400V 474J 22.5S 5 ____
0.56	26.0	11.0	10.5	22.5-0.8	RMPP 400V 564J 22.5S 5 ____
0.68	26.0	11.5	11.0	22.5-0.8	RMPP 400V 684J 22.5S 5 ____
0.82	26.0	12.5	12.0	22.5-0.8	RMPP 400V 824J 22.5S 5 ____
1.0	26.0	13.5	13.0	22.5-0.8	RMPP 400V 105J 22.5S 5 ____
1.2	26.0	14.0	13.5	22.5-0.8	RMPP 400V 125J 22.5S 5 ____
1.5	26.0	15.5	15.0	22.5-0.8	RMPP 400V 155J 22.5S 5 ____
0.56	32.0	10.5	10.0	27.5-0.8	RMPP 400V 564J 27.5S 5 ____
0.68	32.0	11.0	10.5	27.5-0.8	RMPP 400V 684J 27.5S 5 ____
0.82	32.0	11.5	11.0	27.5-0.8	RMPP 400V 824J 27.5S 5 ____
1.0	32.0	12.5	12.0	27.5-0.8	RMPP 400V 105J 27.5S 5 ____
1.2	32.0	13.0	12.5	27.5-0.8	RMPP 400V 125J 27.5S 5 ____
1.5	32.0	14.0	13.5	27.5-0.8	RMPP 400V 155J 27.5S 5 ____

1.8	32.0	15.0	14.5	27.5-0.8	RMPP 400V 185J 27.5S 5 ____
2.2	32.0	16.0	15.5	27.5-0.8	RMPP 400V 225J 27.5S 5 ____
2.7	32.0	17.5	17.0	27.5-0.8	RMPP 400V 275J 27.5S 5 ____
3.3	32.0	19.0	18.5	27.5-0.8	RMPP 400V 335J 27.5S 5 ____
3.9	32.0	20.0	19.5	27.5-0.8	RMPP 400V 395J 27.5S 5 ____
4.7	32.0	21.5	21.0	27.5-0.8	RMPP 400V 475J 27.5S 5 ____
5.6	32.0	23.5	23.0	27.5-0.8	RMPP 400V 565J 27.5S 5 ____
6.8	32.0	25.0	24.5	27.5-0.8	RMPP 400V 685J 27.5S 5 ____

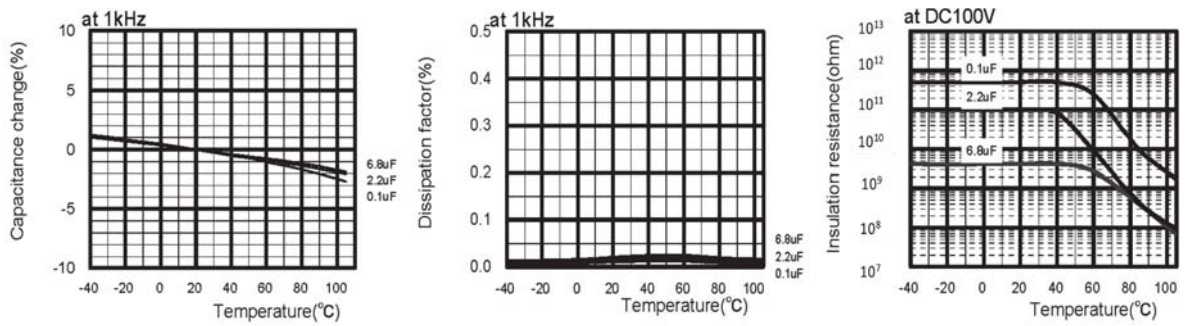
630Vdc(220Vac)

Cap. (μF)	Dimensions(mm)			Pitch - d	PART NUMBER
	W (max.)	H (max.)	T (max.)		
0.01	10.5	7.5	7.0	7.5-0.6	RMPP 630V 103J 7.5S 5 ____
0.012	10.5	8.0	7.5	7.5-0.6	RMPP 630V 123J 7.5S 5 ____
0.015	10.5	8.5	8.0	7.5-0.6	RMPP 630V 153J 7.5S 5 ____
0.018	10.5	8.0	7.5	7.5-0.6	RMPP 630V 183J 7.5S 5 ____
0.022	10.5	8.0	7.5	7.5-0.6	RMPP 630V 223J 7.5S 5 ____
0.027	10.5	8.5	8.0	7.5-0.6	RMPP 630V 273J 7.5S 5 ____
0.033	10.5	9.0	8.5	7.5-0.6	RMPP 630V 333J 7.5S 5 ____
0.039	10.5	9.5	9.0	7.5-0.6	RMPP 630V 393J 7.5S 5 ____
0.022	13.0	8.0	7.5	10.0-0.6	RMPP 630V 223J 10S 5 ____
0.027	13.0	8.0	7.5	10.0-0.6	RMPP 630V 273J 10S 5 ____
0.033	13.0	8.0	7.5	10.0-0.6	RMPP 630V 333J 10S 5 ____
0.039	13.0	8.0	7.5	10.0-0.6	RMPP 630V 393J 10S 5 ____
0.047	13.0	8.5	8.0	10.0-0.6	RMPP 630V 473J 10S 5 ____
0.056	13.0	9.0	8.5	10.0-0.6	RMPP 630V 563J 10S 5 ____
0.068	13.0	9.0	8.5	10.0-0.6	RMPP 630V 683J 10S 5 ____
0.047	18.0	9.0	8.5	15.0-0.8	RMPP 630V 473J 15S 5 ____
0.056	18.0	9.0	8.5	15.0-0.8	RMPP 630V 563J 15S 5 ____
0.068	18.0	8.5	8.0	15.0-0.8	RMPP 630V 683J 15S 5 ____
0.082	18.0	9.0	8.5	15.0-0.8	RMPP 630V 823J 15S 5 ____
0.1	18.0	8.5	8.0	15.0-0.8	RMPP 630V 104J 15S 5 ____
0.12	18.0	9.0	8.5	15.0-0.8	RMPP 630V 124J 15S 5 ____
0.15	18.0	9.5	9.0	15.0-0.8	RMPP 630V 154J 15S 5 ____
0.18	18.0	10.0	9.5	15.0-0.8	RMPP 630V 184J 15S 5 ____
0.22	18.0	10.5	10.0	15.0-0.8	RMPP 630V 224J 15S 5 ____
0.27	18.0	11.5	11.0	15.0-0.8	RMPP 630V 274J 15S 5 ____
0.33	18.0	12.0	11.5	15.0-0.8	RMPP 630V 334J 15S 5 ____
0.39	18.0	13.0	12.5	15.0-0.8	RMPP 630V 394J 15S 5 ____
0.1	26.0	10.0	9.5	22.5-0.8	RMPP 630V 104J 22.5S 5 ____
0.12	26.0	10.5	10.0	22.5-0.8	RMPP 630V 124J 22.5S 5 ____
0.15	26.0	10.5	10.0	22.5-0.8	RMPP 630V 154J 22.5S 5 ____
0.18	26.0	10.5	10.0	22.5-0.8	RMPP 630V 184J 22.5S 5 ____
0.22	26.0	11.0	10.5	22.5-0.8	RMPP 630V 224J 22.5S 5 ____
0.27	26.0	10.0	9.5	22.5-0.8	RMPP 630V 274J 22.5S 5 ____
0.33	26.0	11.0	10.5	22.5-0.8	RMPP 630V 334J 22.5S 5 ____
0.39	26.0	11.5	11.0	22.5-0.8	RMPP 630V 394J 22.5S 5 ____
0.47	26.0	12.0	11.5	22.5-0.8	RMPP 630V 474J 22.5S 5 ____
0.56	26.0	12.5	12.0	22.5-0.8	RMPP 630V 564J 22.5S 5 ____
0.68	26.0	13.5	13.0	22.5-0.8	RMPP 630V 684J 22.5S 5 ____
0.82	26.0	14.5	14.0	22.5-0.8	RMPP 630V 824J 22.5S 5 ____
1.0	26.0	15.5	15.0	22.5-0.8	RMPP 630V 105J 22.5S 5 ____
1.2	26.0	16.5	16.0	22.5-0.8	RMPP 630V 125J 22.5S 5 ____
0.33	32.0	11.5	11.0	27.5-0.8	RMPP 630V 334J 27.5S 5 ____
0.39	32.0	10.5	10.0	27.5-0.8	RMPP 630V 394J 27.5S 5 ____
0.47	32.0	11.0	10.5	27.5-0.8	RMPP 630V 474J 27.5S 5 ____
0.56	32.0	11.5	11.0	27.5-0.8	RMPP 630V 564J 27.5S 5 ____
0.68	32.0	12.5	12.0	27.5-0.8	RMPP 630V 684J 27.5S 5 ____
0.82	32.0	13.0	12.5	27.5-0.8	RMPP 630V 824J 27.5S 5 ____
1.0	32.0	14.0	13.5	27.5-0.8	RMPP 630V 105J 27.5S 5 ____
1.2	32.0	15.0	14.5	27.5-0.8	RMPP 630V 125J 27.5S 5 ____
1.5	32.0	16.5	16.0	27.5-0.8	RMPP 630V 155J 27.5S 5 ____
1.8	32.0	17.5	17.0	27.5-0.8	RMPP 630V 185J 27.5S 5 ____
2.2	32.0	19.0	18.5	27.5-0.8	RMPP 630V 225J 27.5S 5 ____
2.7	32.0	20.5	20.0	27.5-0.8	RMPP 630V 275J 27.5S 5 ____
3.3	32.0	22.0	21.5	27.5-0.8	RMPP 630V 335J 27.5S 5 ____
3.9	32.0	24.0	23.5	27.5-0.8	RMPP 630V 395J 27.5S 5 ____

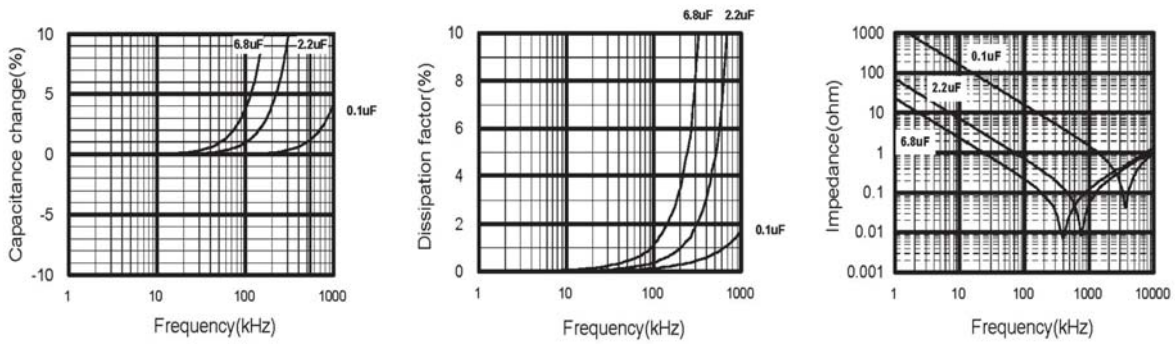
■ Electrical Characteristics (Typical Data)

250Vdc Series

Temperature Characteristics

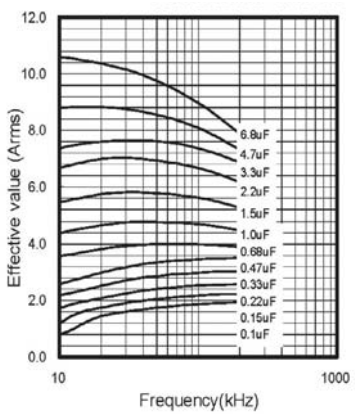


Frequency Characteristics



■ Applicable Specifications

Permissible Current



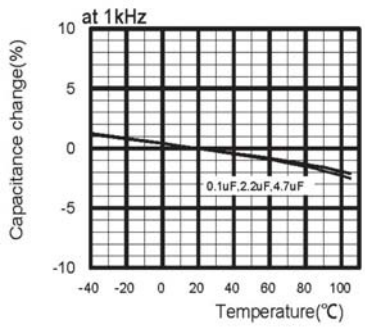
Pulse Handling Capability(dv/dt)
(Max 1000cycles)

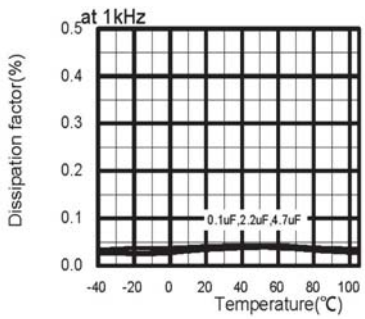
Rating Voltage	Capacitance Value(μF)	Code	dV/dt(V/μs)	Current(o-p) (A)
DC 250V	0.10	104	135	13.5
	0.15	154		20.2
	0.22	224		29.7
	0.33	334		44.5
	0.47	474		63.4
	0.68	684	82	55.7
	1.00	105		82.0
	1.50	155		123.0
	2.20	225		180.4
	3.30	335	57	188.1
	6.80	685		387.6

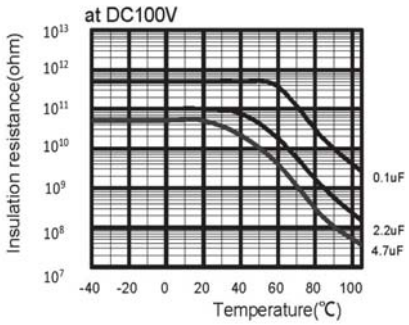
■ Electrical Characteristics (Typical Data)

450Vdc Series

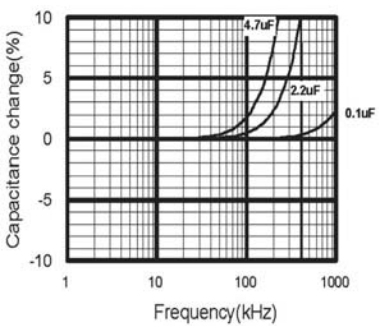
Temperature Characteristics

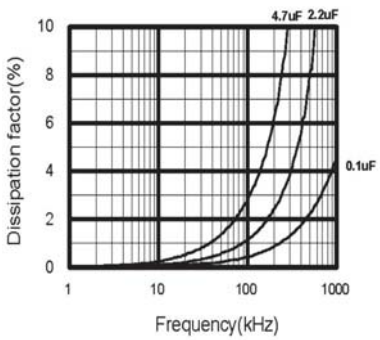


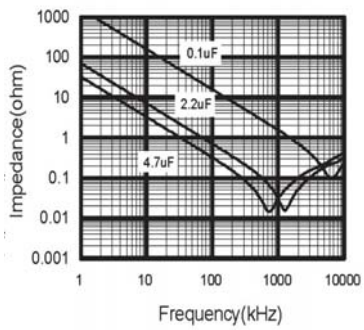




Frequency Characteristics

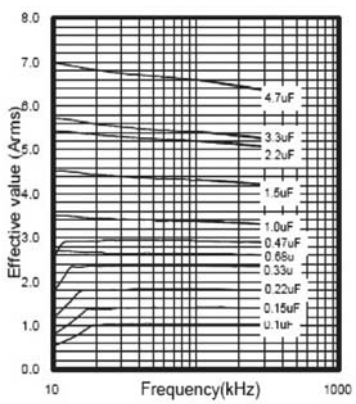






■ Applicable Specifications

Permissible Current



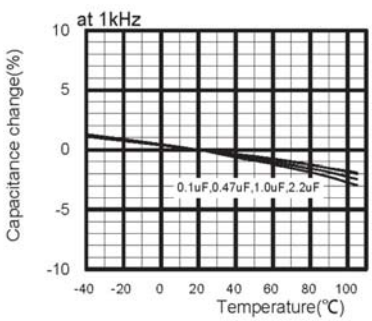
Pulse Handling Capability(dv/dt)
(Max 1000cycles)

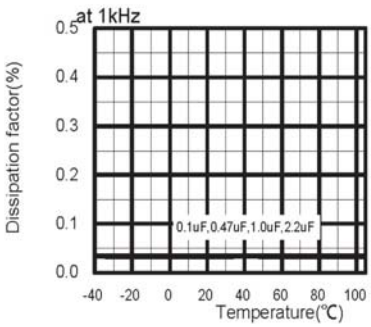
Rating Voltage	Capacitance Value(μF)	Code	dV/dt(V/μs)	Current(o-p) (A)
DC 450V	0.10	104	41.6	4.2
	0.15	154		6.2
	0.22	224		9.2
	0.33	334		13.7
	0.47	474		19.6
	0.68	684	24.3	16.5
	1.00	105		24.3
	1.50	155		36.4
	2.20	225		53.4
	3.30	335	14.3	47.2
	4.70	475		67.3

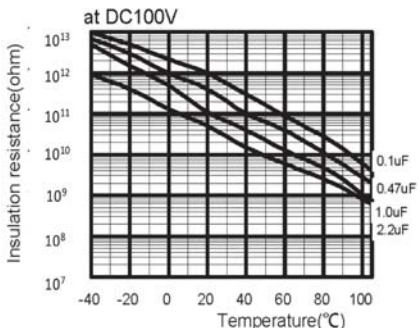
■ Electrical Characteristics (Typical Data)

630Vdc Series

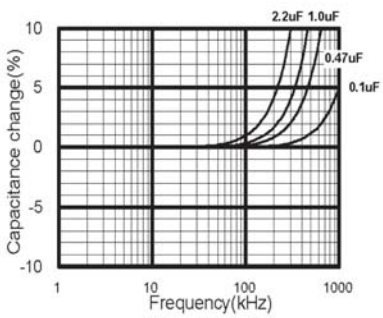
Temperature Characteristics

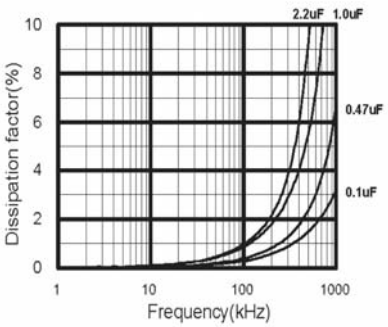


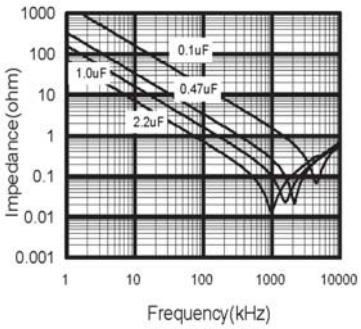




Frequency Characteristics

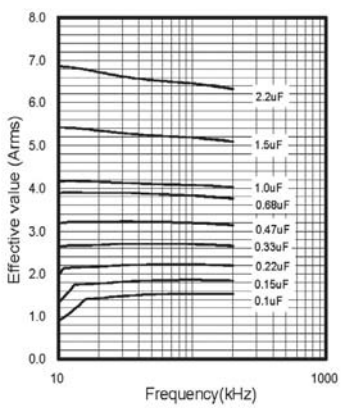






■ Applicable Specifications

Permissible Current



Pulse Handling Capability(dv/dt)
(Max 1000cycles)

Rating Voltage	Capacitance Value(μF)	Code	dV/dt(V/μs)	Current(o-p) (A)
DC 630V	0.10	104	155	15.5
	0.12	124		18.6
	0.15	154		23.3
	0.18	184		27.9
	0.22	224		34.1
	0.27	274		41.9
	0.33	334		51.2
	0.39	394		60.5
	0.47	474		72.9
	0.56	564		86.8
	0.68	684		105.4
	0.82	824	65	53.3
	1.00	105		65.0
	1.20	125		78.0
	1.50	155		97.5
	1.80	185		117
	2.20	225		143

Metallized Polypropylene Film Capacitor

RFMPP

※Old Series Name "FMPP®" has been changed to "RFMPP". This is not a change in the feature, construction, materials and other elements related to the product but a change just in 'Series Name'.

Non-inductive construction using metallized Polypropylene film with flame retardant epoxy resin coating

■ Features

- Round type of FMPP
- Low noise
- Self-healing property.
- Safe-film construction.
- Coated with flame-retardant(UL94 V-0) epoxy resin.
- RoHS directive compliant

■ Applications

- DC Multipurpose.
- Widely used in SMPS.
- Used in DC-filter.

■ Specifications

Reference Standard	IEC 60384-16		
Climatic Category	40 / 105 / 21		
Rated Temperature	105℃ +85℃~+105℃ decreasing factor 1.0% / ℃ for V_R(dc)		
Operation Temperature Range	-40℃~105℃		
Rated Voltage	450V, 500V		
Capacitance Range	0.01μF~4.7μF		
Capacitance Tolerance	J : ±5% K : ±10% M : ±20% ※Standard : J : ±5%, Other Tolerance Grade : available on request.		
Voltage Proof	1.75U_R(dc) / 3sec		
Dissipation Factor	≤0.1%(at 1kHz 20℃)		
Rated Voltage	**DC-Type**	U_R(dc)〈500V	≥30,000MΩ C_R≤0.33μF 100Vdc 60sec 20℃
			≥10,000Ω·F C_R〉0.33μF 100Vdc 60sec 20℃
		U_R(dc)≥500V	≥30,000MΩ C_R≤0.33μF 500Vdc 60sec 20℃
			≥10,000Ω·F C_R〉0.33μF 500Vdc 60sec 20℃
	AC-Type		≥30,000MΩ C_R≤0.33μF 250Vdc 60sec 20℃
			≥10,000Ω·F C_R〉0.33μF 250Vdc 60sec 20℃

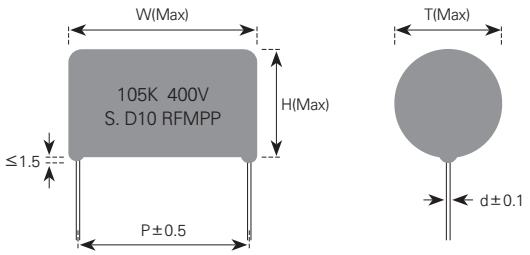
■ Part Number System

RFMPP	450V	683	J	10	S	5	
Part-1	Part-2	Part-3	Part-4	Part-5	Part-6	Part-7	Part-8

Part-1 : Series Code(Series Name)-RFMPP
Part-2 : Rated Voltage(DC : 400V~630V)
Part-3 : Rated Capacitance Value(0.01μF~4.7μF / 103~475)
Part-4 : Capacitance Tolerance(J : ±5% K : ±10% M : ±20%)
Part-5 : Lead Spacing(10mm / 15mm / 22.5mm / 27.5mm)
Part-6 : Forming-Type and Packing Code
Part-7 : Size Number(1~4 : Min-Type / 5 : Standard-Type / 6~9 : Large-Type)
Part-8 : Internal Use

CODE	STYLE
B	Bending Forming
C	Straight Cutting
D	D-Type Forming
L	B-Type long Forming
M	C-Type long Forming
S	Straight
X	B-Type Forming
Y	C-Type Forming
Z	Z-Type Forming
T	A-Type Tapping
U	B-Type Tapping
V	C-Type Tapping

■ Dimensions



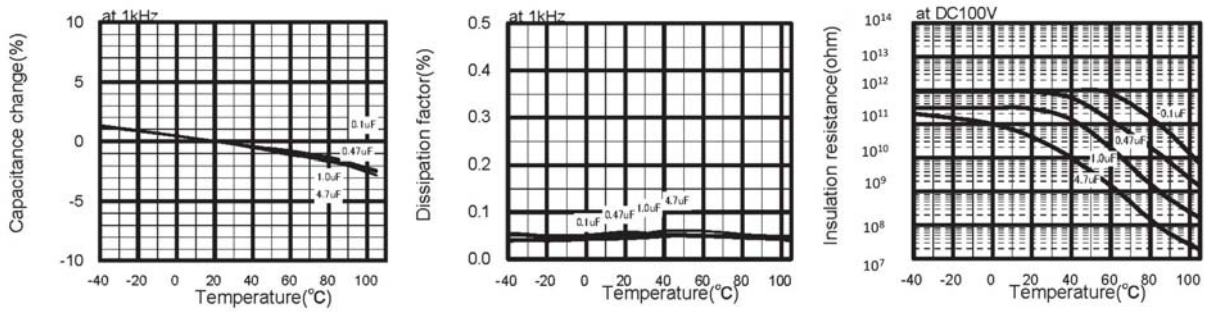
450Vdc(200Vac)					
Cap. (μF)	Dimensions(mm) W (max.)	H (max.)	T (max.)	Pitch - d	PART NUMBER
0.068	13.0	8.5	8.0	10.0-0.6	RFMPP 450V 683J 10S 5 ____
0.1	13.0	8.5	8.0	10.0-0.6	RFMPP 450V 104J 10S 5 ____
0.68	18.0	10.0	9.5	15.0-0.8	RFMPP 450V 684J 15S 5 ____
0.82	18.0	10.5	10.0	15.0-0.8	RFMPP 450V 824J 15S 5 ____
1.0	18.0	11.0	10.5	15.0-0.8	RFMPP 450V 105J 15S 5 ____
1.2	18.0	12.0	11.5	15.0-0.8	RFMPP 450V 125J 15S 5 ____
1.5	18.0	13.0	12.5	15.0-0.8	RFMPP 450V 155J 15S 5 ____
2.2	18.0	15.0	14.5	15.0-0.8	RFMPP 450V 225J 15S 5 ____
4.7	26.0	17.0	16.5	22.5-0.8	RFMPP 450V 475J 22.5S 5 ____

500Vdc(200Vac)					
Cap. (μF)	Dimensions(mm) W (max.)	H (max.)	T (max.)	Pitch - d	PART NUMBER
0.1	13.0	8.5	8.0	10.0-0.6	RFMPP 500V 104J 10S 5 ____
0.22	13.0	10.5	10.0	10.0-0.6	RFMPP 500V 224J 10S 5 ____
0.33	13.0	12.0	11.5	10.0-0.6	RFMPP 500V 334J 10S 5 ____
0.39	13.0	13.0	12.5	10.0-0.6	RFMPP 500V 394J 10S 5 ____
0.1	18.0	8.5	8.0	15.0-0.8	RFMPP 500V 104J 15S 5 ____
0.15	18.0	8.5	8.0	15.0-0.8	RFMPP 500V 154J 15S 5 ____
0.22	18.0	9.0	8.5	15.0-0.8	RFMPP 500V 224J 15S 5 ____
0.33	18.0	10.0	9.5	15.0-0.8	RFMPP 500V 334J 15S 5 ____
0.47	18.0	11.0	10.5	15.0-0.8	RFMPP 500V 474J 15S 5 ____
0.56	18.0	11.5	11.0	15.0-0.8	RFMPP 500V 564J 15S 5 ____
0.68	18.0	12.5	12.0	15.0-0.8	RFMPP 500V 684J 15S 5 ____
0.82	18.0	13.5	13.0	15.0-0.8	RFMPP 500V 824J 15S 5 ____
1.0	18.0	14.5	14.0	15.0-0.8	RFMPP 500V 105J 15S 5 ____
1.2	18.0	15.5	15.0	15.0-0.8	RFMPP 500V 125J 15S 5 ____
1.5	18.0	16.5	16.0	15.0-0.8	RFMPP 500V 155J 15S 5 ____
1.5	26.0	14.0	13.5	22.5-0.8	RFMPP 500V 155J 22.5S 5 ____
1.8	26.0	15.0	14.5	22.5-0.8	RFMPP 500V 185J 22.5S 5 ____
2.2	26.0	16.5	16.0	22.5-0.8	RFMPP 500V 225J 22.5S 5 ____
2.7	26.0	17.5	17.0	22.5-0.8	RFMPP 500V 275J 22.5S 5 ____
3.3	26.0	19.0	18.5	22.5-0.8	RFMPP 500V 335J 22.5S 5 ____
3.9	26.0	20.5	20.0	22.5-0.8	RFMPP 500V 395J 22.5S 5 ____
4.7	26.0	22.0	21.5	22.5-0.8	RFMPP 500V 475J 22.5S 5 ____

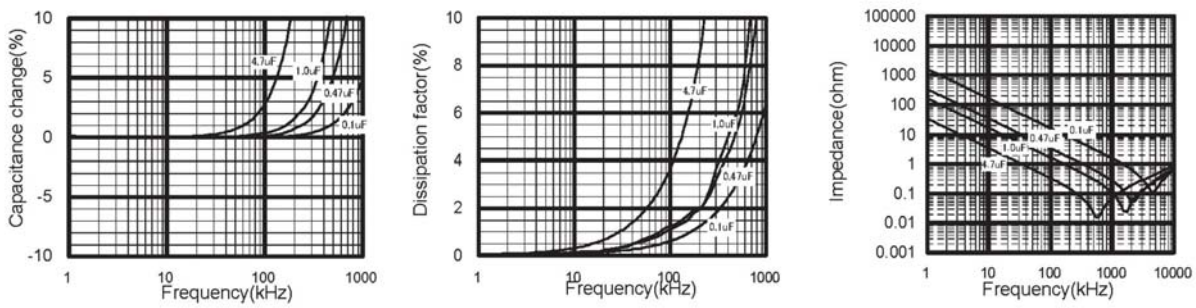
■ Electrical Characteristics (Typical Data)

450/500Vdc Series

Temperature Characteristics

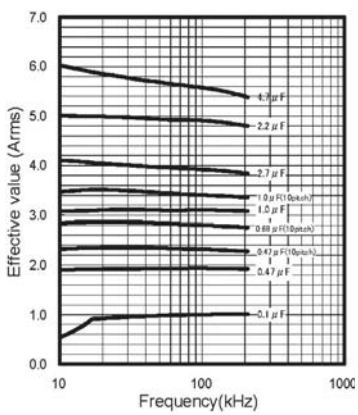


Frequency Characteristics



■ Applicable Specifications

Permissible Current



Pulse Handling Capability(dv/dt)
(Max 1000cycles)

Rated Voltage	Pitch (mm)	Capacitance (μF)	Code	dV/dt (V/μs)	Current (A0-p)
DC 450V/ 500V	10.0	0.10	104	41.6	4.2
		0.15	154		6.2
		0.22	224		9.2
		0.47	474		19.6
		0.68	684		28.3
		1.00	105		41.6
	15.0	0.47	474	24.3	11.4
		1.0	105		24.3
		1.5	155		36.4
		2.2	225		53.4
	22.5	2.7	275	14.3	38.7
		4.7	475		67.3

MPPS

Non-inductive construction using metallized Polypropylene film with flame retardant epoxy resin coating

■ Features

- Metallized Polypropylene(Series Type).
- Non-inductive wound construction.
- Low dissipation factor.
- Small inherent temperature rise.
- Coated with flame-retardant(UL94 V-0) epoxy resin.
- RoHS directive compliant

■ Applications

- Typical applications include pulse operation in switched mode
- power supply(SMPS), televisions, computers, monitors, electrical ballasts and other high frequency applications demanding stable operation.

■ Specifications

Reference Standard	IEC 60384-16
Climatic Category	40 / 105 / 21
Rated Temperature	105℃ +85℃~+105℃ decreasing factor 1.0% / ℃ for V_R(dc)
Operation Temperature Range	-40℃~105℃
Rated Voltage	1000Vdc, 1250Vdc, 1600Vdc, 2000Vdc
Capacitance Range	0.0027μF~0.68μF
Capacitance Tolerance	G : ±2% H : ±3% J : ±5% K : ±10% M : ±20% ※Standard : J : ±5%, Other Tolerance Grade : available on request.
Voltage Proof	1.75U_R(dc) / 3sec
Dissipation Factor	≤0.1%(at 1kHz 20℃)
Rated Voltage	≥30,000MΩ C_R≤0.33μF 100Vdc 60sec 20℃
	≥10,000Ω·F C_R〉0.33μF 100Vdc 60sec 20℃

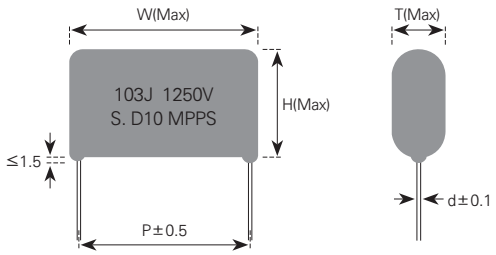
■ Part Number System

MPPS	1000V	103	J	10	S	5	
Part-1	Part-2	Part-3	Part-4	Part-5	Part-6	Part-7	Part-8

Part-1 : Series Code(Series Name) - MPPS
Part-2 : Rated Voltage(DC : 1000V~2000V)
Part-3 : Rated Capacitance Value(0.0027μF~0.68μF / 272~684)
Part-4 : Capacitance Tolerance(G : ±2% H : ±3% J : ±5% K : ±10% M : ±20%)
Part-5 : Lead Spacing(10mm / 15mm / 22.5mm / 27.5mm)
Part-6 : Forming-Type and Packing Code
Part-7 : Size Number(1~4 : Min-Type / 5 : Standard-Type / 6~9 : Large-Type)
Part-8 : Internal Use

CODE	STYLE
B	Bending Forming
C	Straight Cutting
D	D-Type Forming
L	B-Type long Forming
M	C-Type long Forming
S	Straight
X	B-Type Forming
Y	C-Type Forming
Z	Z-Type Forming
T	A-Type Tapping
U	B-Type Tapping
V	C-Type Tapping

■ Dimensions



1000Vdc(400Vac)					
Cap. (μF)	Dimensions(mm) W (max.)	H (max.)	T (max.)	Pitch - d	PART NUMBER
0.01	13.0	14.0	8.5	10.0-0.6	MPPS 1000V 103J 10S 5 ____
0.012	13.0	14.5	9.5	10.0-0.6	MPPS 1000V 123J 10S 5 ____
0.015	13.0	15.5	10.5	10.0-0.6	MPPS 1000V 153J 10S 5 ____
0.018	13.0	16.5	11.5	10.0-0.6	MPPS 1000V 183J 10S 5 ____
0.022	13.0	17.5	12.5	10.0-0.6	MPPS 1000V 223J 10S 5 ____
0.018	18.0	11.5	7.0	15.0-0.8	MPPS 1000V 183J 15S 5 ____
0.022	18.0	12.5	7.0	15.0-0.8	MPPS 1000V 223J 15S 5 ____
0.027	18.0	13.0	8.0	15.0-0.8	MPPS 1000V 273J 15S 5 ____
0.033	18.0	13.5	8.5	15.0-0.8	MPPS 1000V 333J 15S 5 ____
0.039	18.0	14.5	9.0	15.0-0.8	MPPS 1000V 393J 15S 5 ____
0.047	18.0	15.0	10.0	15.0-0.8	MPPS 1000V 473J 15S 5 ____
0.056	18.0	17.0	10.0	15.0-0.8	MPPS 1000V 563J 15S 5 ____
0.068	18.0	17.5	11.0	15.0-0.8	MPPS 1000V 683J 15S 5 ____
0.082	18.0	19.0	12.0	15.0-0.8	MPPS 1000V 823J 15S 5 ____
0.1	18.0	21.0	12.5	15.0-0.8	MPPS 1000V 104J 15S 5 ____
0.12	18.0	22.0	14.0	15.0-0.8	MPPS 1000V 124J 15S 5 ____
0.15	18.0	24.5	15.0	15.0-0.8	MPPS 1000V 154J 15S 5 ____
0.047	26.0	13.0	8.0	22.5-0.8	MPPS 1000V 473J 22.5S 5 ____
0.056	26.0	13.5	8.5	22.5-0.8	MPPS 1000V 563J 22.5S 5 ____
0.068	26.0	14.0	9.0	22.5-0.8	MPPS 1000V 683J 22.5S 5 ____
0.082	26.0	15.0	10.0	22.5-0.8	MPPS 1000V 823J 22.5S 5 ____
0.1	26.0	16.0	10.5	22.5-0.8	MPPS 1000V 104J 22.5S 5 ____
0.12	26.0	17.5	11.0	22.5-0.8	MPPS 1000V 124J 22.5S 5 ____
0.15	26.0	19.0	12.0	22.5-0.8	MPPS 1000V 154J 22.5S 5 ____
0.18	26.0	20.5	12.5	22.5-0.8	MPPS 1000V 184J 22.5S 5 ____
0.22	26.0	22.0	13.5	22.5-0.8	MPPS 1000V 224J 22.5S 5 ____
0.27	26.0	24.5	14.5	22.5-0.8	MPPS 1000V 274J 22.5S 5 ____
0.33	26.0	26.0	16.0	22.5-0.8	MPPS 1000V 334J 22.5S 5 ____
0.39	26.0	27.5	17.5	22.5-0.8	MPPS 1000V 394J 22.5S 5 ____
0.47	26.0	29.0	19.5	22.5-0.8	MPPS 1000V 474J 22.5S 5 ____
0.15	31.0	17.0	10.5	27.5-0.8	MPPS 1000V 154J 27.5S 5 ____
0.18	31.0	18.0	11.5	27.5-0.8	MPPS 1000V 184J 27.5S 5 ____
0.22	31.0	19.0	12.5	27.5-0.8	MPPS 1000V 224J 27.5S 5 ____
0.27	31.0	21.5	13.0	27.5-0.8	MPPS 1000V 274J 27.5S 5 ____
0.33	31.0	22.5	14.5	27.5-0.8	MPPS 1000V 334J 27.5S 5 ____
0.39	31.0	24.0	15.5	27.5-0.8	MPPS 1000V 394J 27.5S 5 ____
0.47	31.0	26.5	16.5	27.5-0.8	MPPS 1000V 474J 27.5S 5 ____
0.56	31.0	28.0	18.0	27.5-0.8	MPPS 1000V 564J 27.5S 5 ____
0.68	31.0	30.0	20.0	27.5-0.8	MPPS 1000V 684J 27.5S 5 ____

1250Vdc(450Vac)					
Cap. (μF)	Dimensions(mm) W (max.)	H (max.)	T (max.)	Pitch - d	PART NUMBER
0.01	13.0	14.5	9.5	10.0-0.6	MPPS 1250V 103J 10S 5 ____
0.012	13.0	15.5	10.0	10.0-0.6	MPPS 1250V 123J 10S 5 ____
0.015	13.0	16.5	11.5	10.0-0.6	MPPS 1250V 153J 10S 5 ____
0.0082	18.0	11.0	6.5	15.0-0.8	MPPS 1250V 822J 15S 5 ____
0.01	18.0	10.5	6.0	15.0-0.8	MPPS 1250V 103J 15S 5 ____
0.012	18.0	11.0	6.5	15.0-0.8	MPPS 1250V 123J 15S 5 ____
0.015	18.0	11.5	7.0	15.0-0.8	MPPS 1250V 153J 15S 5 ____
0.018	18.0	12.5	7.0	15.0-0.8	MPPS 1250V 183J 15S 5 ____
0.022	18.0	13.0	7.5	15.0-0.8	MPPS 1250V 223J 15S 5 ____
0.027	18.0	13.5	8.5	15.0-0.8	MPPS 1250V 273J 15S 5 ____
0.033	18.0	14.5	9.0	15.0-0.8	MPPS 1250V 333J 15S 5 ____
0.039	18.0	15.0	10.0	15.0-0.8	MPPS 1250V 393J 15S 5 ____
0.047	18.0	17.0	10.0	15.0-0.8	MPPS 1250V 473J 15S 5 ____
0.056	18.0	17.5	11.0	15.0-0.8	MPPS 1250V 563J 15S 5 ____
0.068	18.0	19.0	12.0	15.0-0.8	MPPS 1250V 683J 15S 5 ____
0.022	26.0	12.5	7.5	22.5-0.8	MPPS 1250V 223J 22.5S 5 ____
0.027	26.0	12.0	7.0	22.5-0.8	MPPS 1250V 273J 22.5S 5 ____
0.033	26.0	12.5	7.5	22.5-0.8	MPPS 1250V 333J 22.5S 5 ____
0.039	26.0	13.0	8.0	22.5-0.8	MPPS 1250V 393J 22.5S 5 ____
0.047	26.0	13.5	8.5	22.5-0.8	MPPS 1250V 473J 22.5S 5 ____
0.056	26.0	14.5	9.0	22.5-0.8	MPPS 1250V 563J 22.5S 5 ____

0.068	26.0	15.0	10.0	22.5-0.8	MPPS 1250V 683J 22.5S 5 ____
0.082	26.0	16.0	10.5	22.5-0.8	MPPS 1250V 823J 22.5S 5 ____
0.1	26.0	17.5	11.0	22.5-0.8	MPPS 1250V 104J 22.5S 5 ____
0.12	26.0	18.5	12.0	22.5-0.8	MPPS 1250V 124J 22.5S 5 ____
0.15	26.0	21.0	12.5	22.5-0.8	MPPS 1250V 154J 22.5S 5 ____
0.18	26.0	22.0	13.5	22.5-0.8	MPPS 1250V 184J 22.5S 5 ____
0.22	26.0	24.5	14.5	22.5-0.8	MPPS 1250V 224J 22.5S 5 ____
0.27	26.0	26.0	16.0	22.5-0.8	MPPS 1250V 274J 22.5S 5 ____
0.068	31.0	14.0	8.5	27.5-0.8	MPPS 1250V 683J 27.5S 5 ____
0.082	31.0	14.5	9.5	27.5-0.8	MPPS 1250V 823J 27.5S 5 ____
0.1	31.0	15.5	10.0	27.5-0.8	MPPS 1250V 104J 27.5S 5 ____
0.12	31.0	16.0	11.0	27.5-0.8	MPPS 1250V 124J 27.5S 5 ____
0.15	31.0	18.0	11.5	27.5-0.8	MPPS 1250V 154J 27.5S 5 ____
0.18	31.0	19.0	12.5	27.5-0.8	MPPS 1250V 184J 27.5S 5 ____
0.22	31.0	21.5	13.0	27.5-0.8	MPPS 1250V 224J 27.5S 5 ____
0.27	31.0	22.5	14.5	27.5-0.8	MPPS 1250V 274J 27.5S 5 ____
0.33	31.0	25.0	15.0	27.5-0.8	MPPS 1250V 334J 27.5S 5 ____
0.39	31.0	25.5	17.0	27.5-0.8	MPPS 1250V 394J 27.5S 5 ____
0.47	31.0	28.0	18.0	27.5-0.8	MPPS 1250V 474J 27.5S 5 ____
0.56	31.0	29.0	20.5	27.5-0.8	MPPS 1250V 564J 27.5S 5 ____

1600Vdc(500Vac)

Cap. (μF)	Dimensions(mm)			Pitch - d	PART NUMBER
	W (max.)	H (max.)	T (max.)		
0.0027	18.0	10.5	6.0	15.0-0.8	MPPS 1600V 272J 15S 5 ____
0.0033	18.0	11.0	6.5	15.0-0.8	MPPS 1600V 332J 15S 5 ____
0.0039	18.0	10.5	6.0	15.0-0.8	MPPS 1600V 392J 15S 5 ____
0.0047	18.0	11.0	6.5	15.0-0.8	MPPS 1600V 472J 15S 5 ____
0.0056	18.0	11.0	7.0	15.0-0.8	MPPS 1600V 562J 15S 5 ____
0.0068	18.0	12.0	7.0	15.0-0.8	MPPS 1600V 682J 15S 5 ____
0.0082	18.0	12.5	7.5	15.0-0.8	MPPS 1600V 822J 15S 5 ____
0.01	18.0	13.5	8.0	15.0-0.8	MPPS 1600V 103J 15S 5 ____
0.012	18.0	14.0	9.0	15.0-0.8	MPPS 1600V 123J 15S 5 ____
0.015	18.0	15.0	9.5	15.0-0.8	MPPS 1600V 153J 15S 5 ____
0.018	18.0	15.5	10.5	15.0-0.8	MPPS 1600V 183J 15S 5 ____
0.022	18.0	17.5	10.5	15.0-0.8	MPPS 1600V 223J 15S 5 ____
0.027	18.0	18.5	12.0	15.0-0.8	MPPS 1600V 273J 15S 5 ____
0.033	18.0	20.0	13.0	15.0-0.8	MPPS 1600V 333J 15S 5 ____
0.039	18.0	21.0	14.0	15.0-0.8	MPPS 1600V 393J 15S 5 ____
0.047	18.0	22.5	15.5	15.0-0.8	MPPS 1600V 473J 15S 5 ____
0.015	26.0	12.5	7.5	22.5-0.8	MPPS 1600V 153J 22.5S 5 ____
0.018	26.0	13.0	8.0	22.5-0.8	MPPS 1600V 183J 22.5S 5 ____
0.022	26.0	13.5	8.5	22.5-0.8	MPPS 1600V 223J 22.5S 5 ____
0.027	26.0	14.0	9.0	22.5-0.8	MPPS 1600V 273J 22.5S 5 ____
0.033	26.0	15.0	10.0	22.5-0.8	MPPS 1600V 333J 22.5S 5 ____
0.039	26.0	15.5	10.5	22.5-0.8	MPPS 1600V 393J 22.5S 5 ____
0.047	26.0	17.5	10.5	22.5-0.8	MPPS 1600V 473J 22.5S 5 ____
0.056	26.0	18.5	11.5	22.5-0.8	MPPS 1600V 563J 22.5S 5 ____
0.068	26.0	19.5	12.5	22.5-0.8	MPPS 1600V 683J 22.5S 5 ____
0.082	26.0	21.5	13.0	22.5-0.8	MPPS 1600V 823J 22.5S 5 ____
0.1	26.0	22.5	14.5	22.5-0.8	MPPS 1600V 104J 22.5S 5 ____
0.12	26.0	25.0	15.0	22.5-0.8	MPPS 1600V 124J 22.5S 5 ____
0.15	26.0	27.0	17.0	22.5-0.8	MPPS 1600V 154J 22.5S 5 ____
0.18	26.0	28.5	18.5	22.5-0.8	MPPS 1600V 184J 22.5S 5 ____
0.047	31.0	15.0	10.0	27.5-0.8	MPPS 1600V 473J 27.5S 5 ____
0.056	31.0	16.0	10.5	27.5-0.8	MPPS 1600V 563J 27.5S 5 ____
0.068	31.0	17.5	11.0	27.5-0.8	MPPS 1600V 683J 27.5S 5 ____
0.082	31.0	18.5	11.5	27.5-0.8	MPPS 1600V 823J 27.5S 5 ____
0.1	31.0	19.5	13.0	27.5-0.8	MPPS 1600V 104J 27.5S 5 ____
0.12	31.0	21.5	13.5	27.5-0.8	MPPS 1600V 124J 27.5S 5 ____
0.15	31.0	23.0	15.0	27.5-0.8	MPPS 1600V 154J 27.5S 5 ____
0.18	31.0	25.5	15.5	27.5-0.8	MPPS 1600V 184J 27.5S 5 ____
0.22	31.0	27.0	17.0	27.5-0.8	MPPS 1600V 224J 27.5S 5 ____
0.27	31.0	29.0	19.0	27.5-0.8	MPPS 1600V 274J 27.5S 5 ____
0.33	31.0	31.0	21.0	27.5-0.8	MPPS 1600V 334J 27.5S 5 ____

2000Vdc(600Vac)

Cap. (μF)	Dimensions(mm)			Pitch - d	PART NUMBER
	W (max.)	H (max.)	T (max.)		
0.0027	18.0	10.5	6.0	15.0-0.8	MPPS 2000V 272J 15S 5 ____
0.0033	18.0	11.0	6.5	15.0-0.8	MPPS 2000V 332J 15S 5 ____
0.0039	18.0	11.5	7.0	15.0-0.8	MPPS 2000V 392J 15S 5 ____
0.0047	18.0	12.5	7.0	15.0-0.8	MPPS 2000V 472J 15S 5 ____
0.0056	18.0	13.0	7.5	15.0-0.8	MPPS 2000V 562J 15S 5 ____
0.0068	18.0	13.5	8.0	15.0-0.8	MPPS 2000V 682J 15S 5 ____
0.0082	18.0	14.0	9.0	15.0-0.8	MPPS 2000V 822J 15S 5 ____

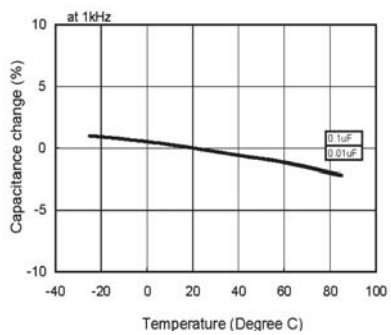
0.01	18.0	15.0	9.5	15.0-0.8	MPPS 2000V 103J 15S 5 _____
0.012	18.0	15.5	10.5	15.0-0.8	MPPS 2000V 123J 15S 5 _____
0.015	18.0	17.5	11.0	15.0-0.8	MPPS 2000V 153J 15S 5 _____
0.018	18.0	18.5	11.5	15.0-0.8	MPPS 2000V 183J 15S 5 _____
0.022	18.0	19.5	13.0	15.0-0.8	MPPS 2000V 223J 15S 5 _____
0.027	18.0	21.0	14.0	15.0-0.8	MPPS 2000V 273J 15S 5 _____
0.010	26.0	12.5	7.5	22.5-0.8	MPPS 2000V 103J 22.5S 5 _____
0.012	26.0	13.0	8.0	22.5-0.8	MPPS 2000V 123J 22.5S 5 _____
0.015	26.0	13.5	8.5	22.5-0.8	MPPS 2000V 153J 22.5S 5 _____
0.018	26.0	14.0	9.0	22.5-0.8	MPPS 2000V 183J 22.5S 5 _____
0.022	26.0	15.0	10.0	22.5-0.8	MPPS 2000V 223J 22.5S 5 _____
0.027	26.0	16.0	10.5	22.5-0.8	MPPS 2000V 273J 22.5S 5 _____
0.033	26.0	17.5	11.0	22.5-0.8	MPPS 2000V 333J 22.5S 5 _____
0.039	26.0	18.5	11.5	22.5-0.8	MPPS 2000V 393J 22.5S 5 _____
0.047	26.0	19.5	12.5	22.5-0.8	MPPS 2000V 473J 22.5S 5 _____
0.056	26.0	21.5	13.0	22.5-0.8	MPPS 2000V 563J 22.5S 5 _____
0.068	26.0	22.5	14.5	22.5-0.8	MPPS 2000V 683J 22.5S 5 _____

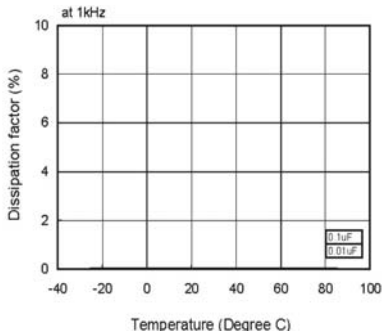
0.082	26.0	25.0	15.0	22.5-0.8	MPPS 2000V 823J 22.5S 5 _____
0.1	26.0	26.5	16.5	22.5-0.8	MPPS 2000V 104J 22.5S 5 _____
0.12	26.0	28.0	18.5	22.5-0.8	MPPS 2000V 124J 22.5S 5 _____
0.022	31.0	14.0	8.5	27.5-0.8	MPPS 2000V 223J 27.5S 5 _____
0.027	31.0	14.5	9.5	27.5-0.8	MPPS 2000V 273J 27.5S 5 _____
0.033	31.0	15.0	10.0	27.5-0.8	MPPS 2000V 333J 27.5S 5 _____
0.039	31.0	16.0	10.5	27.5-0.8	MPPS 2000V 393J 27.5S 5 _____
0.047	31.0	17.5	11.0	27.5-0.8	MPPS 2000V 473J 27.5S 5 _____
0.056	31.0	18.5	12.0	27.5-0.8	MPPS 2000V 563J 27.5S 5 _____
0.068	31.0	19.5	13.0	27.5-0.8	MPPS 2000V 683J 27.5S 5 _____
0.082	31.0	21.5	13.5	27.5-0.8	MPPS 2000V 823J 27.5S 5 _____
0.1	31.0	23.0	14.5	27.5-0.8	MPPS 2000V 104J 27.5S 5 _____
0.12	31.0	25.0	15.5	27.5-0.8	MPPS 2000V 124J 27.5S 5 _____
0.15	31.0	27.0	17.0	27.5-0.8	MPPS 2000V 154J 27.5S 5 _____
0.18	31.0	28.5	19.0	27.5-0.8	MPPS 2000V 184J 27.5S 5 _____
0.22	31.0	31.0	21.0	27.5-0.8	MPPS 2000V 224J 27.5S 5 _____

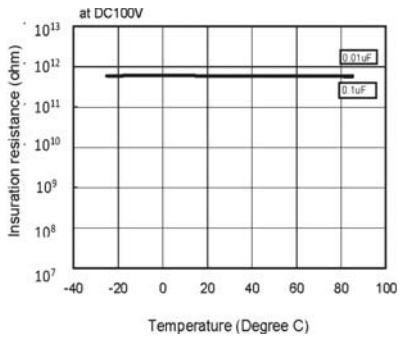
■ Electrical Characteristics (Typical Data)

1000Vdc Series

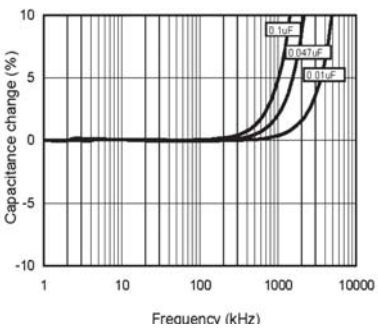
Temperature Characteristics

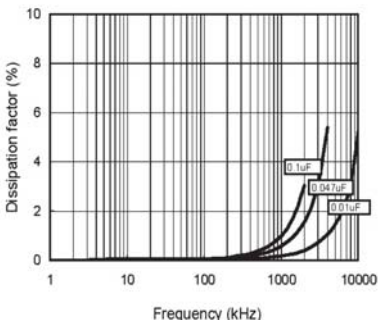


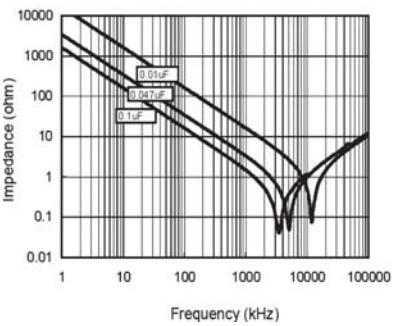




Frequency Characteristics

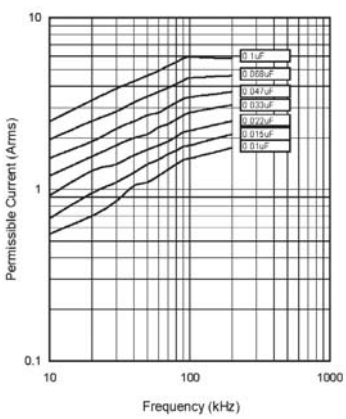






■ Applicable Specifications

Permissible Current



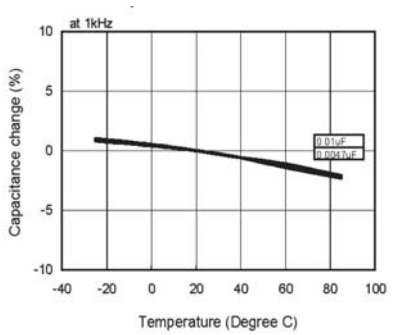
Pulse Handling Capability(dv/dt)
(Max 1000cycles)

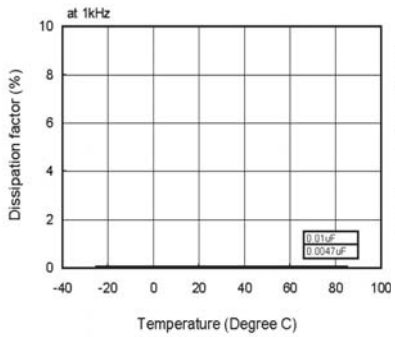
Rating Voltage	Capacitance Value(uF)	Code	dV/dt(V/us)	Current(o-p) (A)
1000VDC	0.0100	103	6000	60.0
	0.0150	153		90.0
	0.0220	223		132.0
	0.0330	333		198.0
	0.0470	473		282.0
	0.0680	683		408.0
	0.1000	104		600.0

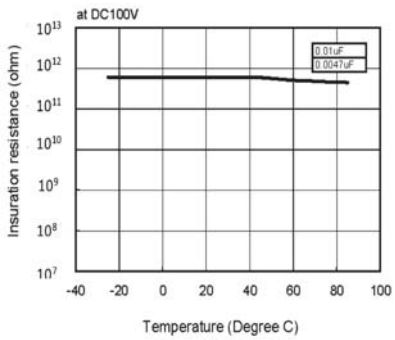
■ Electrical Characteristics (Typical Data)

1250Vdc Series

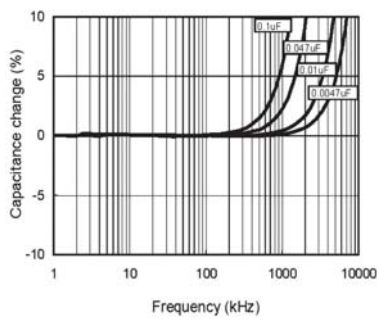
Temperature Characteristics

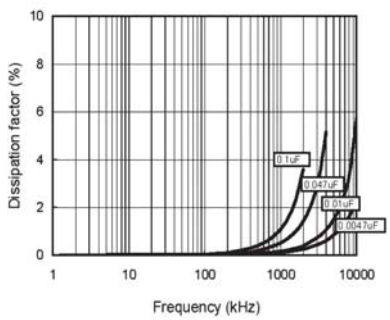


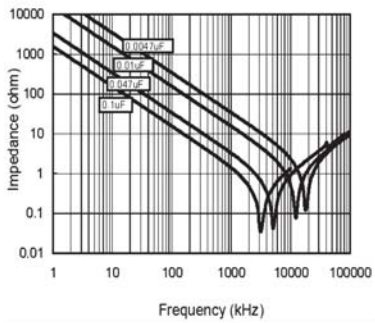




Frequency Characteristics

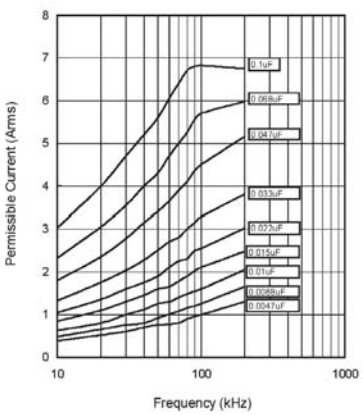






■ Applicable Specifications

Permissible Current



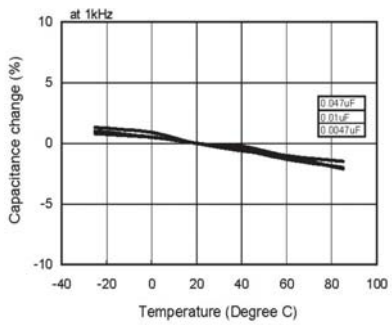
Pulse Handling Capability(dv/dt)
(Max 1000cycles)

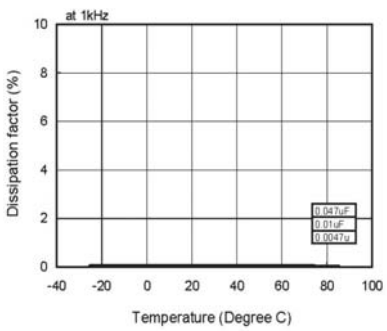
Rating Voltage	Capacitance Value(uF)	Code	dV/dt(V/us)	Current(o-p) (A)
1250VDC	0.0047	472	6000	28.2
	0.0068	682		40.8
	0.0100	103		60.0
	0.0150	153		90.0
	0.0220	223		132.0
	0.0330	333		198.0
	0.0470	473		282.0
	0.0680	683		408.0
	0.1000	104		600.0

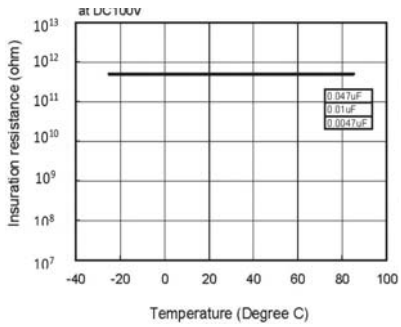
■ Electrical Characteristics (Typical Data)

1600Vdc Series

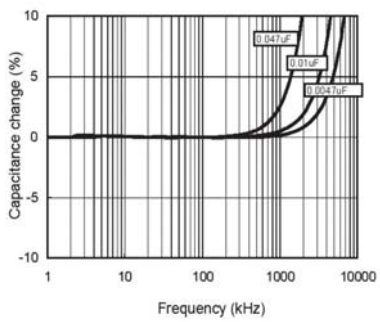
Temperature Characteristics

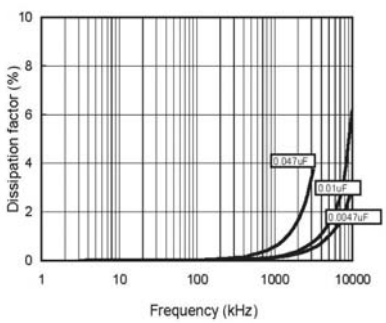


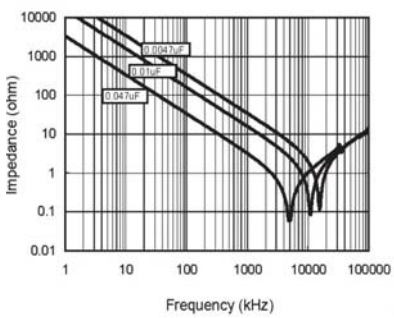




Frequency Characteristics

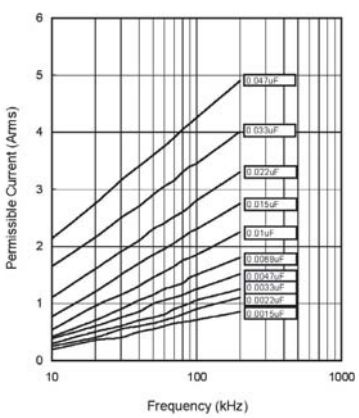






■ Applicable Specifications

Permissible Current



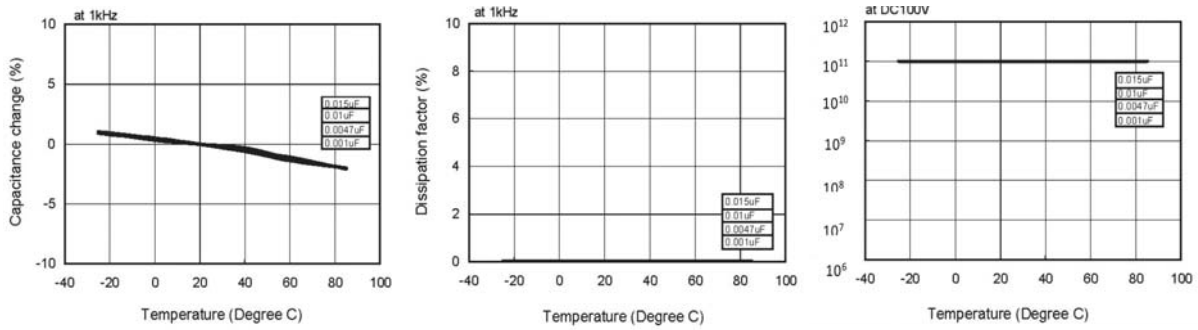
Pulse Handling Capability(dv/dt)
(Max 1000cycles)

Rating Voltage	Capacitance Value(uF)	Code	dV/dt(V/us)	Current(o-p) (A)
1600VDC	0.0015	152	6000	9.0
	0.0022	222		13.2
	0.0033	332		19.8
	0.0047	472		28.2
	0.0068	682		40.8
	0.0100	103		60.0
	0.0150	153		90.0
	0.0220	223		132.0
	0.0330	333		198.0
	0.0470	473		282.0

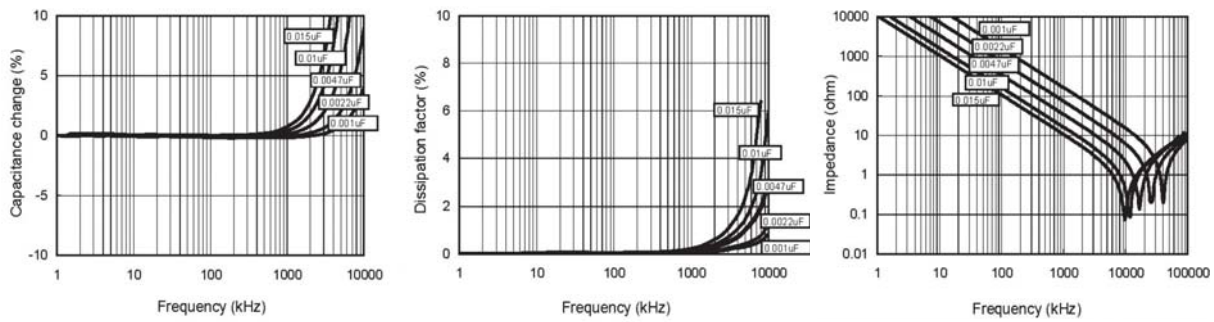
■ Electrical Characteristics (Typical Data)

2000Vdc Series

Temperature Characteristics

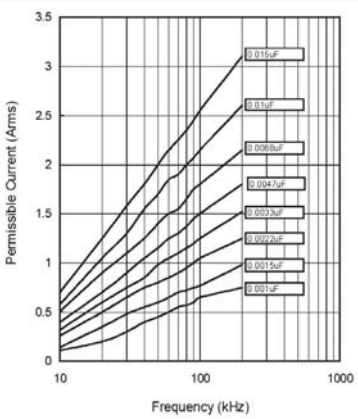


Frequency Characteristics



■ Applicable Specifications

Permissible Current



Pulse Handling Capability(dv/dt)
(Max 1000cycles)

Rating Voltage	Capacitance Value(uF)	Code	dV/dt(V/us)	Current(o-p) (A)
2000VDC	0.0010	102	6000	6.0
	0.0015	152		9.0
	0.0022	222		13.2
	0.0033	332		19.8
	0.0047	472		28.2
	0.0068	682		40.8
	0.0100	103		60.0
	0.0150	153		90.0

BMPS

Non-inductive construction using metallized Polypropylene film with flame retardant plastic case and epoxy resin filled.

■ Features

- Metallized Polypropylene(Series Type).
- Non-inductive wound construction.
- Low dissipation factor.
- Small inherent temperature rise.
- Plastic case(UL94 V-0), Epoxy resin sealing
- RoHS directive compliant

■ Applications

- Typical applications include pulse operation in switched mode
- power supply(SMPS), televisions, computers, monitors, electrical ballasts and other high frequency applications demanding stable operation.

■ Specifications

Reference Standard	IEC 60384-16
Climatic Category	40 / 105 / 21
Rated Temperature	105℃ +85℃~+105℃ decreasing factor 1.0% / ℃ for V_R(dc)
Operation Temperature Range	-40℃~105℃
Rated Voltage	1000Vdc, 1250Vdc, 1600Vdc, 2000Vdc, 2500Vdc
Capacitance Range	0.0027μF~0.82μF
Capacitance Tolerance	G : ±2% H : ±3% J : ±5% K : ±10% M : ±20% ※Standard : J : ±5%, Other Tolerance Grade : available on request.
Voltage Proof	1.75U_R(dc) / 3sec
Dissipation Factor	≤0.1%(at 1kHz 20℃)
Rated Voltage	≥30,000MΩ C_R≤0.33μF 100Vdc 60sec 20℃
	≥10,000Ω·F C_R〉0.33μF 100Vdc 60sec 20℃

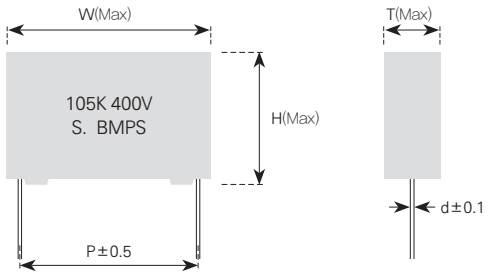
■ Part Number System

BMPS	1000V	103	J	10	S	5	
Part-1	Part-2	Part-3	Part-4	Part-5	Part-6	Part-7	Part-8

Part-1 : Series Code(Series Name)-BMPS
Part-2 : Rated Voltage(DC : 630V~2000V)
Part-3 : Rated Capacitance Value(0.0027μF~0.82μF / 272~824)
Part-4 : Capacitance Tolerance(G : ±2% H : ±3% J : ±5% K : ±10% M : ±20%)
Part-5 : Lead Spacing(10mm / 15mm / 22.5mm / 27.5mm)
Part-6 : Forming-Type and Packing Code(Refer to 1.8.1.)
Part-7 : Size Number(1~4 : Min-Type / 5 : Standard-Type / 6~9 : Large-Type)
Part-8 : Internal Use

CODE	STYLE
B	Bending Forming
C	Straight Cutting
D	D-Type Forming
L	B-Type long Forming
M	C-Type long Forming
S	Straight
X	B-Type Forming
Y	C-Type Forming
Z	Z-Type Forming
T	A-Type Tapping
U	B-Type Tapping
V	C-Type Tapping

■ Dimensions



1000Vdc

Cap. (μF)	Dimensions(mm) W (max.)	H (max.)	T (max.)	Pitch - d	PART NUMBER
0.01	13	11	5	10-0.6	BMPS 1000V 103J 10S 5 ____
0.012	13	11	5	10-0.6	BMPS 1000V 123J 10S 5 ____
0.015	13	11	5	10-0.6	BMPS 1000V 153J 10S 5 ____
0.018	13	11	5	10-0.6	BMPS 1000V 183J 10S 5 ____
0.022	13	12	6	10-0.6	BMPS 1000V 223J 10S 5 ____
0.018	18	11	5	15-0.8	BMPS 1000V 183J 15S 5 ____
0.022	18	11	5	15-0.8	BMPS 1000V 223J 15S 5 ____
0.027	18	12.5	5.5	15-0.8	BMPS 1000V 273J 15S 5 ____
0.033	18	12.5	5.5	15-0.8	BMPS 1000V 333J 15S 5 ____
0.039	18	13.5	7.5	15-0.8	BMPS 1000V 393J 15S 5 ____
0.047	18	13.5	7.5	15-0.8	BMPS 1000V 473J 15S 5 ____
0.056	18	13.5	7.5	15-0.8	BMPS 1000V 563J 15S 5 ____
0.068	18	14.5	8.5	15-0.8	BMPS 1000V 683J 15S 5 ____
0.082	18	16	10	15-0.8	BMPS 1000V 823J 15S 5 ____
0.1	18	16	10	15-0.8	BMPS 1000V 104J 15S 5 ____
0.12	18	19	11	15-0.8	BMPS 1000V 124J 15S 5 ____
0.15	18	19	11	15-0.8	BMPS 1000V 154J 15S 5 ____
0.047	26	14.5	6	22.5-0.8	BMPS 1000V 473J 22.5S 5 ____
0.056	26	14.5	6	22.5-0.8	BMPS 1000V 563J 22.5S 5 ____
0.068	26	14.5	6	22.5-0.8	BMPS 1000V 683J 22.5S 5 ____
0.082	26	16	7	22.5-0.8	BMPS 1000V 823J 22.5S 5 ____
0.1	26	16	7	22.5-0.8	BMPS 1000V 104J 22.5S 5 ____
0.12	26	16	8	22.5-0.8	BMPS 1000V 124J 22.5S 5 ____
0.15	26	18.5	9	22.5-0.8	BMPS 1000V 154J 22.5S 5 ____
0.18	26	18.5	10	22.5-0.8	BMPS 1000V 184J 22.5S 5 ____
0.22	26	18.5	10	22.5-0.8	BMPS 1000V 224J 22.5S 5 ____
0.27	26	22	13	22.5-0.8	BMPS 1000V 274J 22.5S 5 ____
0.33	26	22	13	22.5-0.8	BMPS 1000V 334J 22.5S 5 ____
0.39	26	24.5	15.5	22.5-0.8	BMPS 1000V 394J 22.5S 5 ____
0.47	26	24.5	15.5	22.5-0.8	BMPS 1000V 474J 22.5S 5 ____
0.56	26	24.5	15.5	22.5-0.8	BMPS 1000V 564J 22.5S 5 ____
0.15	31.5	17	9	27.5-0.8	BMPS 1000V 154J 27.5S 5 ____
0.18	31.5	17	9	27.5-0.8	BMPS 1000V 184J 27.5S 5 ____
0.22	31.5	17	9	27.5-0.8	BMPS 1000V 224J 27.5S 5 ____
0.27	31.5	20	11	27.5-0.8	BMPS 1000V 274J 27.5S 5 ____
0.33	31.5	20	11	27.5-0.8	BMPS 1000V 334J 27.5S 5 ____
0.39	31.5	25	13	27.5-0.8	BMPS 1000V 394J 27.5S 5 ____
0.47	31.5	25	13	27.5-0.8	BMPS 1000V 474J 27.5S 5 ____
0.56	31.5	28	14	27.5-0.8	BMPS 1000V 564J 27.5S 5 ____
0.68	31.5	28	14	27.5-0.8	BMPS 1000V 684J 27.5S 5 ____
0.82	31.5	28	17.5	27.5-0.8	BMPS 1000V 824J 27.5S 5 ____

1250Vdc

Cap. (μF)	Dimensions(mm) W (max.)	H (max.)	T (max.)	Pitch - d	PART NUMBER
0.01	13	11	5	10-0.6	BMPS 1250V 103J 10S 5 ____
0.012	13	11	5	10-0.6	BMPS 1250V 123J 10S 5 ____
0.015	13	12	6	10-0.6	BMPS 1250V 153J 10S 5 ____
0.0082	18	11	5	15-0.8	BMPS 1250V 822J 15S 5 ____
0.01	18	11	5	15-0.8	BMPS 1250V 103J 15S 5 ____
0.012	18	12.5	5.5	15-0.8	BMPS 1250V 123J 15S 5 ____
0.015	18	12	6	15-0.8	BMPS 1250V 153J 15S 5 ____
0.018	18	13.5	7.5	15-0.8	BMPS 1250V 183J 15S 5 ____
0.022	18	13.5	7.5	15-0.8	BMPS 1250V 223J 15S 5 ____
0.027	18	13.5	7.5	15-0.8	BMPS 1250V 273J 15S 5 ____
0.033	18	14.5	8.5	15-0.8	BMPS 1250V 333J 15S 5 ____
0.039	18	16	10	15-0.8	BMPS 1250V 393J 15S 5 ____
0.047	18	16	10	15-0.8	BMPS 1250V 473J 15S 5 ____
0.056	18	19	11	15-0.8	BMPS 1250V 563J 15S 5 ____
0.068	18	19	11	15-0.8	BMPS 1250V 683J 15S 5 ____
0.022	26	14.5	6	22.5-0.8	BMPS 1250V 223J 22.5S 5 ____
0.027	26	14.5	6	22.5-0.8	BMPS 1250V 273J 22.5S 5 ____
0.033	26	14.5	6	22.5-0.8	BMPS 1250V 333J 22.5S 5 ____
0.039	26	14.5	6	22.5-0.8	BMPS 1250V 393J 22.5S 5 ____

0.047	26	16	7	22.5-0.8	BMPS 1250V 473J 22.5S 5 ____
0.056	26	16	7	22.5-0.8	BMPS 1250V 563J 22.5S 5 ____
0.068	26	17	8.5	22.5-0.8	BMPS 1250V 683J 22.5S 5 ____
0.082	26	18.5	9	22.5-0.8	BMPS 1250V 823J 22.5S 5 ____
0.1	26	18.5	10	22.5-0.8	BMPS 1250V 104J 22.5S 5 ____
0.12	26	20	11	22.5-0.8	BMPS 1250V 124J 22.5S 5 ____
0.15	26	22	13	22.5-0.8	BMPS 1250V 154J 22.5S 5 ____
0.18	26	22	13	22.5-0.8	BMPS 1250V 184J 22.5S 5 ____
0.22	26	24.5	15.5	22.5-0.8	BMPS 1250V 224J 22.5S 5 ____
0.27	26	24.5	15.5	22.5-0.8	BMPS 1250V 274J 22.5S 5 ____
0.068	31.5	17	9	27.5-0.8	BMPS 1250V 683J 27.5S 5 ____
0.082	31.5	17	9	27.5-0.8	BMPS 1250V 823J 27.5S 5 ____
0.1	31.5	17	9	27.5-0.8	BMPS 1250V 104J 27.5S 5 ____
0.12	31.5	17	9	27.5-0.8	BMPS 1250V 124J 27.5S 5 ____
0.15	31.5	20	11	27.5-0.8	BMPS 1250V 154J 27.5S 5 ____
0.18	31.5	20	11	27.5-0.8	BMPS 1250V 184J 27.5S 5 ____
0.22	31.5	25	13	27.5-0.8	BMPS 1250V 224J 27.5S 5 ____
0.27	31.5	25	13	27.5-0.8	BMPS 1250V 274J 27.5S 5 ____
0.33	31.5	28	14	27.5-0.8	BMPS 1250V 334J 27.5S 5 ____
0.39	31.5	28	17.5	27.5-0.8	BMPS 1250V 394J 27.5S 5 ____
0.47	31.5	28	17.5	27.5-0.8	BMPS 1250V 474J 27.5S 5 ____
0.56	31.5	37	22	27.5-0.8	BMPS 1250V 564J 27.5S 5 ____
0.68	31.5	37	22	27.5-0.8	BMPS 1250V 684J 27.5S 5 ____
0.82	31.5	37	22	27.5-0.8	BMPS 1250V 824J 27.5S 5 ____

1600Vdc

Cap. (μF)	Dimensions(mm)			Pitch - d	PART NUMBER
	W (max.)	H (max.)	T (max.)		
0.0027	13	11	5	10-0.6	BMPS 1600V 272J 10S 5 ____
0.0033	13	11	5	10-0.6	BMPS 1600V 332J 10S 5 ____
0.0039	13	11	5	10-0.6	BMPS 1600V 392J 10S 5 ____
0.0047	13	11	5	10-0.6	BMPS 1600V 472J 10S 5 ____
0.0056	13	12	6	10-0.6	BMPS 1600V 562J 10S 5 ____
0.0068	13	12	6	10-0.6	BMPS 1600V 682J 10S 5 ____
0.0056	18	11	5	15-0.8	BMPS 1600V 562J 15S 5 ____
0.0068	18	11	5	15-0.8	BMPS 1600V 682J 15S 5 ____
0.0082	18	12.5	5.5	15-0.8	BMPS 1600V 822J 15S 5 ____
0.01	18	12	6	15-0.8	BMPS 1600V 103J 15S 5 ____
0.012	18	13.5	7.5	15-0.8	BMPS 1600V 123J 15S 5 ____
0.015	18	13.5	7.5	15-0.8	BMPS 1600V 153J 15S 5 ____
0.018	18	14.5	8.5	15-0.8	BMPS 1600V 183J 15S 5 ____
0.022	18	14.5	8.5	15-0.8	BMPS 1600V 223J 15S 5 ____
0.027	18	16	10	15-0.8	BMPS 1600V 273J 15S 5 ____
0.033	18	19	11	15-0.8	BMPS 1600V 333J 15S 5 ____
0.039	18	19	11	15-0.8	BMPS 1600V 393J 15S 5 ____
0.047	18	19	11	15-0.8	BMPS 1600V 473J 15S 5 ____
0.015	26	14.5	6	22.5-0.8	BMPS 1600V 153J 22.5S 5 ____
0.018	26	14.5	6	22.5-0.8	BMPS 1600V 183J 22.5S 5 ____
0.022	26	14.5	6	22.5-0.8	BMPS 1600V 223J 22.5S 5 ____
0.027	26	14.5	6	22.5-0.8	BMPS 1600V 273J 22.5S 5 ____
0.033	26	16	7	22.5-0.8	BMPS 1600V 333J 22.5S 5 ____
0.039	26	16	7	22.5-0.8	BMPS 1600V 393J 22.5S 5 ____
0.047	26	17	8.5	22.5-0.8	BMPS 1600V 473J 22.5S 5 ____
0.056	26	18.5	9	22.5-0.8	BMPS 1600V 563J 22.5S 5 ____
0.068	26	18.5	10	22.5-0.8	BMPS 1600V 683J 22.5S 5 ____
0.082	26	20	11	22.5-0.8	BMPS 1600V 823J 22.5S 5 ____
0.1	26	22	13	22.5-0.8	BMPS 1600V 104J 22.5S 5 ____
0.12	26	22	13	22.5-0.8	BMPS 1600V 124J 22.5S 5 ____
0.15	26	24.5	15.5	22.5-0.8	BMPS 1600V 154J 22.5S 5 ____
0.18	26	24.5	15.5	22.5-0.8	BMPS 1600V 184J 22.5S 5 ____
0.047	31.5	17	9	27.5-0.8	BMPS 1600V 473J 10S 5 ____
0.056	31.5	17	9	27.5-0.8	BMPS 1600V 563J 10S 5 ____
0.068	31.5	17	9	27.5-0.8	BMPS 1600V 683J 10S 5 ____
0.082	31.5	17	9	27.5-0.8	BMPS 1600V 823J 10S 5 ____
0.1	31.5	20	11	27.5-0.8	BMPS 1600V 104J 27.5S 5 ____
0.12	31.5	20	11	27.5-0.8	BMPS 1600V 124J 27.5S 5 ____
0.15	31.5	25	13	27.5-0.8	BMPS 1600V 154J 27.5S 5 ____
0.18	31.5	25	13	27.5-0.8	BMPS 1600V 184J 27.5S 5 ____
0.22	31.5	28	14	27.5-0.8	BMPS 1600V 224J 27.5S 5 ____
0.27	31.5	28	17.5	27.5-0.8	BMPS 1600V 274J 27.5S 5 ____
0.33	31.5	29	19	27.5-0.8	BMPS 1600V 334J 27.5S 5 ____
0.39	31.5	37	22	27.5-0.8	BMPS 1600V 394J 27.5S 5 ____
0.47	31.5	37	22	27.5-0.8	BMPS 1600V 474J 27.5S 5 ____
0.56	31.5	37	22	27.5-0.8	BMPS 1600V 564J 27.5S 5 ____

2000Vdc

Cap. (μF)	Dimensions(mm) W (max.)	H (max.)	T (max.)	Pitch - d	PART NUMBER
0.0027	13	11	5	10-0.6	BMPS 2000V 272J 10S 5 ____
0.0033	13	11	5	10-0.6	BMPS 2000V 332J 10S 5 ____
0.0039	13	11	5	10-0.6	BMPS 2000V 392J 10S 5 ____
0.0047	13	11	5	10-0.6	BMPS 2000V 472J 10S 5 ____
0.0056	13	12	6	10-0.6	BMPS 2000V 562J 10S 5 ____
0.0027	18	11	5	15-0.8	BMPS 2000V 272J 15S 5 ____
0.0033	18	11	5	15-0.8	BMPS 2000V 332J 15S 5 ____
0.0039	18	11	5	15-0.8	BMPS 2000V 392J 15S 5 ____
0.0047	18	12.5	5.5	15-0.8	BMPS 2000V 472J 15S 5 ____
0.0056	18	12.5	5.5	15-0.8	BMPS 2000V 562J 15S 5 ____
0.0068	18	13.5	7.5	15-0.8	BMPS 2000V 682J 15S 5 ____
0.0082	18	13.5	7.5	15-0.8	BMPS 2000V 822J 15S 5 ____
0.01	18	13.5	7.5	15-0.8	BMPS 2000V 103J 15S 5 ____
0.012	18	14.5	8.5	15-0.8	BMPS 2000V 123J 15S 5 ____
0.015	18	16	10	15-0.8	BMPS 2000V 153J 15S 5 ____
0.018	18	19	11	15-0.8	BMPS 2000V 183J 15S 5 ____
0.022	18	19	11	15-0.8	BMPS 2000V 223J 15S 5 ____
0.027	18	19	11	15-0.8	BMPS 2000V 273J 15S 5 ____
0.01	26	14.5	6	22.5-0.8	BMPS 2000V 103J 22.5S 5 ____
0.012	26	14.5	6	22.5-0.8	BMPS 2000V 123J 22.5S 5 ____
0.015	26	16	7	22.5-0.8	BMPS 2000V 153J 22.5S 5 ____
0.018	26	16	7	22.5-0.8	BMPS 2000V 183J 22.5S 5 ____
0.022	26	16	8	22.5-0.8	BMPS 2000V 223J 22.5S 5 ____
0.027	26	17	8.5	22.5-0.8	BMPS 2000V 273J 22.5S 5 ____
0.033	26	18.5	10	22.5-0.8	BMPS 2000V 333J 22.5S 5 ____
0.039	26	18.5	10	22.5-0.8	BMPS 2000V 393J 22.5S 5 ____
0.047	26	20	11	22.5-0.8	BMPS 2000V 473J 22.5S 5 ____
0.056	26	22	13	22.5-0.8	BMPS 2000V 563J 22.5S 5 ____
0.068	26	22	13	22.5-0.8	BMPS 2000V 683J 22.5S 5 ____
0.082	26	24.5	15.5	22.5-0.8	BMPS 2000V 823J 22.5S 5 ____
0.1	26	24.5	15.5	22.5-0.8	BMPS 2000V 104J 22.5S 5 ____
0.022	31.5	17	9	27.5-0.8	BMPS 2000V 223J 27.5S 5 ____
0.027	31.5	17	9	27.5-0.8	BMPS 2000V 273J 27.5S 5 ____
0.033	31.5	17	9	27.5-0.8	BMPS 2000V 333J 27.5S 5 ____
0.039	31.5	17	9	27.5-0.8	BMPS 2000V 393J 27.5S 5 ____
0.047	31.5	20	11	27.5-0.8	BMPS 2000V 473J 27.5S 5 ____
0.056	31.5	20	11	27.5-0.8	BMPS 2000V 563J 27.5S 5 ____
0.068	31.5	20	11	27.5-0.8	BMPS 2000V 683J 27.5S 5 ____
0.082	31.5	25	13	27.5-0.8	BMPS 2000V 823J 27.5S 5 ____
0.1	31.5	25	13	27.5-0.8	BMPS 2000V 104J 27.5S 5 ____
0.12	31.5	28	14	27.5-0.8	BMPS 2000V 124J 27.5S 5 ____
0.15	31.5	28	17.5	27.5-0.8	BMPS 2000V 154J 27.5S 5 ____
0.18	31.5	29	19	27.5-0.8	BMPS 2000V 184J 27.5S 5 ____
0.22	31.5	37	22	27.5-0.8	BMPS 2000V 224J 27.5S 5 ____
0.27	31.5	37	22	27.5-0.8	BMPS 2000V 274J 27.5S 5 ____
0.33	31.5	37	22	27.5-0.8	BMPS 2000V 334J 27.5S 5 ____

2500Vdc

Cap. (μF)	Dimensions(mm) W (max.)	H (max.)	T (max.)	Pitch - d	PART NUMBER
0.0027	18	11	5	15-0.8	BMPS 2500V 272J 15S 5 ____
0.0033	18	11	5	15-0.8	BMPS 2500V 332J 15S 5 ____
0.0039	18	12.5	5.5	15-0.8	BMPS 2500V 392J 15S 5 ____
0.0047	18	12.5	5.5	15-0.8	BMPS 2500V 472J 15S 5 ____
0.0056	18	13.5	7.5	15-0.8	BMPS 2500V 562J 15S 5 ____
0.0068	18	13.5	7.5	15-0.8	BMPS 2500V 682J 15S 5 ____
0.0082	18	13.5	7.5	15-0.8	BMPS 2500V 822J 15S 5 ____
0.01	18	14.5	8.5	15-0.8	BMPS 2500V 103J 15S 5 ____
0.012	18	16	10	15-0.8	BMPS 2500V 123J 15S 5 ____
0.015	18	16	10	15-0.8	BMPS 2500V 153J 15S 5 ____
0.018	18	19	11	15-0.8	BMPS 2500V 183J 15S 5 ____
0.022	18	19	11	15-0.8	BMPS 2500V 223J 15S 5 ____
0.0047	26	14.5	6	22.5-0.8	BMPS 2500V 472J 22.5S 5 ____
0.0056	26	14.5	6	22.5-0.8	BMPS 2500V 562J 22.5S 5 ____
0.0068	26	14.5	6	22.5-0.8	BMPS 2500V 682J 22.5S 5 ____
0.0082	26	14.5	6	22.5-0.8	BMPS 2500V 822J 22.5S 5 ____
0.01	26	16	7	22.5-0.8	BMPS 2500V 103J 22.5S 5 ____
0.012	26	16	7	22.5-0.8	BMPS 2500V 123J 22.5S 5 ____
0.015	26	17	8.5	22.5-0.8	BMPS 2500V 153J 22.5S 5 ____
0.018	26	18.5	9	22.5-0.8	BMPS 2500V 183J 22.5S 5 ____
0.022	26	18.5	9	22.5-0.8	BMPS 2500V 223J 22.5S 5 ____
0.027	26	20	11	22.5-0.8	BMPS 2500V 273J 22.5S 5 ____
0.033	26	22	13	22.5-0.8	BMPS 2500V 333J 22.5S 5 ____
0.039	26	24.5	15.5	22.5-0.8	BMPS 2500V 393J 22.5S 5 ____

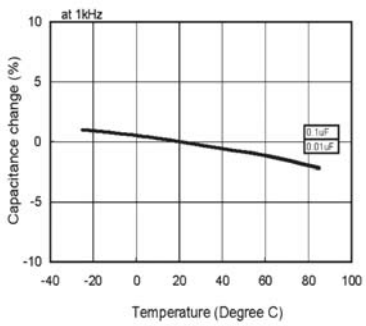
0.047	26	24.5	15.5	22.5-0.8	BMPS 2500V 473J 22.5S 5 _____
0.056	26	24.5	15.5	22.5-0.8	BMPS 2500V 563J 22.5S 5 _____
0.015	31.5	17	9	27.5-0.8	BMPS 2500V 153J 27.5S 5 _____
0.018	31.5	17	9	27.5-0.8	BMPS 2500V 183J 27.5S 5 _____
0.022	31.5	17	9	27.5-0.8	BMPS 2500V 223J 27.5S 5 _____
0.027	31.5	17	9	27.5-0.8	BMPS 2500V 273J 27.5S 5 _____
0.033	31.5	20	11	27.5-0.8	BMPS 2500V 333J 27.5S 5 _____
0.039	31.5	20	11	27.5-0.8	BMPS 2500V 393J 27.5S 5 _____

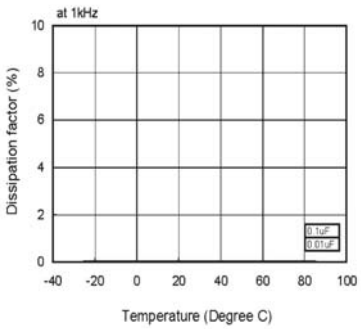
0.047	31.5	25	13	27.5-0.8	BMPS 2500V 473J 27.5S 5 _____
0.056	31.5	25	13	27.5-0.8	BMPS 2500V 563J 27.5S 5 _____
0.068	31.5	25	13	27.5-0.8	BMPS 2500V 683J 27.5S 5 _____
0.082	31.5	28	14	27.5-0.8	BMPS 2500V 823J 27.5S 5 _____
0.1	31.5	28	17.5	27.5-0.8	BMPS 2500V 104J 27.5S 5 _____
0.12	31.5	29	19	27.5-0.8	BMPS 2500V 124J 27.5S 5 _____
0.15	31.5	37	22	27.5-0.8	BMPS 2500V 154J 27.5S 5 _____
0.18	31.5	37	22	27.5-0.8	BMPS 2500V 184J 27.5S 5 _____

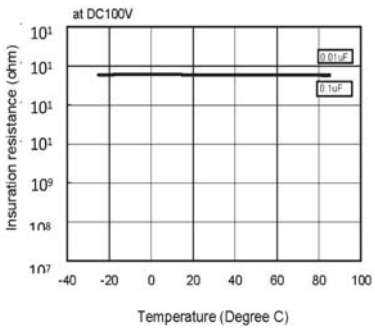
■ Electrical Characteristics (Typical Data)

1000Vdc Series

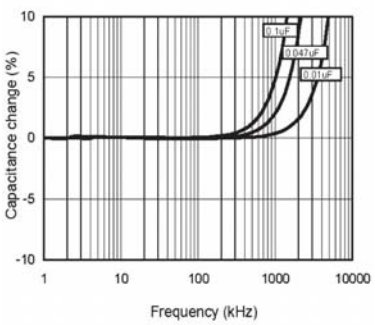
Temperature Characteristics

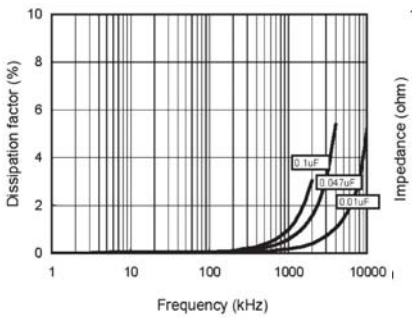


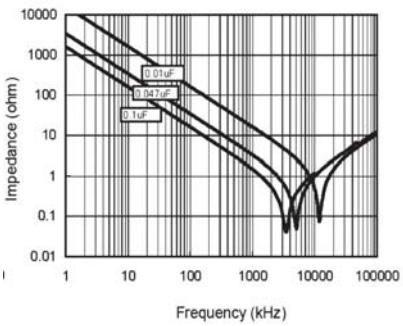




Frequency Characteristics

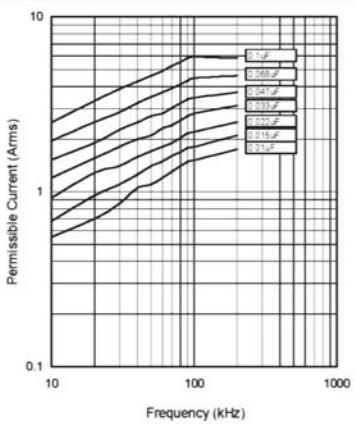






■ Applicable Specifications

Permissible Current



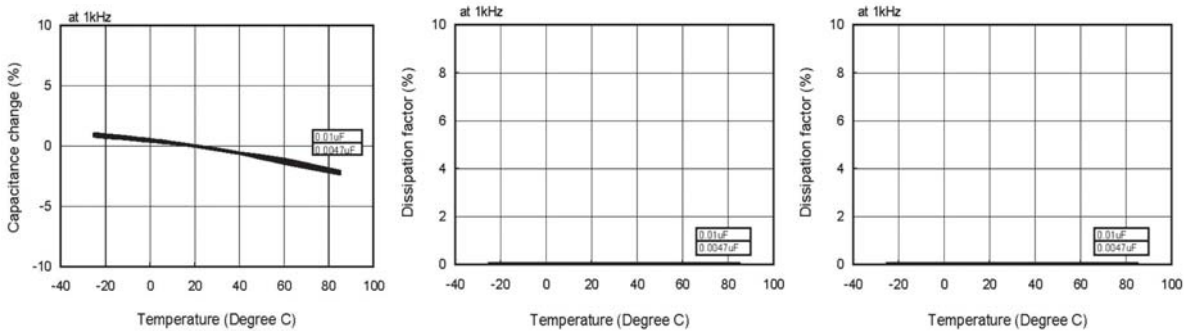
Pulse Handling Capability(dv/dt)
(Max 1000cycles)

Rating Voltage	Capacitance Value(uF)	Code	dV/dt(V/us)	Current(o-p) (A)
1000VDC	0.0100	103	6000	60.0
	0.0150	153		90.0
	0.0220	223		132.0
	0.0330	333		198.0
	0.0470	473		282.0
	0.0680	683		408.0
	0.1000	104		600.0

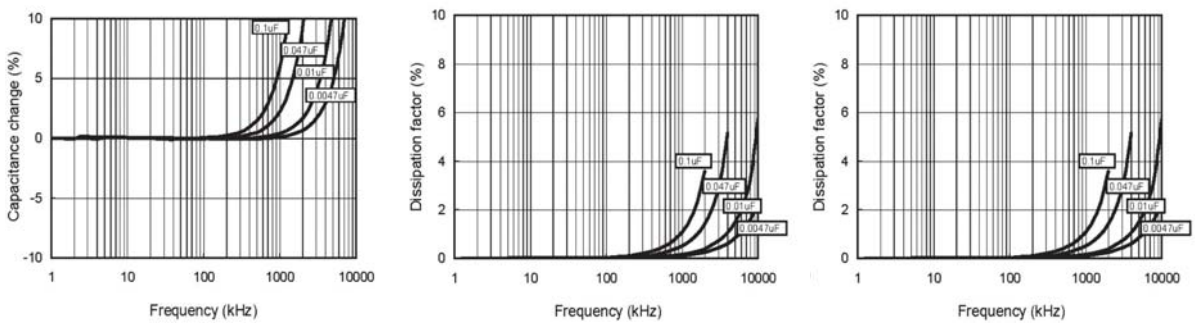
■ Electrical Characteristics (Typical Data)

1250Vdc Series

Temperature Characteristics

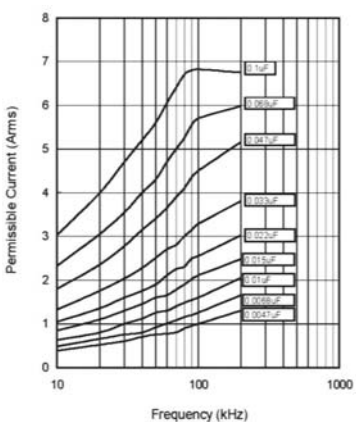


Frequency Characteristics



■ Applicable Specifications

Permissible Current



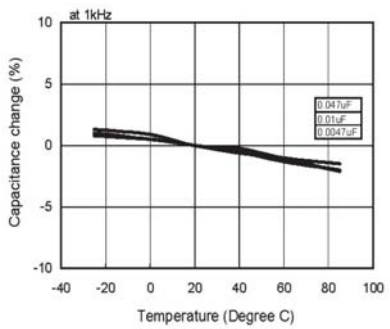
Pulse Handling Capability(dv/dt)
(Max 1000cycles)

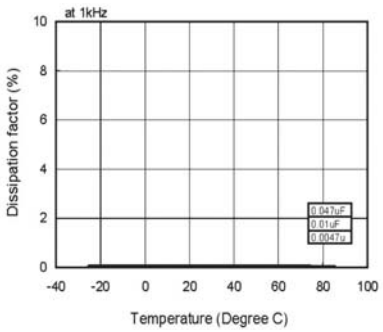
Rating Voltage	Capacitance Value(uF)	Code	dV/dt(V/us)	Current(o-p) (A)
1250VDC	0.0047	472	6000	28.2
	0.0068	682		40.8
	0.0100	103		60.0
	0.0150	153		90.0
	0.0220	223		132.0
	0.0330	333		198.0
	0.0470	473		282.0
	0.0680	683		408.0
	0.1000	104		600.0

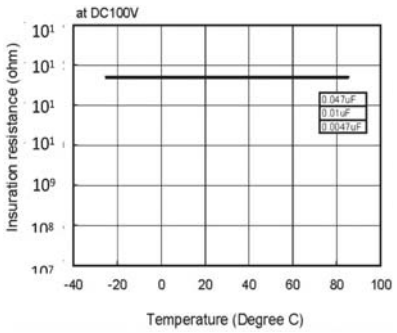
■ Electrical Characteristics (Typical Data)

1600Vdc Series

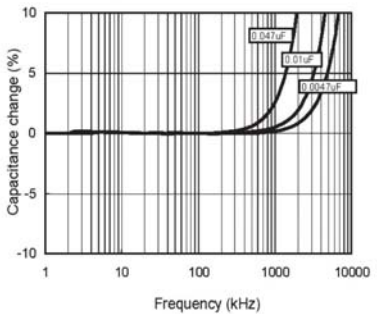
Temperature Characteristics

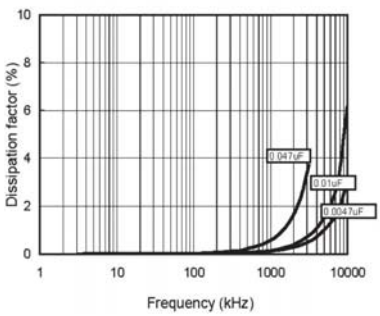


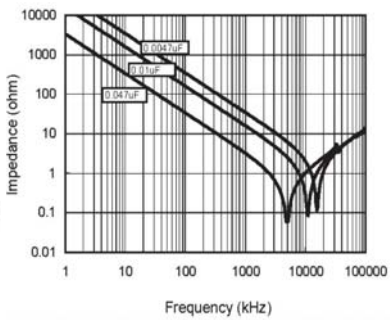




Frequency Characteristics

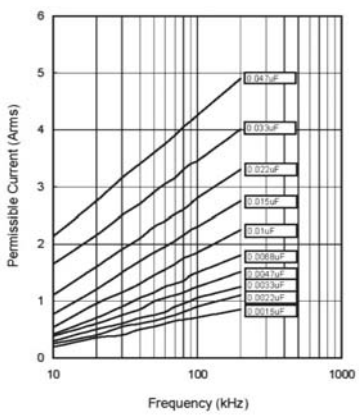






■ Applicable Specifications

Permissible Current



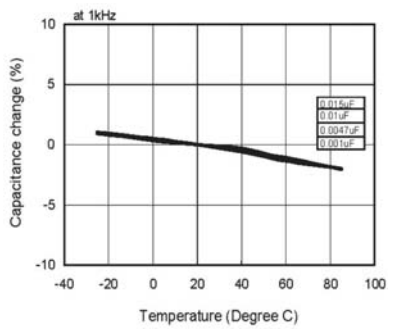
Pulse Handling Capability(dv/dt)
(Max 1000cycles)

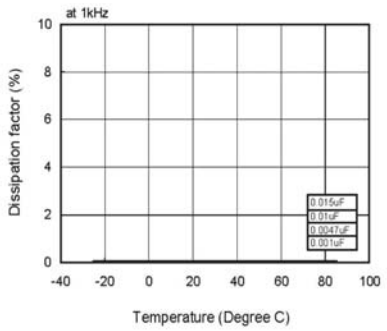
Rating Voltage	Capacitance Value(uF)	Code	dV/dt(V/us)	Current(o-p) (A)
1600VDC	0.0015	152	6000	9.0
	0.0022	222		13.2
	0.0033	332		19.8
	0.0047	472		28.2
	0.0068	682		40.8
	0.0100	103		60.0
	0.0150	153		90.0
	0.0220	223		132.0
	0.0330	333		198.0
	0.0470	473		282.0

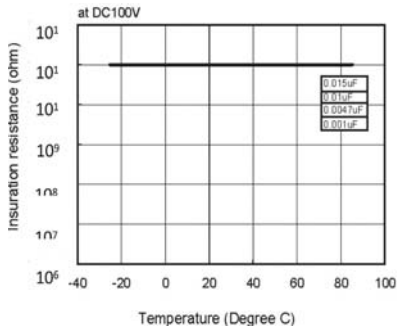
■ Electrical Characteristics (Typical Data)

2000Vdc Series

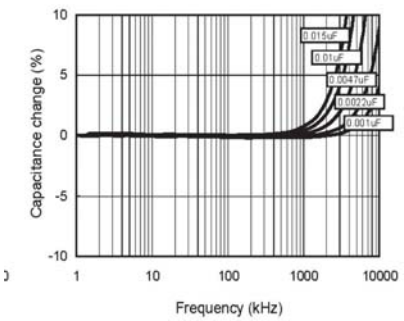
Temperature Characteristics

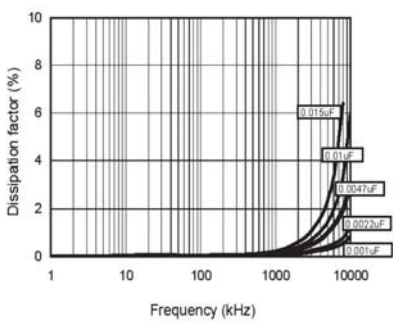


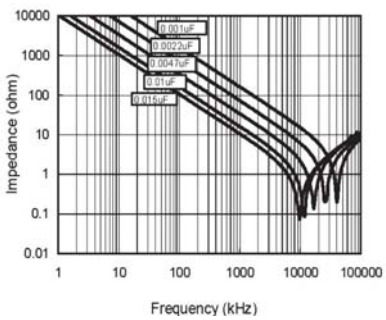




Frequency Characteristics

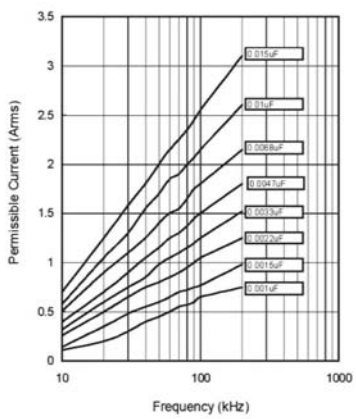






■ Applicable Specifications

Permissible Current



Pulse Handling Capability(dv/dt)
(Max 1000cycles)

Rating Voltage	Capacitance Value(uF)	Code	dV/dt(V/us)	Current(o-p) (A)
2000VDC	0.0010	102	6000	6.0
	0.0015	152		9.0
	0.0022	222		13.2
	0.0033	332		19.8
	0.0047	472		28.2
	0.0068	682		40.8
	0.0100	103		60.0
	0.0150	153		90.0

MPP-R

Non-inductive construction using metallized Polypropylene film with flame retardant epoxy resin coating

■ Features

- Self-healing property
- Excellent electrical characteristics
- Low loss
- Coated with flame-retardant(UL94 V-0) epoxy resin.
- Moisture resistance 85 °C, 85 % RH
- RoHS directive compliant
- High humidity.

■ Applications

- Lighting
- High frequency and high current circuits (TVs, Monitors, Power Supplies, etc.)

■ Specifications

Reference Standard			IEC 60384-16(For-DC Type)
Climatic Category			40 / 105 / 21
Rated Temperature			105℃ +85℃~+105℃ decreasing factor 1.0% / ℃ for V_R(dc)
Operation Temperature Range			-40℃~+105℃
Rated Voltage	**DC-Type**		400V, 630V
Capacitance Range			0.01μF~2.4μF
Capacitance Tolerance			J : ±5% K : ±10% M : ±20% ※Standard : J : ±5%, Other Tolerance Grade : available on request.
Voltage Proof	**DC-Type**		1.75U_R(dc) / 3sec
	AC-Type		4.3U_R(ac) / 3sec
Dissipation Factor			≤0.1%(at 1kHz 20℃)
Rated Voltage	**DC-Type**	U_R(dc)〈500V	≥30,000MΩ C_R≤0.33μF 100Vdc 60sec 20℃
			≥10,000Ω·F C_R〉0.33μF 100Vdc 60sec 20℃
		U_R(dc)≥500V	≥30,000MΩ C_R≤0.33μF 100Vdc 60sec 20℃
			≥10,000Ω·F C_R〉0.33μF 100Vdc 60sec 20℃
	AC-Type		≥30,000MΩ C_R≤0.33μF 100Vdc 60sec 20℃
			≥10,000Ω·F C_R〉0.33μF 100Vdc 60sec 20℃

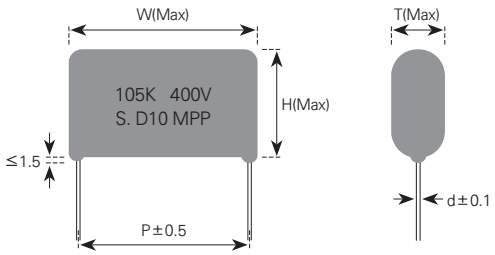
■ Part Number System

MPP	400V	223	J	10	S	5	R
Part-1	Part-2	Part-3	Part-4	Part-5	Part-6	Part-7	Part-8

Part-1 : Series Code(Series Name)-MPP
Part-2 : Rated Voltage(DC : 400V~630V)
Part-3 : Rated Capacitance Value(0.01μF~2.4μF / 103~245)
Part-4 : Capacitance Tolerance(G : ±2% H : ±3% J : ±5% K : ±10% M : ±20%)
Part-5 : Lead Spacing(7.5mm / 10mm / 15mm / 22.5mm / 27.5mm)
Part-6 : Forming-Type and Packing Code(Refer to 1.8.1.)
Part-7 : Size Number(1~4 : Min-Type / 5 : Standard-Type / 6~9 : Large-Type)
Part-8 : Internal Use

CODE	STYLE
B	Bending Forming
C	Straight Cutting
D	D-Type Forming
L	B-Type long Forming
M	C-Type long Forming
S	Straight
X	B-Type Forming
Y	C-Type Forming
Z	Z-Type Forming
T	A-Type Tapping
U	B-Type Tapping
V	C-Type Tapping

■ Dimensions



400Vdc					
Cap. (μF)	Dimensions(mm) W (max.)	H (max.)	T (max.)	Pitch - d	PART NUMBER
0.022	12.5	8.6	5.8	10-0.6	MPP 400V 223J 10S 5R
0.024	12.5	8.8	6	10-0.6	MPP 400V 243J 10S 5R
0.027	12.5	9	6.2	10-0.6	MPP 400V 273J 10S 5R
0.03	12.5	9.3	6.4	10-0.6	MPP 400V 303J 10S 5R
0.033	12.5	9.5	6.7	10-0.6	MPP 400V 333J 10S 5R
0.036	12.5	8.4	5.7	10-0.6	MPP 400V 363J 10S 5R
0.039	12.5	8.6	5.8	10-0.6	MPP 400V 393J 10S 5R
0.043	12.5	8.8	6	10-0.6	MPP 400V 433J 10S 5R
0.047	12.5	9	6.2	10-0.6	MPP 400V 473J 10S 5R
0.051	12.5	9.2	6.4	10-0.6	MPP 400V 513J 10S 5R
0.056	12.5	9.4	6.6	10-0.6	MPP 400V 563J 10S 5R
0.062	13	9.6	6.8	10-0.8	MPP 400V 623J 10S 5R
0.068	13	9.9	7	10-0.8	MPP 400V 683J 10S 5R
0.075	13	10.1	7.3	10-0.8	MPP 400V 753J 15S 5R
0.082	13	10.4	7.5	10-0.8	MPP 400V 823J 15S 5R
0.091	13	10.7	7.8	10-0.8	MPP 400V 913J 15S 5R
0.1	15.5	11	6.5	12.5-0.8	MPP 400V 104J 12.5S 5R
0.11	15.5	11.3	6.8	12.5-0.8	MPP 400V 114J 12.5S 5R
0.12	15.5	11.5	7	12.5-0.8	MPP 400V 124J 12.5S 5R
0.13	15.5	11.8	7.2	12.5-0.8	MPP 400V 134J 12.5S 5R
0.15	15.5	12.2	7.6	12.5-0.8	MPP 400V 154J 12.5S 5R
0.16	15.5	12.4	7.8	12.5-0.8	MPP 400V 164J 12.5S 5R
0.18	15.5	12.8	8.2	12.5-0.8	MPP 400V 184J 12.5S 5R
0.2	15.5	13.3	8.6	12.5-0.8	MPP 400V 204J 12.5S 5R
0.22	15.5	13.6	9	12.5-0.8	MPP 400V 224J 12.5S 5R
0.24	18	13	8.3	15-0.8	MPP 400V 244J 15S 5R
0.27	18	13.4	8.8	15-0.8	MPP 400V 274J 15S 5R
0.3	18	13.9	9.2	15-0.8	MPP 400V 304J 15S 5R
0.33	18	14.3	9.6	15-0.8	MPP 400V 334J 15S 5R
0.36	18	14.7	9.9	15-0.8	MPP 400V 364J 15S 5R
0.39	18	15.1	10.3	15-0.8	MPP 400V 394J 15S 5R
0.43	18	15.6	10.7	15-0.8	MPP 400V 434J 15S 5R
0.47	18	16.1	11.2	15-0.8	MPP 400V 474J 15S 5R
0.51	20.5	16.8	10.3	17.5-0.8	MPP 400V 514J 17.5S 5R
0.56	20.5	17.3	10.7	17.5-0.8	MPP 400V 564J 17.5S 5R
0.62	20.5	17.9	11.3	17.5-0.8	MPP 400V 624J 17.5S 5R
0.68	20.5	18.5	11.8	17.5-0.8	MPP 400V 684J 17.5S 5R
0.75	20.5	19.1	12.3	17.5-0.8	MPP 400V 754J 15S 5R
0.82	23	18.5	11.8	20-0.8	MPP 400V 824J 20S 5R
0.91	23	19.2	12.4	20-0.8	MPP 400V 914J 20S 5R
1.0	23	19.8	13	20-0.8	MPP 400V 105J 20S 5R
1.1	23	20.5	13.6	20-0.8	MPP 400V 115J 20S 5R
1.2	28	19.1	12.3	25-0.8	MPP 400V 125J 25S 5R
1.3	28	19.6	12.8	25-0.8	MPP 400V 135J 25S 5R
1.5	28	20.7	13.7	25-0.8	MPP 400V 155J 25S 5R
1.6	28	21.2	14.2	25-0.8	MPP 400V 165J 25S 5R
1.8	28	22.2	15.2	25-0.8	MPP 400V 185J 25S 5R
2.0	28	23.1	16	25-0.8	MPP 400V 205J 25S 5R
2.2	28	24	16.8	25-0.8	MPP 400V 225J 25S 5R
2.4	28	24.8	17.5	25-0.8	MPP 400V 245J 25S 5R

630Vdc					
Cap. (μF)	Dimensions(mm) W (max.)	H (max.)	T (max.)	Pitch - d	PART NUMBER
0.01	12.5	8	5.2	10-0.6	MPP 630V 103J 10S 5R
0.011	12.5	8.2	5.4	10-0.6	MPP 630V 113J 10S 5R
0.012	12.5	8.3	5.5	10-0.6	MPP 630V 123J 10S 5R
0.013	12.5	8.5	5.6	10-0.6	MPP 630V 133J 10S 5R
0.015	12.5	8.7	5.9	10-0.6	MPP 630V 153J 10S 5R
0.016	12.5	8.9	6	10-0.6	MPP 630V 163J 10S 5R
0.018	12.5	9.1	6.2	10-0.6	MPP 630V 183J 10S 5R
0.02	12.5	9.3	6.5	10-0.6	MPP 630V 203J 10S 5R
0.022	12.5	9	6.2	10-0.6	MPP 630V 223J 10S 5R
0.024	12.5	9.2	6.4	10-0.6	MPP 630V 243J 10S 5R

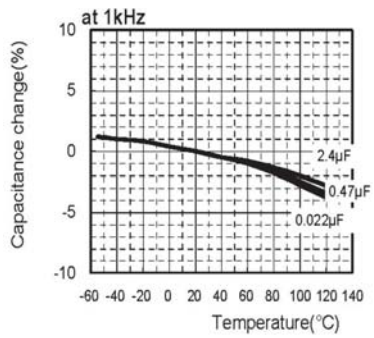
0.027	13	9.5	6.6	10-0.8	MPP 630V 273J 10S 5R
0.03	13	9.7	6.9	10-0.8	MPP 630V 303J 10S 5R
0.033	13	10	7.1	10-0.8	MPP 630V 333J 10S 5R
0.036	13	10.2	7.3	10-0.8	MPP 630V 363J 10S 5R
0.039	13	10.4	7.6	10-0.8	MPP 630V 393J 10S 5R
0.043	13	10.7	7.9	10-0.8	MPP 630V 433J 10S 5R
0.047	15.5	10.8	6.4	12.5-0.8	MPP 630V 473J 12.5S 5R
0.051	15.5	11	6.6	12.5-0.8	MPP 630V 513J 12.5S 5R
0.056	15.5	11.2	6.8	12.5-0.8	MPP 630V 563J 12.5S 5R
0.062	15.5	11.5	7.1	12.5-0.8	MPP 630V 623J 12.5S 5R
0.068	15.5	11.8	7.4	12.5-0.8	MPP 630V 683J 12.5S 5R
0.075	15.5	12.1	7.7	12.5-0.8	MPP 630V 753J 12.5S 5R
0.082	15.5	12.4	8	12.5-0.8	MPP 630V 823J 12.5S 5R
0.091	15.5	12.7	8.3	12.5-0.8	MPP 630V 913J 12.5S 5R
0.1	18	12.1	7.7	15-0.8	MPP 630V 104J 15S 5R
0.11	18	12.4	8	15-0.8	MPP 630V 114J 15S 5R
0.12	18	12.7	8.3	15-0.8	MPP 630V 124J 15S 5R
0.13	18	13	8.5	15-0.8	MPP 630V 134J 15S 5R
0.15	18	13.5	9.1	15-0.8	MPP 630V 154J 15S 5R
0.16	18	13.8	9.3	15-0.8	MPP 630V 164J 15S 5R
0.18	18	14.2	9.8	15-0.8	MPP 630V 184J 15S 5R

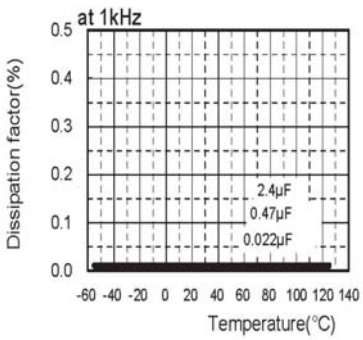
0.2	18	14.7	10.3	15-0.8	MPP 630V 204J 15S 5R
0.22	18	15.5	10.8	15-0.8	MPP 630V 224J 15S 5R
0.24	18	15.9	11.2	15-0.8	MPP 630V 244J 15S 5R
0.27	20.5	16.7	10.4	17.5-0.8	MPP 630V 274J 17.5S 5R
0.3	20.5	17.2	10.9	17.5-0.8	MPP 630V 304J 17.5S 5R
0.33	20.5	17.7	11.4	17.5-0.8	MPP 630V 334J 17.5S 5R
0.36	20.5	18.5	11.9	17.5-0.8	MPP 630V 364J 17.5S 5R
0.39	20.5	19	12.4	17.5-0.8	MPP 630V 394J 17.5S 5R
0.43	20.5	19.5	13	17.5-0.8	MPP 630V 434J 17.5S 5R
0.47	20.5	20.1	13.5	17.5-0.8	MPP 630V 474J 17.5S 5R
0.51	28	17.3	11.1	25-0.8	MPP 630V 514J 25S 5R
0.56	28	17.8	11.6	25-0.8	MPP 630V 564J 25S 5R
0.62	28	18.7	12.1	25-0.8	MPP 630V 624J 25S 5R
0.68	28	19.3	12.7	25-0.8	MPP 630V 684J 25S 5R
0.75	28	19.9	13.3	25-0.8	MPP 630V 754J 15S 5R
0.82	28	20.5	13.9	25-0.8	MPP 630V 824J 25S 5R
0.91	28	21.2	14.6	25-0.8	MPP 630V 914J 25S 5R
1.0	28	22.3	15.5	25-0.8	MPP 630V 105J 25S 5R
1.1	28	23	16.3	25-0.8	MPP 630V 115J 25S 5R
1.2	28	23.7	17	25-0.8	MPP 630V 125J 25S 5R
1.3	28	24.4	17.6	25-0.8	MPP 630V 135J 25S 5R

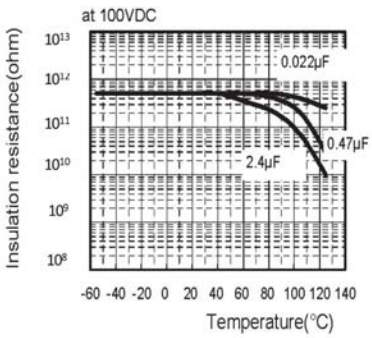
■ Electrical Characteristics (Typical Data)

400Vdc Series

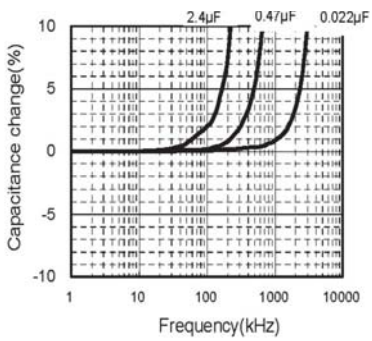
Temperature Characteristics

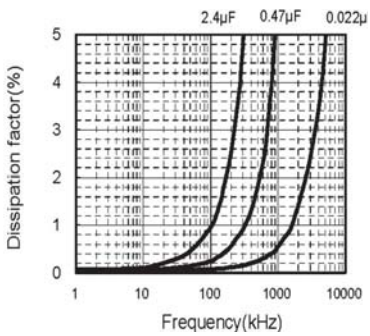


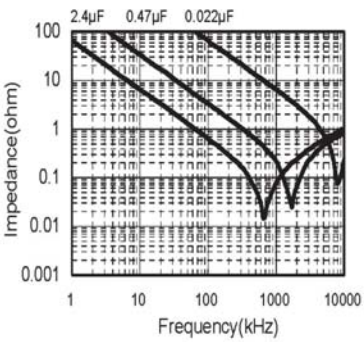




Frequency Characteristics

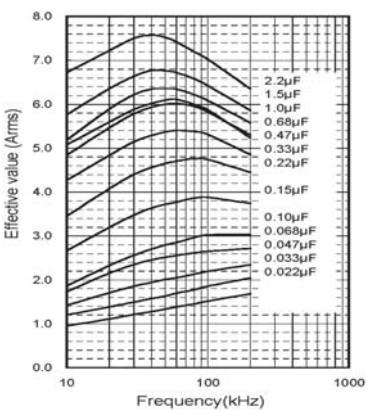






■ Applicable Specifications

Permissible Current



Pulse Handling Capability(dv/dt)

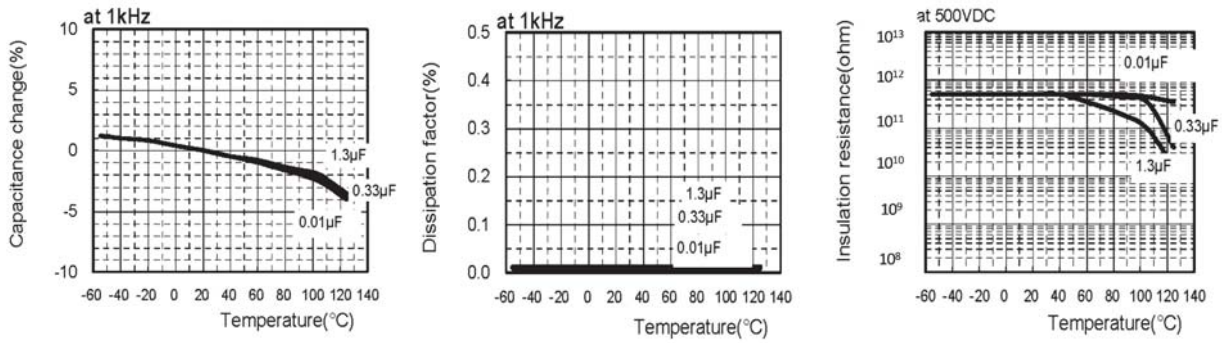
(Max 1000cycles)

Capacitance Value(uF)	code	dV/dt (V/us)	Current(0-P) (A)	Capacitance Value(uF)	code	dV/dt (V/us)	Current(0-P) (A)
0.022	223	412	9.1	0.27	274	154	41.6
0.027	273	412	11.1	0.33	334	154	50.8
0.033	333	412	13.6	0.39	394	154	60.1
0.039	393	283	11.0	0.47	474	154	72.4
0.047	473	283	13.3	0.56	564	136	76.2
0.056	563	283	15.8	0.68	684	136	92.5
0.068	683	283	19.2	0.82	824	113	92.7
0.082	823	283	23.2	1.00	105	113	113.0
0.10	104	200	20.0	1.20	125	85	102.0
0.12	124	200	24.0	1.50	155	85	127.5
0.15	154	200	30.0	1.80	185	85	153.0
0.18	184	200	36.0	2.20	225	85	187.0
0.22	224	200	44.0	2.40	245	85	204.0

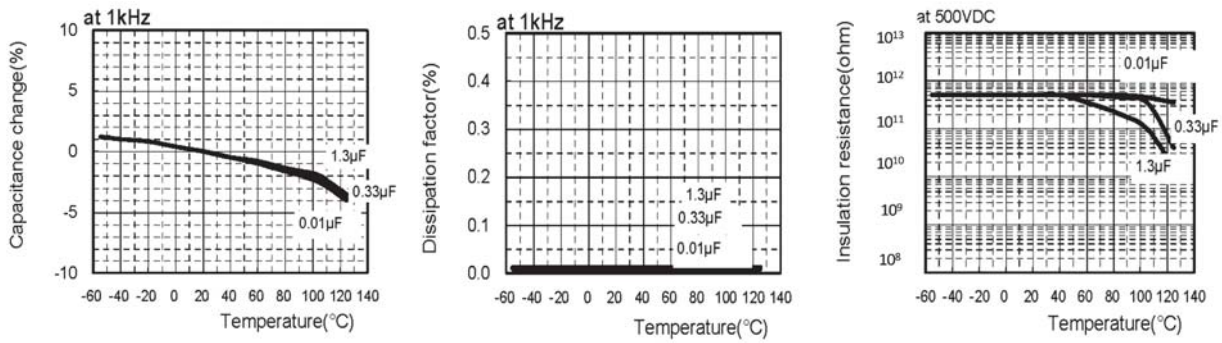
■ Electrical Characteristics (Typical Data)

630Vdc Series

Temperature Characteristics

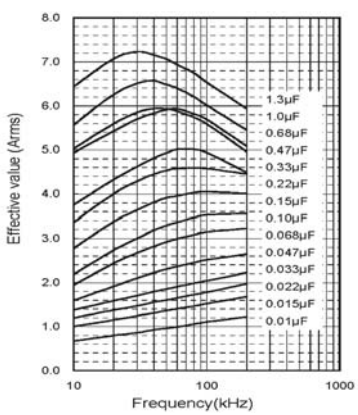


Frequency Characteristics



■ Applicable Specifications

Permissible Current



Pulse Handling Capability(dv/dt)

(Max 1000cycles)

Capacitance Value(uF)	code	dV/dt (V/us)	Current(0-P) (A)	Capacitance Value(uF)	code	dV/dt (V/us)	Current(0-P) (A)
0.01	103	561	5.6	0.12	124	249	29.9
0.012	123	561	6.7	0.15	154	249	37.4
0.015	153	561	8.4	0.18	184	249	44.8
0.018	183	561	10.1	0.22	224	249	54.8
0.022	223	451	9.9	0.27	274	216	58.3
0.027	273	451	12.2	0.33	334	216	71.3
0.033	333	451	14.9	0.39	394	216	84.2
0.039	393	451	17.6	0.47	474	216	101.5
0.047	473	332	15.6	0.56	564	131	73.4
0.056	563	332	18.6	0.68	684	131	89.1
0.068	683	332	22.6	0.82	824	131	107.4
0.082	823	332	27.2	1.00	105	131	131.0
0.10	104	249	24.9	1.20	125	131	157.2

MPP-V

Non-inductive construction using metallized Polypropylene film with flame retardant epoxy resin coating

■ Features

- Smaller version of MPP series.
- For applications where high frequency, high current are required.
- Small and low E.S.R,
- Coated with flame-retardant(UL94 V-0) epoxy resin.
- RoHS directive compliant

■ Applications

- Typical for S-correction in TV-set.
- Electronic ballast circuits.
- Switching power supply circuits.

■ Specifications

Reference Standard		IEC 60384-16(For-DC Type) IEC 60384-17(For-AC Type)	
Climatic Category		40 / 105 / 21	
Rated Temperature		105℃ +85℃~+105℃ decreasing factor 1.0% / ℃ for V_R(dc)	
Operation Temperature Range		-40℃~+105℃	
Rated Voltage	**DC-Type**	250V, 450V, 630V	
Capacitance Range		0.047μF~10μF	
Capacitance Tolerance		J : ±5% K : ±10% M : ±20% ※Standard : J : ±5%, Other Tolerance Grade : available on request.	
Voltage Proof	**DC-Type**	1.75U_R(dc) / 3sec	
	AC-Type	4.3U_R(ac) / 3sec	
Dissipation Factor		≤0.1%(at 1kHz 20℃)	
Rated Voltage	**DC-Type**	U_R(dc)〈500V	≥30,000MΩ C_R≤0.33μF 100Vdc 60sec 20℃
			≥10,000Ω·F C_R〉0.33μF 100Vdc 60sec 20℃
		U_R(dc)≥500V	≥30,000MΩ C_R≤0.33μF 100Vdc 60sec 20℃
			≥10,000Ω·F C_R〉0.33μF 100Vdc 60sec 20℃
	AC-Type		≥30,000MΩ C_R≤0.33μF 100Vdc 60sec 20℃
			≥10,000Ω·F C_R〉0.33μF 100Vdc 60sec 20℃

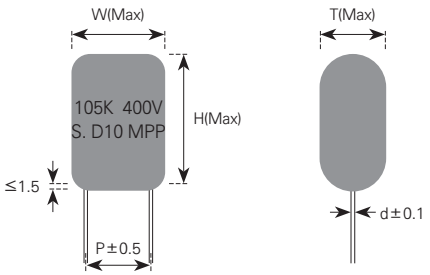
■ Part Number System

MPP	250V	104	J	7.5	S	5	V
Part-1	Part-2	Part-3	Part-4	Part-5	Part-6	Part-7	Part-8

Part-1 : Series Code(Series Name)-MPP
Part-2 : Rated Voltage(DC : 250V~630V)
Part-3 : Rated Capacitance Value(0.047μF~10μF / 473~106)
Part-4 : Capacitance Tolerance(G : ±2% H : ±3% J : ±5% K : ±10% M : ±20%)
Part-5 : Lead Spacing(7.5mm / 10mm / 15mm / 22.5mm / 27.5mm)
Part-6 : Forming-Type and Packing Code(Refer to 1.8.1.)
Part-7 : Size Number(1~4 : Min-Type / 5 : Standard-Type / 6~9 : Large-Type)
Part-8 : Internal Use

CODE	STYLE
B	Bending Forming
C	Straight Cutting
D	D-Type Forming
L	B-Type long Forming
M	C-Type long Forming
S	Straight
X	B-Type Forming
Y	C-Type Forming
Z	Z-Type Forming
T	A-Type Tapping
U	B-Type Tapping
V	C-Type Tapping

■ Dimensions



250Vdc

Cap. (μF)	Dimensions(mm) W (max.)	H (max.)	T (max.)	Pitch - d	PART NUMBER
0.1	10.5	13.5	7.0	7.5-0.6	MPP 250V 104J 7.5S 5V
0.12	10.5	14.0	8.0	7.5-0.6	MPP 250V 124J 7.5S 5V
0.15	10.5	15.0	8.5	7.5-0.6	MPP 250V 154J 7.5S 5V
0.18	10.5	15.5	9.0	7.5-0.6	MPP 250V 184J 7.5S 5V
0.22	10.5	14.5	8.5	7.5-0.6	MPP 250V 224J 7.5S 5V
0.27	10.5	16.5	8.5	7.5-0.6	MPP 250V 274J 15S 5V
0.33	10.5	17.0	9.0	7.5-0.6	MPP 250V 334J 15S 5V
0.39	13.0	16.0	8.0	10-0.6	MPP 250V 394J 10S 5V
0.47	13.0	17.0	9.0	10-0.8	MPP 250V 474J 10S 5V
0.56	13.0	18.0	10.0	10-0.8	MPP 250V 564J 10S 5V
0.68	13.0	19.0	11.0	10-0.8	MPP 250V 684J 10S 5V
0.82	13.0	20.0	12.0	10-0.8	MPP 250V 824J 10S 5V
1.0	13.0	21.0	13.0	10-0.8	MPP 250V 105J 10S 5V
1.2	13.0	22.0	14.5	10-0.8	MPP 250V 125J 10S 5V
1.5	13.0	24.0	15.0	10-0.8	MPP 250V 155J 10S 5V
1.8	18.5	20.5	13.0	15-0.8	MPP 250V 185J 15S 5V
2.2	18.5	21.5	14.0	15-0.8	MPP 250V 225J 15S 5V
2.7	18.5	23.5	16.0	15-1	MPP 250V 275J 15S 5V
3.3	18.5	26.5	17.0	15-1	MPP 250V 335J 15S 5V
3.9	18.5	28.0	18.5	15-1	MPP 250V 395J 15S 5V
4.7	18.5	29.5	20.5	15-1	MPP 250V 475J 15S 5V
5.6	23.5	28.0	18.5	20-1	MPP 250V 565J 20S 5V
6.8	23.5	30.0	19.5	20-1	MPP 250V 685J 20S 5V
8.2	23.5	32.5	22.0	20-1	MPP 250V 825J 20S 5V
10.0	23.5	33.5	24.5	20-1	MPP 250V 106J 20S 5V

450Vdc

Cap. (μF)	Dimensions(mm) W (max.)	H (max.)	T (max.)	Pitch - d	PART NUMBER
0.1	10.5	14.5	8.5	7.5-0.6	MPP 450V 104J 7.5S 5V
0.12	10.5	15.5	9.5	7.5-0.6	MPP 450V 124J 7.5S 5V
0.15	13.0	14.5	8.5	10-0.6	MPP 450V 154J 10S 5V
0.18	13.0	15.0	9.0	10-0.6	MPP 450V 184J 10S 5V
0.22	13.0	16.0	9.5	10-0.6	MPP 450V 224J 10S 5V
0.27	13.0	18.0	10.5	10-0.6	MPP 450V 274J 10S 5V
0.33	13.0	19.0	11.5	10-0.6	MPP 450V 334J 10S 5V
0.39	13.0	19.5	12.5	10-0.6	MPP 450V 394J 10S 5V
0.47	13.0	21.0	13.5	10-0.6	MPP 450V 474J 10S 5V
0.56	18.5	18.5	11.0	15-0.8	MPP 450V 564J 15S 5V
0.68	18.5	19.5	12.5	15-0.8	MPP 450V 684J 15S 5V
0.82	18.5	20.5	13.5	15-0.8	MPP 450V 824J 15S 5V
1.0	18.5	22.0	15.0	15-0.8	MPP 450V 105J 15S 5V
1.2	18.5	24.0	15.5	15-0.8	MPP 450V 125J 15S 5V
1.5	18.5	26.0	17.5	15-0.8	MPP 450V 155J 15S 5V
1.8	18.5	27.5	19.0	15-0.8	MPP 450V 185J 15S 5V
2.2	18.5	30.5	21.0	15-0.8	MPP 450V 225J 15S 5V
2.7	23.5	29.0	19.0	20-0.8	MPP 450V 275J 20S 5V
3.3	23.5	32.0	21.0	20-0.8	MPP 450V 335J 20S 5V
3.9	23.5	34.0	23.0	20-0.8	MPP 450V 395J 20S 5V
4.7	23.5	36.0	25.0	20-0.8	MPP 450V 475J 20S 5V

630Vdc

Cap. (μF)	Dimensions(mm) W (max.)	H (max.)	T (max.)	Pitch - d	PART NUMBER
0.047	13.0	14.0	8.5	10-0.6	MPP 630V 473J 10S 5V
0.056	13.0	15.0	9.0	10-0.6	MPP 630V 563J 10S 5V
0.068	13.0	15.5	10.0	10-0.6	MPP 630V 683J 10S 5V
0.082	13.0	16.5	10.5	10-0.6	MPP 630V 823J 10S 5V
0.1	13.0	17.0	11.0	10-0.6	MPP 630V 104J 10S 5V
0.12	13.0	17.5	12.0	10-0.6	MPP 630V 124J 10S 5V
0.15	13.0	19.0	13.0	10-0.6	MPP 630V 154J 10S 5V
0.18	13.0	20.0	14.5	10-0.6	MPP 630V 184J 10S 5V
0.22	13.0	21.0	15.5	10-0.6	MPP 630V 224J 10S 5V

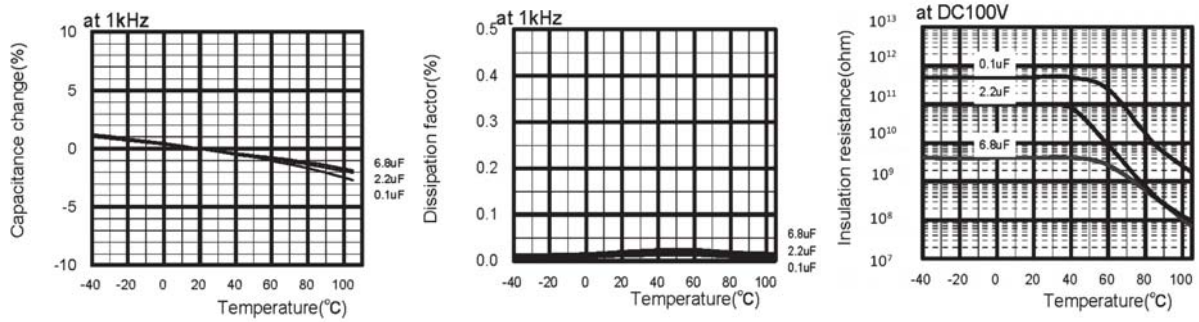
0.27	18.5	19.5	12.0	15-0.8	MPP 630V 274J 15S 5V
0.33	18.5	20.5	13.5	15-0.8	MPP 630V 334J 15S 5V
0.39	18.5	22.0	14.5	15-0.8	MPP 630V 394J 15S 5V
0.47	18.5	23.0	16.0	15-0.8	MPP 630V 474J 15S 5V
0.56	18.5	24.5	17.0	15-0.8	MPP 630V 564J 15S 5V
0.68	18.5	27.0	18.0	15-0.8	MPP 630V 684J 15S 5V

0.82	18.5	29.0	20.0	15-0.8	MPP 630V 824J 15S 5V
1.0	18.5	32.0	21.5	15-0.8	MPP 630V 105J 15S 5V
1.2	23.5	30.0	19.5	20-0.8	MPP 630V 125J 20S 5V
1.5	23.5	33.0	22.0	20-0.8	MPP 630V 155J 20S 5V
1.8	23.5	34.0	24.0	20-0.8	MPP 630V 185J 20S 5V
2.2	23.5	37.0	26.5	20-0.8	MPP 630V 225J 20S 5V

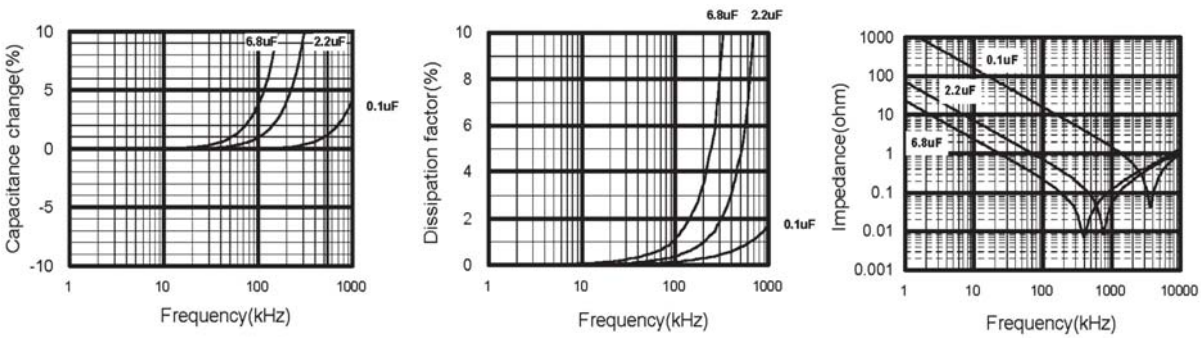
■ Electrical Characteristics (Typical Data)

250Vdc Series

Temperature Characteristics

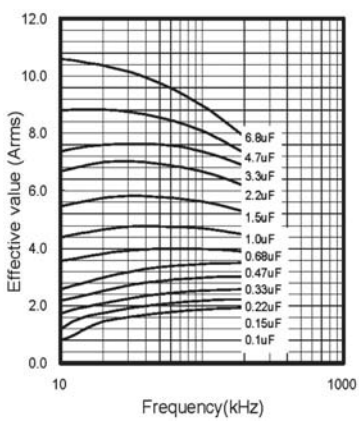


Frequency Characteristics



■ Applicable Specifications

Permissible Current



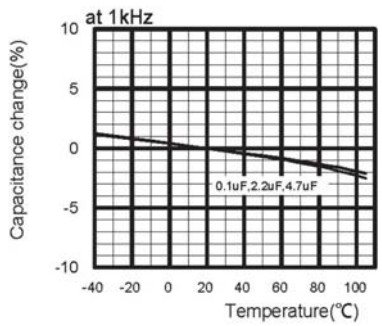
Pulse Handling Capability(dv/dt)
(Max 1000cycles)

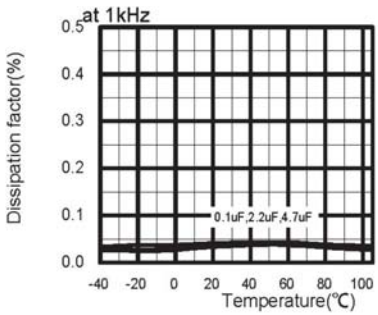
Rating Voltage	Capacitance Value(㎌)	Code	dV/dt(V/㎲)	Current(o-p) (A)
DC 250V	0.10	104	135	13.5
	0.15	154		20.2
	0.22	224		29.7
	0.33	334		44.5
	0.47	474		63.4
	0.68	684	82	55.7
	1.00	105		82.0
	1.50	155		123.0
	2.20	225		180.4
	3.30	335	57	188.1
	6.80	685		387.6

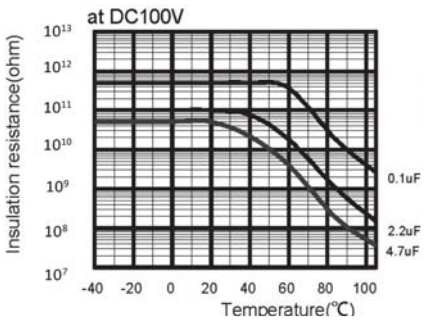
■ Electrical Characteristics (Typical Data)

450Vdc Series

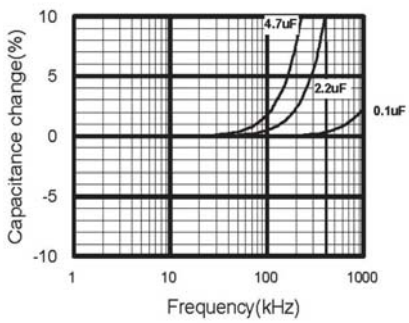
Temperature Characteristics

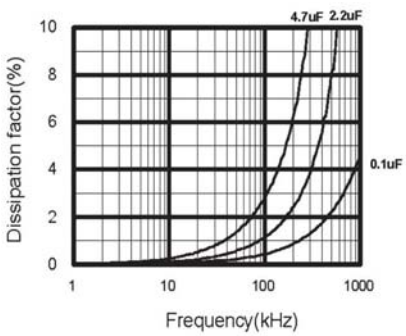


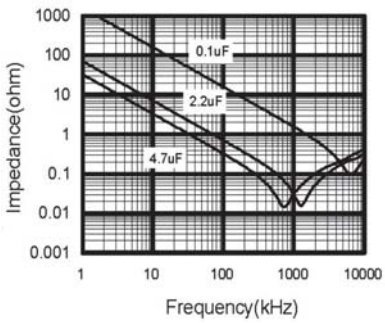




Frequency Characteristics

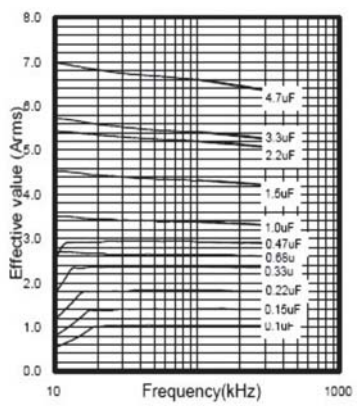






■ Applicable Specifications

Permissible Current



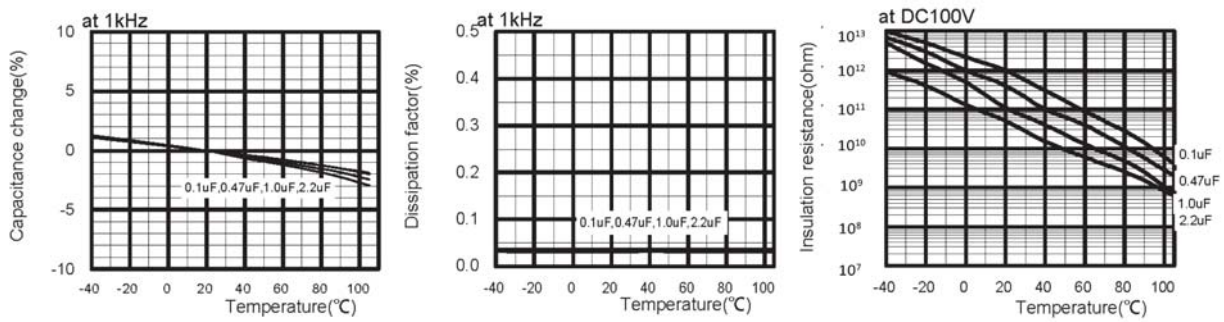
Pulse Handling Capability(dv/dt)
(Max 1000cycles)

Rating Voltage	Capacitance Value(μF)	Code	dV/dt(V/μS)	Current(o-p) (A)
DC 450V	0.10	104	41.6	4.2
	0.15	154		6.2
	0.22	224		9.2
	0.33	334		13.7
	0.47	474		19.6
	0.68	684	24.3	16.5
	1.00	105		24.3
	1.50	155		36.4
	2.20	225		53.4
	3.30	335	14.3	47.2
	4.70	475		67.3

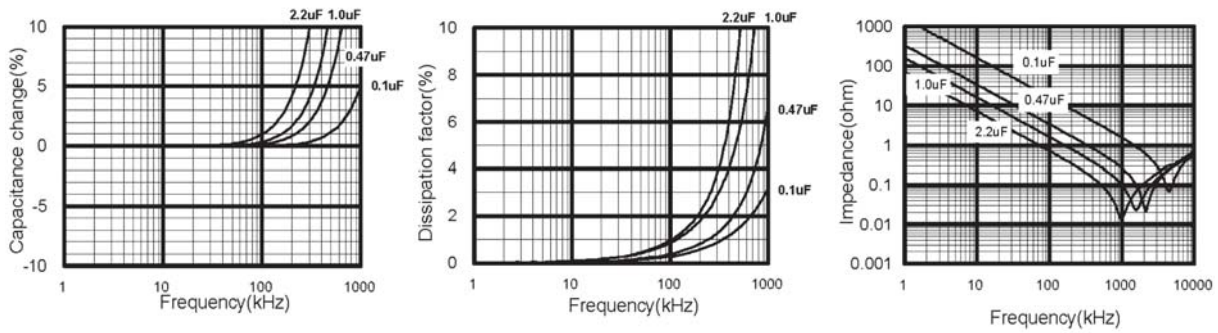
■ Electrical Characteristics (Typical Data)

630Vdc Series

Temperature Characteristics

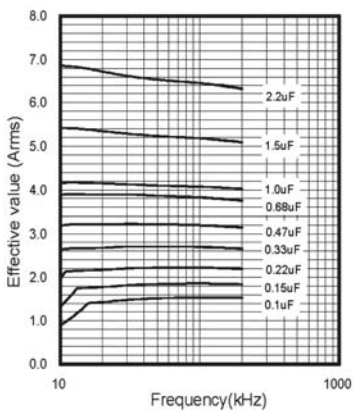


Frequency Characteristics



■ Applicable Specifications

Permissible Current



Pulse Handling Capability(dv/dt)

(Max 1000cycles)

Rating Voltage	Capacitance Value(㎌)	Code	dV/dt(V/㎲)	Current(o-p) (A)
DC 630V	0.10	104	155	15.5
	0.12	124		18.6
	0.15	154		23.3
	0.18	184		27.9
	0.22	224		34.1
	0.27	274		41.9
	0.33	334		51.2
	0.39	394		60.5
	0.47	474		72.9
	0.56	564		86.8
	0.68	684		105.4
	0.82	824	65	53.3
	1.00	105		65.0
	1.20	125		78.0
	1.50	155		97.5
	1.80	185		117
	2.20	225		143

NPP

Non-inductive construction using Polypropylene film & Foil with flame retardant epoxy resin coating

■ Features

- Pulse duty construction
- Very low dissipation factor
- Negative capacitance change versus temperature
- Very low dielectric absorption
- Coated with flame-retardant(UL94 V-0) epoxy resin.
- RoHS directive compliant

■ Applications

- For high frequency applications e.g.
- Sample and hold
- Timing
- LC-Filtering
- Oscillating circuits
- Audio equipment

■ Specifications

Reference Standard	IEC 60384-13	
Climatic Category	40 / 105 / 21	
Rated Temperature	105℃ +85℃~+105℃ decreasing factor 1.0% / ℃ for V_R(dc)	
Operation Temperature Range	-40℃~+105℃	
Rated Voltage	100Vdc / 160Vdc, 250Vdc, 400Vdc, 630Vdc, 800Vdc	
Capacitance Range	0.00082μF~2.70μF	
Capacitance Tolerance	G : ±2% H : ±3% J : ±5% K : ±10% M : ±20% ※Standard : J : ±5%, Other Tolerance Grade : available on request.	
Voltage Proof	2.5U_R(dc) / 3sec	
Dissipation Factor	≤0.1%(at 1kHz 20℃)	
Rated Voltage	U_R(dc)〈500V	≥30,000MΩ C_R≤0.33μF 100Vdc 60sec 20℃
		≥10,000Ω·F C_R〉0.33μF 100Vdc 60sec 20℃
	U_R(dc)≥500V	≥30,000MΩ C_R≤0.33μF 100Vdc 60sec 20℃
		≥10,000Ω·F C_R〉0.33μF 100Vdc 60sec 20℃

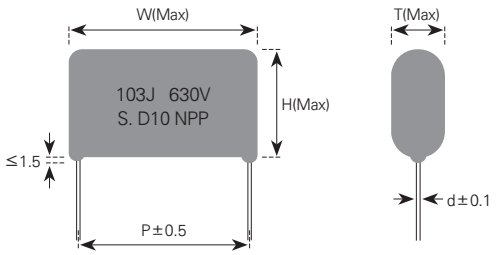
■ Part Number System

NPP	160V	183	J	10	S	5	
Part-1	Part-2	Part-3	Part-4	Part-5	Part-6	Part-7	Part-8

Part-1 : Series Code(Series Name)-NPP
Part-2 : Rated Voltage(DC : 100V~800V)
Part-3 : Rated Capacitance Value(0.00082μF~2.70μF / 821~275)
Part-4 : Capacitance Tolerance(G : ±2% H : ±3% J : ±5% K : ±10% M : ±20%)
Part-5 : Lead Spacing(10mm / 15mm / 22.5mm / 27.5mm)
Part-6 : Forming-Type and Packing Code →
Part-7 : Size Number(1~4 : Min-Type / 5 : Standard-Type / 6~9 : Large-Type)
Part-8 : Internal Use

CODE	STYLE
B	Bending Forming
C	Straight Cutting
D	D-Type Forming
L	B-Type long Forming
M	C-Type long Forming
S	Straight
X	B-Type Forming
Y	C-Type Forming
Z	Z-Type Forming
T	A-Type Tapping
U	B-Type Tapping
V	C-Type Tapping

■ Dimensions



100Vdc/160Vdc(63Vac / 100Vac)

Cap. (μF)	Dimensions(mm) W (max.)	H (max.)	T (max.)	Pitch - d	PART NUMBER
0.018	13.0	10.0	5.5	10.0-0.6	NPP 160V 183J 10S 5 ____
0.022	13.0	9.5	5.5	10.0-0.6	NPP 160V 223J 10S 5 ____
0.027	13.0	10.0	5.5	10.0-0.6	NPP 160V 273J 10S 5 ____
0.033	13.0	10.0	5.5	10.0-0.6	NPP 160V 333J 10S 5 ____
0.039	13.0	11.0	5.5	10.0-0.6	NPP 160V 393J 10S 5 ____
0.047	13.0	11.5	6.0	10.0-0.6	NPP 160V 473J 10S 5 ____
0.056	13.0	11.5	6.5	10.0-0.6	NPP 160V 563J 10S 5 ____
0.068	13.0	12.5	7.0	10.0-0.6	NPP 160V 683J 10S 5 ____
0.082	13.0	13.0	7.5	10.0-0.6	NPP 160V 823J 10S 5 ____
0.1	13.0	13.5	8.5	10.0-0.6	NPP 160V 104J 10S 5 ____
0.12	13.0	14.5	9.0	10.0-0.6	NPP 160V 124J 10S 5 ____
0.15	13.0	15.5	10.0	10.0-0.6	NPP 160V 154J 10S 5 ____
0.18	13.0	16.0	11.0	10.0-0.6	NPP 160V 184J 10S 5 ____
0.22	13.0	17.5	12.0	10.0-0.6	NPP 160V 224J 10S 5 ____
0.033	19.0	10.5	6.5	15.0-0.8	NPP 160V 333J 15S 5 ____
0.039	19.0	10.5	6.0	15.0-0.8	NPP 160V 393J 15S 5 ____
0.047	19.0	11.0	6.5	15.0-0.8	NPP 160V 473J 15S 5 ____
0.056	19.0	10.5	6.0	15.0-0.8	NPP 160V 563J 15S 5 ____
0.068	19.0	11.0	6.5	15.0-0.8	NPP 160V 683J 15S 5 ____
0.082	19.0	12.0	7.0	15.0-0.8	NPP 160V 823J 15S 5 ____
0.1	19.0	13.0	7.5	15.0-0.8	NPP 160V 104J 15S 5 ____
0.12	19.0	13.5	8.0	15.0-0.8	NPP 160V 124J 15S 5 ____
0.15	19.0	14.5	9.0	15.0-0.8	NPP 160V 154J 15S 5 ____
0.18	19.0	15.0	10.0	15.0-0.8	NPP 160V 184J 15S 5 ____
0.22	19.0	17.0	10.0	15.0-0.8	NPP 160V 224J 15S 5 ____
0.27	19.0	18.0	11.5	15.0-0.8	NPP 160V 274J 15S 5 ____
0.33	19.0	19.5	12.5	15.0-0.8	NPP 160V 334J 15S 5 ____
0.39	19.0	21.0	13.0	15.0-0.8	NPP 160V 394J 15S 5 ____
0.47	19.0	22.5	14.0	15.0-0.8	NPP 160V 474J 15S 5 ____
0.1	28.0	12.5	7.5	22.5-0.8	NPP 160V 104J 22.5S 5 ____
0.12	28.0	12.5	7.0	22.5-0.8	NPP 160V 124J 22.5S 5 ____
0.15	28.0	12.0	7.0	22.5-0.8	NPP 160V 154J 22.5S 5 ____
0.18	28.0	12.5	7.5	22.5-0.8	NPP 160V 184J 22.5S 5 ____
0.22	28.0	13.5	8.0	22.5-0.8	NPP 160V 224J 22.5S 5 ____
0.27	28.0	14.0	9.0	22.5-0.8	NPP 160V 274J 22.5S 5 ____
0.33	28.0	15.0	9.5	22.5-0.8	NPP 160V 334J 22.5S 5 ____
0.39	28.0	15.5	10.5	22.5-0.8	NPP 160V 394J 22.5S 5 ____
0.47	28.0	17.5	10.5	22.5-0.8	NPP 160V 474J 22.5S 5 ____
0.56	28.0	18.5	11.5	22.5-0.8	NPP 160V 564J 22.5S 5 ____
0.68	28.0	19.5	12.5	22.5-0.8	NPP 160V 684J 22.5S 5 ____
0.82	28.0	21.5	13.5	22.5-0.8	NPP 160V 824J 22.5S 5 ____
1.0	28.0	24.0	14.0	22.5-0.8	NPP 160V 105J 22.5S 5 ____
1.2	28.0	25.5	15.5	22.5-0.8	NPP 160V 125J 22.5S 5 ____
1.5	28.0	27.0	17.5	22.5-0.8	NPP 160V 155J 22.5S 5 ____
0.15	31.0	13.5	8.0	27.5-0.8	NPP 160V 154J 27.5S 5 ____
0.18	31.0	13.0	8.0	27.5-0.8	NPP 160V 184J 27.5S 5 ____
0.22	31.0	13.5	8.5	27.5-0.8	NPP 160V 224J 27.5S 5 ____
0.27	31.0	13.5	8.0	27.5-0.8	NPP 160V 274J 27.5S 5 ____
0.33	31.0	14.0	9.0	27.5-0.8	NPP 160V 334J 27.5S 5 ____
0.47	31.0	19.5	12.5	27.5-0.8	NPP 160V 394J 27.5S 5 ____
0.56	31.0	21.5	13.0	27.5-0.8	NPP 160V 474J 27.5S 5 ____
0.68	31.0	22.5	14.5	27.5-0.8	NPP 160V 564J 27.5S 5 ____
0.82	31.0	25.0	15.0	27.5-0.8	NPP 160V 684J 27.5S 5 ____
1.0	31.0	26.5	16.5	27.5-0.8	NPP 160V 824J 27.5S 5 ____
1.2	31.0	28.0	18.5	27.5-0.8	NPP 160V 105J 27.5S 5 ____
1.5	31.0	30.5	20.5	27.5-0.8	NPP 160V 125J 27.5S 5 ____
1.8	31.0	30.0	20.0	27.5-0.8	NPP 160V 155J 27.5S 5 ____
2.2	31.0	29.0	19.5	27.5-0.8	NPP 160V 185J 27.5S 5 ____
2.7	31.0	31.5	21.5	27.5-0.8	NPP 160V 225J 27.5S 5 ____

250Vdc(160Vac)

Cap. (μF)	Dimensions(mm) W (max.)	H (max.)	T (max.)	Pitch - d	PART NUMBER
0.018	13.0	10.0	5.5	10.0-0.6	NPP 250V 183J 10S 5 ____

0.022	13.0	9.5	5.5	10.0-0.6	NPP 250V 223J 10S 5 ____
0.027	13.0	10.0	5.5	10.0-0.6	NPP 250V 273J 10S 5 ____
0.033	13.0	10.0	5.5	10.0-0.6	NPP 250V 333J 10S 5 ____
0.039	13.0	11.0	5.5	10.0-0.6	NPP 250V 393J 10S 5 ____
0.047	13.0	11.5	6.0	10.0-0.6	NPP 250V 473J 10S 5 ____
0.056	13.0	11.5	6.5	10.0-0.6	NPP 250V 563J 10S 5 ____
0.068	13.0	12.5	7.0	10.0-0.6	NPP 250V 683J 10S 5 ____
0.082	13.0	13.0	7.5	10.0-0.6	NPP 250V 823J 10S 5 ____
0.1	13.0	13.5	8.5	10.0-0.6	NPP 250V 104J 10S 5 ____
0.12	13.0	14.5	9.0	10.0-0.6	NPP 250V 124J 10S 5 ____
0.15	13.0	15.5	10.0	10.0-0.6	NPP 250V 154J 10S 5 ____
0.18	13.0	16.0	11.0	10.0-0.6	NPP 250V 184J 10S 5 ____
0.22	13.0	17.5	12.0	10.0-0.6	NPP 250V 224J 10S 5 ____
0.033	19.0	10.5	6.5	15.0-0.8	NPP 250V 333J 15S 5 ____
0.039	19.0	10.5	6.0	15.0-0.8	NPP 250V 393J 15S 5 ____
0.047	19.0	11.0	6.5	15.0-0.8	NPP 250V 473J 15S 5 ____
0.056	19.0	10.5	6.0	15.0-0.8	NPP 250V 563J 15S 5 ____
0.068	19.0	11.0	6.5	15.0-0.8	NPP 250V 683J 15S 5 ____
0.082	19.0	12.0	7.0	15.0-0.8	NPP 250V 823J 15S 5 ____
0.1	19.0	13.0	7.5	15.0-0.8	NPP 250V 104J 15S 5 ____
0.12	19.0	13.5	8.0	15.0-0.8	NPP 250V 124J 15S 5 ____
0.15	19.0	14.5	9.0	15.0-0.8	NPP 250V 154J 15S 5 ____
0.18	19.0	15.0	10.0	15.0-0.8	NPP 250V 184J 15S 5 ____
0.22	19.0	17.0	10.0	15.0-0.8	NPP 250V 224J 15S 5 ____
0.27	19.0	18.0	11.5	15.0-0.8	NPP 250V 274J 15S 5 ____
0.33	19.0	19.5	12.5	15.0-0.8	NPP 250V 334J 15S 5 ____
0.39	19.0	21.0	13.0	15.0-0.8	NPP 250V 394J 15S 5 ____
0.47	19.0	23.5	13.5	15.0-0.8	NPP 250V 474J 15S 5 ____
0.56	19.0	25.0	15.0	15.0-0.8	NPP 250V 564J 15S 5 ____
0.1	28.0	12.5	7.5	22.5-0.8	NPP 250V 104J 22.5S 5 ____
0.12	28.0	12.5	7.0	22.5-0.8	NPP 250V 124J 22.5S 5 ____
0.15	28.0	12.0	7.0	22.5-0.8	NPP 250V 154J 22.5S 5 ____
0.18	28.0	12.5	7.5	22.5-0.8	NPP 250V 184J 22.5S 5 ____
0.22	28.0	13.5	8.0	22.5-0.8	NPP 250V 224J 22.5S 5 ____
0.27	28.0	14.0	9.0	22.5-0.8	NPP 250V 274J 22.5S 5 ____
0.33	28.0	15.0	9.5	22.5-0.8	NPP 250V 334J 22.5S 5 ____
0.39	28.0	15.5	10.5	22.5-0.8	NPP 250V 394J 22.5S 5 ____
0.47	28.0	17.5	10.5	22.5-0.8	NPP 250V 474J 22.5S 5 ____
0.56	28.0	18.5	11.5	22.5-0.8	NPP 250V 564J 22.5S 5 ____
0.68	28.0	19.5	12.5	22.5-0.8	NPP 250V 684J 22.5S 5 ____
0.82	28.0	21.5	13.5	22.5-0.8	NPP 250V 824J 22.5S 5 ____
1.0	28.0	23.0	14.5	22.5-0.8	NPP 250V 105J 22.5S 5 ____
1.2	28.0	25.5	15.5	22.5-0.8	NPP 250V 125J 22.5S 5 ____
1.5	28.0	27.0	17.5	22.5-0.8	NPP 250V 155J 22.5S 5 ____
0.15	31.0	13.5	8.0	27.5-0.8	NPP 250V 154J 27.5S 5 ____
0.18	31.0	13.0	8.0	27.5-0.8	NPP 250V 184J 27.5S 5 ____
0.22	31.0	13.5	8.5	27.5-0.8	NPP 250V 224J 27.5S 5 ____
0.27	31.0	13.5	8.0	27.5-0.8	NPP 250V 274J 27.5S 5 ____
0.33	31.0	14.0	9.0	27.5-0.8	NPP 250V 334J 27.5S 5 ____
0.39	31.0	15.0	9.5	27.5-0.8	NPP 250V 394J 27.5S 5 ____
0.47	31.0	15.5	10.5	27.5-0.8	NPP 250V 474J 27.5S 5 ____
0.56	31.0	16.5	11.5	27.5-0.8	NPP 250V 564J 27.5S 5 ____
0.68	31.0	18.5	11.5	27.5-0.8	NPP 250V 684J 27.5S 5 ____
0.82	31.0	19.5	13.0	27.5-0.8	NPP 250V 824J 27.5S 5 ____
1.0	31.0	21.0	14.0	27.5-0.8	NPP 250V 105J 27.5S 5 ____
1.2	31.0	23.0	14.5	27.5-0.8	NPP 250V 125J 27.5S 5 ____
1.5	31.0	25.5	15.5	27.5-0.8	NPP 250V 155J 27.5S 5 ____
1.8	31.0	27.0	17.5	27.5-0.8	NPP 250V 185J 27.5S 5 ____
2.2	31.0	29.0	19.5	27.5-0.8	NPP 250V 225J 27.5S 5 ____
2.7	31.0	31.5	21.5	27.5-0.8	NPP 250V 275J 27.5S 5 ____

400Vdc(200Vac)

Cap. (μF)	Dimensions(mm)			Pitch - d	PART NUMBER
	W (max.)	H (max.)	T (max.)		
0.0047	13.0	9.5	5.0	10.0-0.6	NPP 400V 472J 10S 5 ____
0.0068	13.0	9.5	5.0	10.0-0.6	NPP 400V 682J 10S 5 ____
0.0082	13.0	9.5	5.0	10.0-0.6	NPP 400V 822J 10S 5 ____
0.01	13.0	10.0	5.5	10.0-0.6	NPP 400V 103J 10S 5 ____
0.012	13.0	10.0	5.5	10.0-0.6	NPP 400V 123J 10S 5 ____
0.015	13.0	11.0	6.0	10.0-0.6	NPP 400V 153J 10S 5 ____
0.018	13.0	11.5	6.5	10.0-0.6	NPP 400V 183J 10S 5 ____
0.022	13.0	12.0	7.0	10.0-0.6	NPP 400V 223J 10S 5 ____
0.027	13.0	12.5	7.5	10.0-0.6	NPP 400V 273J 10S 5 ____
0.033	13.0	13.5	8.0	10.0-0.6	NPP 400V 333J 10S 5 ____
0.039	13.0	14.0	9.0	10.0-0.6	NPP 400V 393J 10S 5 ____
0.047	13.0	14.5	9.5	10.0-0.6	NPP 400V 473J 10S 5 ____
0.056	13.0	15.5	10.5	10.0-0.6	NPP 400V 563J 10S 5 ____
0.012	19.0	9.5	5.0	15.0-0.8	NPP 400V 123J 15S 5 ____

0.015	19.0	9.5	5.5	15.0-0.8	NPP 400V 153J 15S 5 ____
0.018	19.0	10.0	5.5	15.0-0.8	NPP 400V 183J 15S 5 ____
0.022	19.0	10.5	6.0	15.0-0.8	NPP 400V 223J 15S 5 ____
0.027	19.0	11.0	6.5	15.0-0.8	NPP 400V 273J 15S 5 ____
0.033	19.0	12.0	7.0	15.0-0.8	NPP 400V 333J 15S 5 ____
0.039	19.0	12.5	7.5	15.0-0.8	NPP 400V 393J 15S 5 ____
0.047	19.0	13.0	8.0	15.0-0.8	NPP 400V 473J 15S 5 ____
0.056	19.0	13.5	8.5	15.0-0.8	NPP 400V 563J 15S 5 ____
0.068	13.0	16.5	11.5	10.0-0.6	NPP 400V 683J 10S 5 ____
0.068	19.0	14.5	9.5	15.0-0.8	NPP 400V 683J 15S 5 ____
0.082	13.0	17.5	12.5	10.0-0.6	NPP 400V 823J 10S 5 ____
0.082	19.0	15.5	10.0	15.0-0.8	NPP 400V 823J 15S 5 ____
0.1	19.0	17.0	10.5	15.0-0.8	NPP 400V 104J 15S 5 ____
0.12	19.0	17.5	12.0	15.0-0.8	NPP 400V 124J 15S 5 ____
0.15	19.0	20.5	12.0	15.0-0.8	NPP 400V 154J 15S 5 ____
0.18	19.0	21.5	13.5	15.0-0.8	NPP 400V 184J 15S 5 ____
0.22	19.0	24.0	14.0	15.0-0.8	NPP 400V 224J 15S 5 ____
0.27	19.0	25.5	15.5	15.0-0.8	NPP 400V 274J 15S 5 ____
0.039	28.0	12.5	7.5	22.5-0.8	NPP 400V 393J 22.5S 5 ____
0.047	28.0	12.0	7.0	22.5-0.8	NPP 400V 473J 22.5S 5 ____
0.056	28.0	12.5	7.5	22.5-0.8	NPP 400V 563J 22.5S 5 ____
0.068	28.0	12.5	7.0	22.5-0.8	NPP 400V 683J 22.5S 5 ____
0.082	28.0	13.0	7.5	22.5-0.8	NPP 400V 823J 22.5S 5 ____
0.1	28.0	13.5	8.5	22.5-0.8	NPP 400V 104J 22.5S 5 ____
0.12	28.0	14.0	9.0	22.5-0.8	NPP 400V 124J 22.5S 5 ____
0.15	28.0	15.0	10.0	22.5-0.8	NPP 400V 154J 22.5S 5 ____
0.18	28.0	16.0	11.0	22.5-0.8	NPP 400V 184J 22.5S 5 ____
0.22	28.0	18.0	11.0	22.5-0.8	NPP 400V 224J 22.5S 5 ____
0.27	28.0	19.0	12.0	22.5-0.8	NPP 400V 274J 22.5S 5 ____
0.33	28.0	21.0	12.5	22.5-0.8	NPP 400V 334J 22.5S 5 ____
0.47	28.0	23.5	15.0	22.5-0.8	NPP 400V 474J 22.5S 5 ____
0.56	28.0	26.0	16.0	22.5-0.8	NPP 400V 564J 22.5S 5 ____
0.68	28.0	27.5	17.5	22.5-0.8	NPP 400V 684J 22.5S 5 ____
0.047	31.0	12.5	7.5	27.5-0.8	NPP 400V 473J 27.5S 5 ____
0.056	31.0	12.0	7.0	27.5-0.8	NPP 400V 563J 27.5S 5 ____
0.056	31.0	13.0	8.0	27.5-0.8	NPP 400V 563J 27.5S 5 ____
0.068	31.0	12.5	7.5	27.5-0.8	NPP 400V 683J 27.5S 5 ____
0.068	31.0	13.5	8.5	27.5-0.8	NPP 400V 683J 27.5S 5 ____
0.082	31.0	12.5	7.0	27.5-0.8	NPP 400V 823J 27.5S 5 ____
0.1	31.0	13.0	8.0	27.5-0.8	NPP 400V 104J 27.5S 5 ____
0.12	31.0	13.5	8.5	27.5-0.8	NPP 400V 124J 27.5S 5 ____
0.15	31.0	14.5	9.0	27.5-0.8	NPP 400V 154J 27.5S 5 ____
0.18	31.0	15.0	10.0	27.5-0.8	NPP 400V 184J 27.5S 5 ____
0.22	31.0	16.0	11.0	27.5-0.8	NPP 400V 224J 27.5S 5 ____
0.27	31.0	18.0	11.0	27.5-0.8	NPP 400V 274J 27.5S 5 ____
0.33	31.0	19.0	12.5	27.5-0.8	NPP 400V 334J 27.5S 5 ____
0.39	31.0	21.0	12.5	27.5-0.8	NPP 400V 394J 27.5S 5 ____
0.47	31.0	22.0	14.0	27.5-0.8	NPP 400V 474J 27.5S 5 ____
0.56	31.0	24.5	14.5	27.5-0.8	NPP 400V 564J 27.5S 5 ____
0.68	31.0	26.0	16.0	27.5-0.8	NPP 400V 684J 27.5S 5 ____
0.82	31.0	27.5	17.5	27.5-0.8	NPP 400V 824J 27.5S 5 ____
1.0	31.0	29.5	19.5	27.5-0.8	NPP 400V 105J 27.5S 5 ____

630Vdc(220Vac)

Cap. (μF)	Dimensions(mm)			Pitch - d	PART NUMBER
	W (max.)	H (max.)	T (max.)		
0.0022	13.0	10.5	5.5	10.0-0.6	NPP 630V 222J 10S 5 ____
0.0027	13.0	10.0	5.5	10.0-0.6	NPP 630V 272J 10S 5 ____
0.0033	13.0	10.5	6.0	10.0-0.6	NPP 630V 332J 10S 5 ____
0.0039	13.0	9.5	5.5	10.0-0.6	NPP 630V 392J 10S 5 ____
0.0047	13.0	10.0	5.5	10.0-0.6	NPP 630V 472J 10S 5 ____
0.0056	13.0	11.0	5.5	10.0-0.6	NPP 630V 562J 10S 5 ____
0.0068	13.0	11.5	6.0	10.0-0.6	NPP 630V 682J 10S 5 ____
0.0082	13.0	11.5	6.5	10.0-0.6	NPP 630V 822J 10S 5 ____
0.01	13.0	12.5	7.0	10.0-0.6	NPP 630V 103J 10S 5 ____
0.012	13.0	13.0	7.5	10.0-0.6	NPP 630V 123J 10S 5 ____
0.015	13.0	13.5	8.5	10.0-0.6	NPP 630V 153J 10S 5 ____
0.018	13.0	14.0	9.0	10.0-0.6	NPP 630V 183J 10S 5 ____
0.022	13.0	15.0	10.0	10.0-0.6	NPP 630V 223J 10S 5 ____
0.027	13.0	16.0	11.0	10.0-0.6	NPP 630V 273J 10S 5 ____
0.033	13.0	17.0	12.0	10.0-0.6	NPP 630V 333J 10S 5 ____
0.0047	19.0	10.5	6.0	15.0-0.8	NPP 630V 472J 15S 5 ____
0.0056	19.0	10.5	6.5	15.0-0.8	NPP 630V 562J 15S 5 ____
0.0068	19.0	10.5	6.0	15.0-0.8	NPP 630V 682J 15S 5 ____
0.0082	19.0	11.0	6.5	15.0-0.8	NPP 630V 822J 15S 5 ____
0.01	19.0	10.0	6.0	15.0-0.8	NPP 630V 103J 15S 5 ____
0.012	19.0	10.5	6.0	15.0-0.8	NPP 630V 123J 15S 5 ____
0.015	19.0	11.0	6.5	15.0-0.8	NPP 630V 153J 15S 5 ____

0.018	19.0	12.0	7.0	15.0-0.8	NPP 630V 183J 15S 5 ____
0.022	19.0	12.5	7.5	15.0-0.8	NPP 630V 223J 15S 5 ____
0.027	19.0	13.5	8.0	15.0-0.8	NPP 630V 273J 15S 5 ____
0.033	19.0	14.0	9.0	15.0-0.8	NPP 630V 333J 15S 5 ____
0.039	19.0	14.5	9.5	15.0-0.8	NPP 630V 393J 15S 5 ____
0.047	19.0	15.5	10.5	15.0-0.8	NPP 630V 473J 15S 5 ____
0.056	19.0	17.5	10.5	15.0-0.8	NPP 630V 563J 15S 5 ____
0.068	19.0	18.5	11.5	15.0-0.8	NPP 630V 683J 15S 5 ____
0.082	19.0	20.5	12.0	15.0-0.8	NPP 630V 823J 15S 5 ____
0.1	19.0	22.5	12.5	15.0-0.8	NPP 630V 104J 15S 5 ____
0.120	19.0	23.5	14.0	15.0-0.8	NPP 630V 124J 15S 5 ____
0.150	19.0	25.5	15.5	15.0-0.8	NPP 630V 154J 15S 5 ____
0.018	28.0	12.5	7.5	22.5-0.8	NPP 630V 183J 22.5S 5 ____
0.022	28.0	12.5	7.0	22.5-0.8	NPP 630V 223J 22.5S 5 ____
0.027	28.0	13.0	7.5	22.5-0.8	NPP 630V 273J 22.5S 5 ____
0.033	28.0	12.0	7.0	22.5-0.8	NPP 630V 333J 22.5S 5 ____
0.039	28.0	12.5	7.5	22.5-0.8	NPP 630V 393J 22.5S 5 ____
0.047	28.0	13.0	8.0	22.5-0.8	NPP 630V 473J 22.5S 5 ____
0.056	28.0	13.5	8.5	22.5-0.8	NPP 630V 563J 22.5S 5 ____
0.068	28.0	14.5	9.0	22.5-0.8	NPP 630V 683J 22.5S 5 ____
0.082	28.0	15.0	10.0	22.5-0.8	NPP 630V 823J 22.5S 5 ____
0.1	28.0	16.0	11.0	22.5-0.8	NPP 630V 104J 22.5S 5 ____
0.12	28.0	18.0	11.0	22.5-0.8	NPP 630V 124J 22.5S 5 ____
0.15	28.0	19.0	12.0	22.5-0.8	NPP 630V 154J 22.5S 5 ____
0.18	28.0	21.0	12.5	22.5-0.8	NPP 630V 184J 22.5S 5 ____
0.22	28.0	22.0	14.0	22.5-0.8	NPP 630V 224J 22.5S 5 ____
0.27	28.0	24.5	14.5	22.5-0.8	NPP 630V 274J 22.5S 5 ____
0.33	28.0	26.0	16.5	22.5-0.8	NPP 630V 334J 22.5S 5 ____
0.39	28.0	27.5	18.0	22.5-0.8	NPP 630V 394J 22.5S 5 ____
0.022	31.0	12.5	7.5	27.5-0.8	NPP 630V 223J 27.5S 5 ____
0.027	31.0	13.0	8.0	27.5-0.8	NPP 630V 273J 27.5S 5 ____
0.033	31.0	13.0	7.5	27.5-0.8	NPP 630V 333J 27.5S 5 ____
0.039	31.0	13.5	8.0	27.5-0.8	NPP 630V 393J 27.5S 5 ____
0.047	31.0	12.5	7.5	27.5-0.8	NPP 630V 473J 27.5S 5 ____
0.056	31.0	13.0	8.0	27.5-0.8	NPP 630V 563J 27.5S 5 ____
0.068	31.0	13.5	8.5	27.5-0.8	NPP 630V 683J 27.5S 5 ____
0.082	31.0	14.5	9.0	27.5-0.8	NPP 630V 823J 27.5S 5 ____
0.1	31.0	15.0	10.0	27.5-0.8	NPP 630V 104J 27.5S 5 ____
0.12	31.0	16.0	11.0	27.5-0.8	NPP 630V 124J 27.5S 5 ____
0.15	31.0	18.0	11.0	27.5-0.8	NPP 630V 154J 27.5S 5 ____
0.18	31.0	19.0	12.0	27.5-0.8	NPP 630V 184J 27.5S 5 ____
0.22	31.0	21.0	12.5	27.5-0.8	NPP 630V 224J 27.5S 5 ____
0.27	31.0	22.5	14.0	27.5-0.8	NPP 630V 274J 27.5S 5 ____
0.33	31.0	25.0	15.0	27.5-0.8	NPP 630V 334J 27.5S 5 ____
0.39	31.0	26.0	16.0	27.5-0.8	NPP 630V 394J 27.5S 5 ____
0.47	31.0	27.5	18.0	27.5-0.8	NPP 630V 474J 27.5S 5 ____
0.56	31.0	29.5	19.5	27.5-0.8	NPP 630V 564J 27.5S 5 ____

800Vdc(250Vac)

Cap. (μF)	Dimensions(mm)			Pitch - d	PART NUMBER
	W (max.)	H (max.)	T (max.)		
0.00082	13.0	10.0	5.5	10.0-0.6	NPP 800V 821J 10S 5 ____
0.001	13.0	11.0	5.5	10.0-0.6	NPP 800V 102J 10S 5 ____
0.0012	13.0	11.0	6.0	10.0-0.6	NPP 800V 122J 10S 5 ____
0.0015	13.0	9.5	5.0	10.0-0.6	NPP 800V 152J 10S 5 ____
0.0018	13.0	10.0	5.5	10.0-0.6	NPP 800V 182J 10S 5 ____
0.0022	13.0	9.5	5.0	10.0-0.6	NPP 800V 222J 10S 5 ____
0.0027	13.0	10.0	5.5	10.0-0.6	NPP 800V 272J 10S 5 ____
0.0033	13.0	11.0	5.5	10.0-0.6	NPP 800V 332J 10S 5 ____
0.0039	13.0	11.0	6.0	10.0-0.6	NPP 800V 392J 10S 5 ____
0.0047	13.0	11.5	6.5	10.0-0.6	NPP 800V 472J 10S 5 ____
0.0056	13.0	12.0	7.0	10.0-0.6	NPP 800V 562J 10S 5 ____
0.0068	13.0	12.5	7.5	10.0-0.6	NPP 800V 682J 10S 5 ____
0.0082	13.0	13.0	8.0	10.0-0.6	NPP 800V 822J 10S 5 ____
0.01	13.0	13.5	8.5	10.0-0.6	NPP 800V 103J 10S 5 ____
0.012	13.0	14.5	9.0	10.0-0.6	NPP 800V 123J 10S 5 ____
0.015	13.0	15.5	10.0	10.0-0.6	NPP 800V 153J 10S 5 ____
0.018	13.0	16.0	11.0	10.0-0.6	NPP 800V 183J 10S 5 ____
0.022	13.0	17.5	12.0	10.0-0.6	NPP 800V 223J 10S 5 ____
0.0068	19.0	11.0	5.5	15.0-0.8	NPP 800V 682J 15S 5 ____
0.0082	19.0	11.5	6.0	15.0-0.8	NPP 800V 822J 15S 5 ____
0.01	19.0	11.5	6.5	15.0-0.8	NPP 800V 103J 15S 5 ____
0.012	19.0	12.0	7.0	15.0-0.8	NPP 800V 123J 15S 5 ____
0.015	19.0	13.0	7.5	15.0-0.8	NPP 800V 153J 15S 5 ____
0.018	19.0	13.5	8.5	15.0-0.8	NPP 800V 183J 15S 5 ____
0.022	19.0	14.0	9.0	15.0-0.8	NPP 800V 223J 15S 5 ____
0.027	19.0	15.0	10.0	15.0-0.8	NPP 800V 273J 15S 5 ____
0.033	19.0	17.0	10.0	15.0-0.8	NPP 800V 333J 15S 5 ____

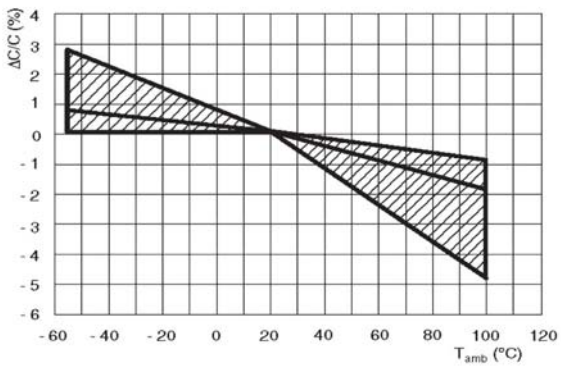
0.039	19.0	17.5	11.0	15.0-0.8	NPP 800V 393J 15S 5 _____
0.047	19.0	18.5	12.0	15.0-0.8	NPP 800V 473J 15S 5 _____
0.056	19.0	20.5	12.5	15.0-0.8	NPP 800V 563J 15S 5 _____
0.068	19.0	22.0	13.5	15.0-0.8	NPP 800V 683J 15S 5 _____
0.082	19.0	24.0	14.0	15.0-0.8	NPP 800V 823J 15S 5 _____
0.1	19.0	25.5	16.0	15.0-0.8	NPP 800V 104J 15S 5 _____
0.01	28.0	13.0	8.0	22.5-0.8	NPP 800V 103J 22.5S 5 _____
0.012	28.0	13.5	8.5	22.5-0.8	NPP 800V 123J 22.5S 5 _____
0.015	28.0	14.0	9.0	22.5-0.8	NPP 800V 153J 22.5S 5 _____
0.018	28.0	12.5	7.5	22.5-0.8	NPP 800V 183J 22.5S 5 _____
0.022	28.0	13.0	8.0	22.5-0.8	NPP 800V 223J 22.5S 5 _____
0.027	28.0	13.0	7.5	22.5-0.8	NPP 800V 273J 22.5S 5 _____
0.033	28.0	13.5	8.5	22.5-0.8	NPP 800V 333J 22.5S 5 _____
0.039	28.0	14.0	9.0	22.5-0.8	NPP 800V 393J 22.5S 5 _____
0.047	28.0	14.5	9.5	22.5-0.8	NPP 800V 473J 22.5S 5 _____
0.056	28.0	15.5	10.0	22.5-0.8	NPP 800V 563J 22.5S 5 _____
0.068	28.0	17.0	10.5	22.5-0.8	NPP 800V 683J 22.5S 5 _____
0.082	28.0	18.0	11.5	22.5-0.8	NPP 800V 823J 22.5S 5 _____
0.1	28.0	19.0	12.5	22.5-0.8	NPP 800V 104J 22.5S 5 _____
0.12	28.0	21.0	13.0	22.5-0.8	NPP 800V 124J 22.5S 5 _____
0.15	28.0	22.5	14.0	22.5-0.8	NPP 800V 154J 22.5S 5 _____
0.18	28.0	25.0	15.0	22.5-0.8	NPP 800V 184J 22.5S 5 _____

0.22	28.0	26.5	16.5	22.5-0.8	NPP 800V 224J 22.5S 5 _____
0.27	28.0	28.0	18.5	22.5-0.8	NPP 800V 274J 22.5S 5 _____
0.33	28.0	30.0	20.5	22.5-0.8	NPP 800V 334J 22.5S 5 _____
0.012	31.0	13.0	8.0	27.5-0.8	NPP 800V 123J 27.5S 5 _____
0.015	31.0	13.5	8.5	27.5-0.8	NPP 800V 153J 27.5S 5 _____
0.018	31.0	14.0	9.0	27.5-0.8	NPP 800V 183J 27.5S 5 _____
0.022	31.0	12.5	7.5	27.5-0.8	NPP 800V 223J 27.5S 5 _____
0.027	31.0	13.0	8.0	27.5-0.8	NPP 800V 273J 27.5S 5 _____
0.033	31.0	13.0	7.5	27.5-0.8	NPP 800V 333J 27.5S 5 _____
0.039	31.0	13.5	8.0	27.5-0.8	NPP 800V 393J 27.5S 5 _____
0.047	31.0	14.0	9.0	27.5-0.8	NPP 800V 473J 27.5S 5 _____
0.056	31.0	14.5	9.5	27.5-0.8	NPP 800V 563J 27.5S 5 _____
0.068	31.0	15.5	10.0	27.5-0.8	NPP 800V 683J 27.5S 5 _____
0.082	31.0	17.0	10.5	27.5-0.8	NPP 800V 823J 27.5S 5 _____
0.1	31.0	18.0	11.5	27.5-0.8	NPP 800V 104J 27.5S 5 _____
0.12	31.0	19.0	12.5	27.5-0.8	NPP 800V 124J 27.5S 5 _____
0.15	31.0	21.5	13.0	27.5-0.8	NPP 800V 154J 27.5S 5 _____
0.18	31.0	22.5	14.0	27.5-0.8	NPP 800V 184J 27.5S 5 _____
0.22	31.0	25.0	15.0	27.5-0.8	NPP 800V 224J 27.5S 5 _____
0.27	31.0	26.5	16.5	27.5-0.8	NPP 800V 274J 27.5S 5 _____
0.33	31.0	28.5	18.5	27.5-0.8	NPP 800V 334J 27.5S 5 _____
0.39	31.0	30.0	20.0	27.5-0.8	NPP 800V 394J 27.5S 5 _____

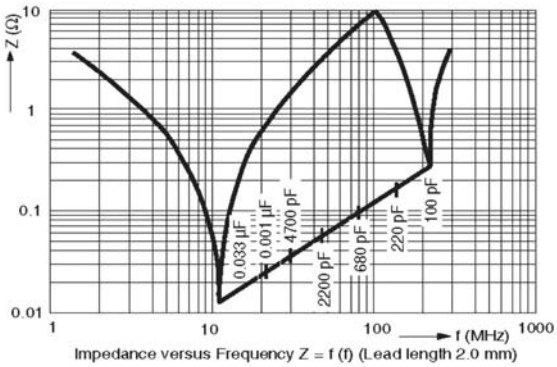
Electrical Characteristics (Typical Data)

Characteristics

Capacitance as a function of ambient temperature (typical curve)

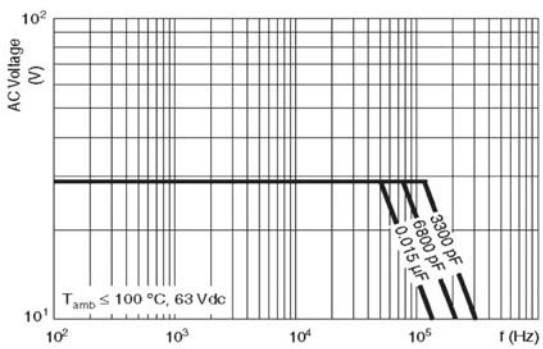


Impedance as a function of frequency (typical curve)

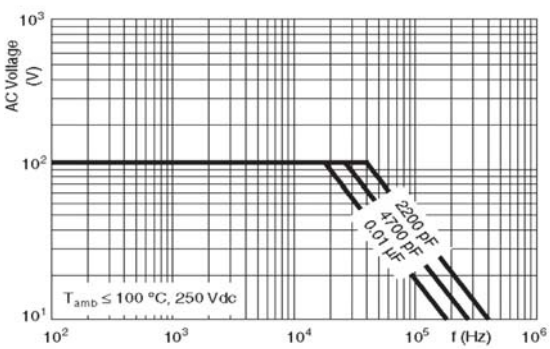


Impedance versus Frequency Z = f (f) (Lead length 2.0 mm)

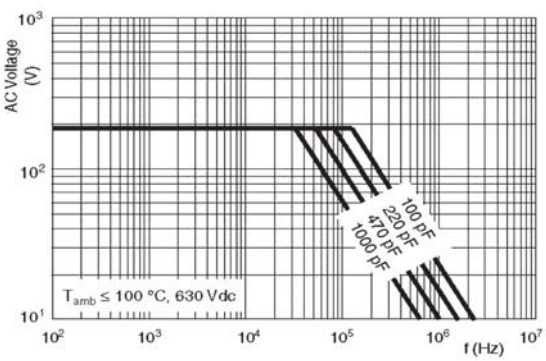
Max. RMS voltage as a function of frequency



Max. RMS voltage as a function of frequency



Max. RMS voltage as a function of frequency



BNPP

Non-inductive construction using Polypropylene film & Foil with flame retardant plastic case and epoxy resin filled.

■ Features

- Pulse duty construction
- Very low dissipation factor
- Negative capacitance change versus temperature
- Very low dielectric absorption
- Plastic case(UL94 V-0), Epoxy resin sealing
- RoHS directive compliant

■ Applications

- For high frequency applications e.g.
- Sample and hold
- Timing
- LC-Filtering
- Oscillating circuits
- Audio equipment

■ Specifications

Reference Standard	IEC 60384-13	
Climatic Category	40 / 105 / 21	
Rated Temperature	105℃ +85℃~+105℃ decreasing factor 1.0% / ℃ for V_R(dc)	
Operation Temperature Range	-40℃~+105℃	
Rated Voltage	100Vdc / 160Vdc, 250Vdc, 400Vdc, 630Vdc, 800Vdc	
Capacitance Range	0.00082μF~2.70μF	
Capacitance Tolerance	G : ±2% H : ±3% J : ±5% K : ±10% M : ±20% ※Standard : J : ±5%, Other Tolerance Grade : available on request.	
Voltage Proof	2.5U_R(ac) / 3sec	
Dissipation Factor	≤0.1%(at 1kHz 20℃)	
Rated Voltage	U_R(dc)〈500V	≥30,000MΩ C_R≤0.33μF 100Vdc 60sec 20℃
		≥10,000Ω·F C_R〉0.33μF 100Vdc 60sec 20℃
	U_R(dc)≥500V	≥30,000MΩ C_R≤0.33μF 100Vdc 60sec 20℃
		≥10,000Ω·F C_R〉0.33μF 100Vdc 60sec 20℃

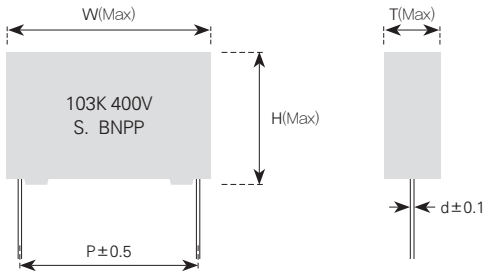
■ Part Number System

BNPP	160V	183	J	10	S	5	
Part-1	Part-2	Part-3	Part-4	Part-5	Part-6	Part-7	Part-8

Part-1 : Series Code(Series Name)-BNPP
Part-2 : Rated Voltage(DC : 100V~800V)
Part-3 : Rated Capacitance Value(0.00082μF~2.70μF / 821~275)
Part-4 : Capacitance Tolerance(G : ±2% H : ±3% J : ±5% K : ±10% M : ±20%)
Part-5 : Lead Spacing(10mm / 15mm / 22.5mm / 27.5mm)
Part-6 : Forming-Type and Packing Code
Part-7 : Size Number(1~4 : Min-Type / 5 : Standard-Type / 6~9 : Large-Type)
Part-8 : Internal Use

CODE	STYLE
B	Bending Forming
C	Straight Cutting
D	D-Type Forming
L	B-Type long Forming
M	C-Type long Forming
S	Straight
X	B-Type Forming
Y	C-Type Forming
Z	Z-Type Forming
T	A-Type Tapping
U	B-Type Tapping
V	C-Type Tapping

■ Dimensions



100Vdc/160Vdc(63Vac / 100Vac)

Cap. (μF)	Dimensions(mm) W (max.)	H (max.)	T (max.)	Pitch - d	PART NUMBER
0.018	13.0	10.0	5.0	10.0-0.6	BNPP 160V 183J 10S 5 ____
0.022	13.0	10.0	5.0	10.0-0.6	BNPP 160V 223J 10S 5 ____
0.027	13.0	10.0	5.0	10.0-0.6	BNPP 160V 273J 10S 5 ____
0.033	13.0	10.0	5.0	10.0-0.6	BNPP 160V 333J 10S 5 ____
0.039	13.0	11.0	5.0	10.0-0.6	BNPP 160V 393J 10S 5 ____
0.047	13.0	11.0	5.0	10.0-0.6	BNPP 160V 473J 10S 5 ____
0.056	13.0	12.0	6.0	10.0-0.6	BNPP 160V 563J 10S 5 ____
0.068	13.0	12.0	6.0	10.0-0.6	BNPP 160V 683J 10S 5 ____
0.082	13.0	13.0	7.0	10.0-0.6	BNPP 160V 823J 10S 5 ____
0.1	13.0	14.0	8.0	10.0-0.6	BNPP 160V 104J 10S 5 ____
0.12	13.0	14.0	8.0	10.0-0.6	BNPP 160V 124J 10S 5 ____
0.033	18.0	11.0	5.0	15.0-0.8	BNPP 160V 333J 15S 5 ____
0.039	18.0	11.0	5.0	15.0-0.8	BNPP 160V 393J 15S 5 ____
0.047	18.0	11.0	5.0	15.0-0.8	BNPP 160V 473J 15S 5 ____
0.056	18.0	11.0	5.0	15.0-0.8	BNPP 160V 563J 15S 5 ____
0.068	18.0	11.0	5.0	15.0-0.8	BNPP 160V 683J 15S 5 ____
0.082	18.0	12.0	6.0	15.0-0.8	BNPP 160V 823J 15S 5 ____
0.1	18.0	12.0	6.0	15.0-0.8	BNPP 160V 104J 15S 5 ____
0.12	18.0	13.0	7.0	15.0-0.8	BNPP 160V 124J 15S 5 ____
0.15	18.0	13.5	7.5	15.0-0.8	BNPP 160V 154J 15S 5 ____
0.18	18.0	14.5	8.5	15.0-0.8	BNPP 160V 184J 15S 5 ____
0.22	18.0	17.5	8.5	15.0-0.8	BNPP 160V 224J 15S 5 ____
0.27	18.0	16.0	10.0	15.0-0.8	BNPP 160V 274J 15S 5 ____
0.33	18.0	19.0	11.0	15.0-0.8	BNPP 160V 334J 15S 5 ____
0.39	18.0	21.0	12.0	15.0-0.8	BNPP 160V 394J 15S 5 ____
0.47	18.0	21.0	12.0	15.0-0.8	BNPP 160V 474J 15S 5 ____
0.1	26.0	15.0	6.0	22.5-0.8	BNPP 160V 104J 22.5S 5 ____
0.12	26.0	15.0	6.0	22.5-0.8	BNPP 160V 124J 22.5S 5 ____
0.15	26.0	15.0	6.0	22.5-0.8	BNPP 160V 154J 22.5S 5 ____
0.18	26.0	15.0	6.0	22.5-0.8	BNPP 160V 184J 22.5S 5 ____
0.22	26.0	16.5	7.0	22.5-0.8	BNPP 160V 224J 22.5S 5 ____
0.27	26.0	16.5	7.0	22.5-0.8	BNPP 160V 274J 22.5S 5 ____
0.33	26.0	17.0	8.5	22.5-0.8	BNPP 160V 334J 22.5S 5 ____
0.39	26.0	17.0	8.5	22.5-0.8	BNPP 160V 394J 22.5S 5 ____
0.47	26.0	19.0	10.0	22.5-0.8	BNPP 160V 474J 22.5S 5 ____
0.56	26.0	20.0	10.0	22.5-0.8	BNPP 160V 564J 22.5S 5 ____
0.68	26.0	22.0	12.0	22.5-0.8	BNPP 160V 684J 22.5S 5 ____
0.82	26.0	22.0	12.0	22.5-0.8	BNPP 160V 824J 22.5S 5 ____
1.0	26.0	25.0	15.0	22.5-0.8	BNPP 160V 105J 22.5S 5 ____
1.2	26.0	25.0	15.0	22.5-0.8	BNPP 160V 125J 22.5S 5 ____
0.15	32.0	18.0	9.0	27.5-0.8	BNPP 160V 154J 27.5S 5 ____
0.18	32.0	18.0	9.0	27.5-0.8	BNPP 160V 184J 27.5S 5 ____
0.22	32.0	18.0	9.0	27.5-0.8	BNPP 160V 224J 27.5S 5 ____
0.27	32.0	18.0	9.0	27.5-0.8	BNPP 160V 274J 27.5S 5 ____
0.33	32.0	18.0	9.0	27.5-0.8	BNPP 160V 334J 27.5S 5 ____
0.39	32.0	18.0	9.0	27.5-0.8	BNPP 160V 394J 27.5S 5 ____
0.47	32.0	18.0	9.0	27.5-0.8	BNPP 160V 474J 27.5S 5 ____
0.56	32.0	20.0	10.0	27.5-0.8	BNPP 160V 564J 27.5S 5 ____
0.68	32.0	20.0	10.0	27.5-0.8	BNPP 160V 684J 27.5S 5 ____
0.82	32.0	22.0	12.0	27.5-0.8	BNPP 160V 824J 27.5S 5 ____
1.0	32.0	22.0	13.0	27.5-0.8	BNPP 160V 105J 27.5S 5 ____
1.2	32.0	23.5	14.0	27.5-0.8	BNPP 160V 125J 27.5S 5 ____
1.5	32.0	25.5	16.0	27.5-0.8	BNPP 160V 155J 27.5S 5 ____
1.8	32.0	26.0	18.0	27.5-0.8	BNPP 160V 185J 27.5S 5 ____
2.2	32.0	30.0	20.0	27.5-0.8	BNPP 160V 225J 27.5S 5 ____
2.7	32.0	34.0	21.0	27.5-0.8	BNPP 160V 275J 27.5S 5 ____

250Vdc(160Vac)

Cap. (μF)	Dimensions(mm) W (max.)	H (max.)	T (max.)	Pitch - d	PART NUMBER
0.018	13.0	10.0	5.0	10.0-0.6	BNPP 250V 183J 10S 5 ____
0.022	13.0	10.0	5.0	10.0-0.6	BNPP 250V 223J 10S 5 ____
0.027	13.0	10.0	5.0	10.0-0.6	BNPP 250V 273J 10S 5 ____
0.033	13.0	10.0	5.0	10.0-0.6	BNPP 250V 333J 10S 5 ____

0.039	13.0	11.0	5.0	10.0-0.6	BNPP 250V 393J 10S 5 ____
0.047	13.0	11.0	5.0	10.0-0.6	BNPP 250V 473J 10S 5 ____
0.056	13.0	12.0	6.0	10.0-0.6	BNPP 250V 563J 10S 5 ____
0.068	13.0	12.0	6.0	10.0-0.6	BNPP 250V 683J 10S 5 ____
0.082	13.0	13.0	7.0	10.0-0.6	BNPP 250V 823J 10S 5 ____
0.1	13.0	14.0	8.0	10.0-0.6	BNPP 250V 104J 10S 5 ____
0.12	13.0	14.0	8.0	10.0-0.6	BNPP 250V 124J 10S 5 ____
0.033	18.0	11.0	5.0	15.0-0.8	BNPP 250V 333J 15S 5 ____
0.039	18.0	11.0	5.0	15.0-0.8	BNPP 250V 393J 15S 5 ____
0.047	18.0	11.0	5.0	15.0-0.8	BNPP 250V 473J 15S 5 ____
0.056	18.0	11.0	5.0	15.0-0.8	BNPP 250V 563J 15S 5 ____
0.068	18.0	11.0	5.0	15.0-0.8	BNPP 250V 683J 15S 5 ____
0.082	18.0	12.0	6.0	15.0-0.8	BNPP 250V 823J 15S 5 ____
0.1	18.0	12.0	6.0	15.0-0.8	BNPP 250V 104J 15S 5 ____
0.12	18.0	13.0	7.0	15.0-0.8	BNPP 250V 124J 15S 5 ____
0.15	18.0	13.5	7.5	15.0-0.8	BNPP 250V 154J 15S 5 ____
0.18	18.0	14.5	8.5	15.0-0.8	BNPP 250V 184J 15S 5 ____
0.22	18.0	17.5	8.5	15.0-0.8	BNPP 250V 224J 15S 5 ____
0.27	18.0	16.0	10.0	15.0-0.8	BNPP 250V 274J 15S 5 ____
0.33	18.0	19.0	11.0	15.0-0.8	BNPP 250V 334J 15S 5 ____
0.39	18.0	21.0	12.0	15.0-0.8	BNPP 250V 394J 15S 5 ____
0.47	18.0	21.0	12.0	15.0-0.8	BNPP 250V 474J 15S 5 ____
0.1	26.0	15.0	6.0	22.5-0.8	BNPP 250V 104J 22.5S 5 ____
0.12	26.0	15.0	6.0	22.5-0.8	BNPP 250V 124J 22.5S 5 ____
0.15	26.0	15.0	6.0	22.5-0.8	BNPP 250V 154J 22.5S 5 ____
0.18	26.0	15.0	6.0	22.5-0.8	BNPP 250V 184J 22.5S 5 ____
0.22	26.0	16.5	7.0	22.5-0.8	BNPP 250V 224J 22.5S 5 ____
0.27	26.0	16.5	7.0	22.5-0.8	BNPP 250V 274J 22.5S 5 ____
0.33	26.0	17.0	8.5	22.5-0.8	BNPP 250V 334J 22.5S 5 ____
0.39	26.0	17.0	8.5	22.5-0.8	BNPP 250V 394J 22.5S 5 ____
0.47	26.0	19.0	10.0	22.5-0.8	BNPP 250V 474J 22.5S 5 ____
0.56	26.0	20.0	10.0	22.5-0.8	BNPP 250V 564J 22.5S 5 ____
0.68	26.0	22.0	12.0	22.5-0.8	BNPP 250V 684J 22.5S 5 ____
0.82	26.0	22.0	12.0	22.5-0.8	BNPP 250V 824J 22.5S 5 ____
1.0	26.0	25.0	15.0	22.5-0.8	BNPP 250V 105J 22.5S 5 ____
1.2	26.0	25.0	15.0	22.5-0.8	BNPP 250V 125J 22.5S 5 ____
0.15	32.0	18.0	9.0	27.5-0.8	BNPP 250V 154J 27.5S 5 ____
0.18	32.0	18.0	9.0	27.5-0.8	BNPP 250V 184J 27.5S 5 ____
0.22	32.0	18.0	9.0	27.5-0.8	BNPP 250V 224J 27.5S 5 ____
0.27	32.0	18.0	9.0	27.5-0.8	BNPP 250V 274J 27.5S 5 ____
0.33	32.0	18.0	9.0	27.5-0.8	BNPP 250V 334J 27.5S 5 ____
0.39	32.0	18.0	9.0	27.5-0.8	BNPP 250V 394J 27.5S 5 ____
0.47	32.0	18.0	9.0	27.5-0.8	BNPP 250V 474J 27.5S 5 ____
0.56	32.0	20.0	10.0	27.5-0.8	BNPP 250V 564J 27.5S 5 ____
0.68	32.0	20.0	10.0	27.5-0.8	BNPP 250V 684J 27.5S 5 ____
0.82	32.0	22.0	12.0	27.5-0.8	BNPP 250V 824J 27.5S 5 ____
1.0	32.0	22.0	13.0	27.5-0.8	BNPP 250V 105J 27.5S 5 ____
1.2	32.0	23.5	14.0	27.5-0.8	BNPP 250V 125J 27.5S 5 ____
1.5	32.0	25.5	16.0	27.5-0.8	BNPP 250V 155J 27.5S 5 ____
1.8	32.0	26.0	18.0	27.5-0.8	BNPP 250V 185J 27.5S 5 ____
2.2	32.0	30.0	20.0	27.5-0.8	BNPP 250V 225J 27.5S 5 ____
2.7	32.0	34.0	21.0	27.5-0.8	BNPP 250V 275J 27.5S 5 ____

400Vdc(200Vac)

Cap. (μF)	Dimensions(mm)			Pitch - d	PART NUMBER
	W (max.)	H (max.)	T (max.)		
0.0047	13.0	10.0	5.0	10.0-0.6	BNPP 400V 472J 10S 5 ____
0.0056	13.0	10.0	5.0	10.0-0.6	BNPP 400V 562J 10S 5 ____
0.0068	13.0	10.0	5.0	10.0-0.6	BNPP 400V 682J 10S 5 ____
0.0082	13.0	10.0	5.0	10.0-0.6	BNPP 400V 822J 10S 5 ____
0.01	13.0	10.0	5.0	10.0-0.6	BNPP 400V 103J 10S 5 ____
0.012	13.0	10.0	5.0	10.0-0.6	BNPP 400V 123J 10S 5 ____
0.015	13.0	11.0	5.0	10.0-0.6	BNPP 400V 153J 10S 5 ____
0.018	13.0	12.0	6.0	10.0-0.6	BNPP 400V 183J 10S 5 ____
0.022	13.0	12.0	6.0	10.0-0.6	BNPP 400V 223J 10S 5 ____
0.027	13.0	13.0	7.0	10.0-0.6	BNPP 400V 273J 10S 5 ____
0.033	13.0	14.0	8.0	10.0-0.6	BNPP 400V 333J 10S 5 ____
0.039	13.0	14.0	8.0	10.0-0.6	BNPP 400V 393J 10S 5 ____
0.012	18.0	11.0	5.0	15.0-0.8	BNPP 400V 123J 15S 5 ____
0.015	18.0	11.0	5.0	15.0-0.8	BNPP 400V 153J 15S 5 ____
0.018	18.0	11.0	5.0	15.0-0.8	BNPP 400V 183J 15S 5 ____
0.022	18.0	11.0	5.0	15.0-0.8	BNPP 400V 223J 15S 5 ____
0.027	18.0	11.0	5.0	15.0-0.8	BNPP 400V 273J 15S 5 ____
0.033	18.0	12.0	6.0	15.0-0.8	BNPP 400V 333J 15S 5 ____
0.039	18.0	12.0	6.0	15.0-0.8	BNPP 400V 393J 15S 5 ____
0.047	18.0	12.0	6.0	15.0-0.8	BNPP 400V 473J 15S 5 ____
0.056	18.0	13.0	7.0	15.0-0.8	BNPP 400V 563J 15S 5 ____
0.068	18.0	14.5	8.5	15.0-0.8	BNPP 400V 683J 15S 5 ____

0.082	18.0	14.5	8.5	15.0-0.8	BNPP 400V 823J 15S 5 ____
0.1	18.0	16.0	10.0	15.0-0.8	BNPP 400V 104J 15S 5 ____
0.12	18.0	16.0	10.0	15.0-0.8	BNPP 400V 124J 15S 5 ____
0.15	18.0	19.0	11.0	15.0-0.8	BNPP 400V 154J 15S 5 ____
0.18	18.0	21.0	12.0	15.0-0.8	BNPP 400V 184J 15S 5 ____
0.039	26.0	15.0	6.0	22.5-0.8	BNPP 400V 393J 22.5S 5 ____
0.047	26.0	15.0	6.0	22.5-0.8	BNPP 400V 473J 22.5S 5 ____
0.056	26.0	15.0	6.0	22.5-0.8	BNPP 400V 563J 22.5S 5 ____
0.068	26.0	15.0	6.0	22.5-0.8	BNPP 400V 683J 22.5S 5 ____
0.082	26.0	15.0	6.0	22.5-0.8	BNPP 400V 823J 22.5S 5 ____
0.1	26.0	16.5	7.0	22.5-0.8	BNPP 400V 104J 22.5S 5 ____
0.12	26.0	17.0	8.5	22.5-0.8	BNPP 400V 124J 22.5S 5 ____
0.15	26.0	17.0	8.5	22.5-0.8	BNPP 400V 154J 22.5S 5 ____
0.18	26.0	18.0	9.0	22.5-0.8	BNPP 400V 184J 22.5S 5 ____
0.22	26.0	19.0	10.0	22.5-0.8	BNPP 400V 224J 22.5S 5 ____
0.27	26.0	20.0	10.0	22.5-0.8	BNPP 400V 274J 22.5S 5 ____
0.33	26.0	22.0	12.0	22.5-0.8	BNPP 400V 334J 22.5S 5 ____
0.47	26.0	25.0	15.0	22.5-0.8	BNPP 400V 474J 22.5S 5 ____
0.047	32.0	18.0	9.0	27.5-0.8	BNPP 400V 473J 27.5S 5 ____
0.056	32.0	18.0	9.0	27.5-0.8	BNPP 400V 563J 27.5S 5 ____
0.068	32.0	18.0	9.0	27.5-0.8	BNPP 400V 683J 27.5S 5 ____
0.082	32.0	18.0	9.0	27.5-0.8	BNPP 400V 823J 27.5S 5 ____
0.1	32.0	18.0	9.0	27.5-0.8	BNPP 400V 104J 27.5S 5 ____
0.12	32.0	18.0	9.0	27.5-0.8	BNPP 400V 124J 27.5S 5 ____
0.15	32.0	18.0	9.0	27.5-0.8	BNPP 400V 154J 27.5S 5 ____
0.18	32.0	18.0	9.0	27.5-0.8	BNPP 400V 184J 27.5S 5 ____
0.22	32.0	18.0	9.0	27.5-0.8	BNPP 400V 224J 27.5S 5 ____
0.27	32.0	20.0	10.0	27.5-0.8	BNPP 400V 274J 27.5S 5 ____
0.33	32.0	20.0	11.0	27.5-0.8	BNPP 400V 334J 27.5S 5 ____
0.39	32.0	22.0	12.0	27.5-0.8	BNPP 400V 394J 27.5S 5 ____
0.47	32.0	23.5	14.0	27.5-0.8	BNPP 400V 474J 27.5S 5 ____
0.56	32.0	24.5	15.0	27.5-0.8	BNPP 400V 564J 27.5S 5 ____
0.68	32.0	25.5	16.0	27.5-0.8	BNPP 400V 684J 27.5S 5 ____
0.82	32.0	30.0	20.0	27.5-0.8	BNPP 400V 824J 27.5S 5 ____
1.0	32.0	30.0	20.0	27.5-0.8	BNPP 400V 105J 27.5S 5 ____

630Vdc(220Vac)

Cap. (μF)	Dimensions(mm)			Pitch - d	PART NUMBER
	W (max.)	H (max.)	T (max.)		
0.0022	13.0	11.0	5.0	10.0-0.6	BNPP 630V 222J 10S 5 ____
0.0027	13.0	10.0	5.0	10.0-0.6	BNPP 630V 272J 10S 5 ____
0.0033	13.0	10.0	5.0	10.0-0.6	BNPP 630V 332J 10S 5 ____
0.0039	13.0	10.0	5.0	10.0-0.6	BNPP 630V 392J 10S 5 ____
0.0047	13.0	10.0	5.0	10.0-0.6	BNPP 630V 472J 10S 5 ____
0.0056	13.0	11.0	5.0	10.0-0.6	BNPP 630V 562J 10S 5 ____
0.0068	13.0	12.0	6.0	10.0-0.6	BNPP 630V 682J 10S 5 ____
0.0082	13.0	12.0	6.0	10.0-0.6	BNPP 630V 822J 10S 5 ____
0.01	13.0	12.0	6.0	10.0-0.6	BNPP 630V 103J 10S 5 ____
0.012	13.0	13.0	7.0	10.0-0.6	BNPP 630V 123J 10S 5 ____
0.015	13.0	14.0	8.0	10.0-0.6	BNPP 630V 153J 10S 5 ____
0.018	13.0	14.0	8.0	10.0-0.6	BNPP 630V 183J 10S 5 ____
0.0047	18.0	11.0	5.0	15.0-0.8	BNPP 630V 472J 15S 5 ____
0.0056	18.0	11.0	5.0	15.0-0.8	BNPP 630V 562J 15S 5 ____
0.0068	18.0	11.0	5.0	15.0-0.8	BNPP 630V 682J 15S 5 ____
0.0082	18.0	11.0	5.0	15.0-0.8	BNPP 630V 822J 15S 5 ____
0.01	18.0	11.0	5.0	15.0-0.8	BNPP 630V 103J 15S 5 ____
0.012	18.0	11.0	5.0	15.0-0.8	BNPP 630V 123J 15S 5 ____
0.015	18.0	12.0	6.0	15.0-0.8	BNPP 630V 153J 15S 5 ____
0.018	18.0	12.0	6.0	15.0-0.8	BNPP 630V 183J 15S 5 ____
0.022	18.0	12.0	6.0	15.0-0.8	BNPP 630V 223J 15S 5 ____
0.027	18.0	13.0	7.0	15.0-0.8	BNPP 630V 273J 15S 5 ____
0.033	18.0	13.5	7.5	15.0-0.8	BNPP 630V 333J 15S 5 ____
0.039	18.0	14.5	8.5	15.0-0.8	BNPP 630V 393J 15S 5 ____
0.047	18.0	16.0	10.0	15.0-0.8	BNPP 630V 473J 15S 5 ____
0.056	18.0	16.0	10.0	15.0-0.8	BNPP 630V 563J 15S 5 ____
0.068	18.0	18.0	10.0	15.0-0.8	BNPP 630V 683J 15S 5 ____
0.082	18.0	21.0	12.0	15.0-0.8	BNPP 630V 823J 15S 5 ____
0.1	18.0	21.0	12.0	15.0-0.8	BNPP 630V 104J 15S 5 ____
0.018	26.0	15.0	6.0	22.5-0.8	BNPP 630V 183J 22.5S 5 ____
0.022	26.0	15.0	6.0	22.5-0.8	BNPP 630V 223J 22.5S 5 ____
0.027	26.0	15.0	6.0	22.5-0.8	BNPP 630V 273J 22.5S 5 ____
0.033	26.0	15.0	6.0	22.5-0.8	BNPP 630V 333J 22.5S 5 ____
0.039	26.0	15.0	6.0	22.5-0.8	BNPP 630V 393J 22.5S 5 ____
0.047	26.0	15.0	6.0	22.5-0.8	BNPP 630V 473J 22.5S 5 ____
0.056	26.0	16.5	7.0	22.5-0.8	BNPP 630V 563J 22.5S 5 ____

0.068	26.0	17.0	8.5	22.5-0.8	BNPP 630V 683J 22.5S 5 ____
0.082	26.0	17.0	8.5	22.5-0.8	BNPP 630V 823J 22.5S 5 ____
0.1	26.0	18.0	9.0	22.5-0.8	BNPP 630V 104J 22.5S 5 ____
0.12	26.0	19.0	10.0	22.5-0.8	BNPP 630V 124J 22.5S 5 ____
0.15	26.0	20.0	10.0	22.5-0.8	BNPP 630V 154J 22.5S 5 ____
0.18	26.0	22.0	12.0	22.5-0.8	BNPP 630V 184J 22.5S 5 ____
0.22	26.0	25.0	15.0	22.5-0.8	BNPP 630V 224J 22.5S 5 ____
0.27	26.0	25.0	15.0	22.5-0.8	BNPP 630V 274J 22.5S 5 ____
0.022	32.0	18.0	9.0	27.5-0.8	BNPP 630V 223J 27.5S 5 ____
0.027	32.0	18.0	9.0	27.5-0.8	BNPP 630V 273J 27.5S 5 ____
0.033	32.0	18.0	9.0	27.5-0.8	BNPP 630V 333J 27.5S 5 ____
0.039	32.0	18.0	9.0	27.5-0.8	BNPP 630V 393J 27.5S 5 ____
0.047	32.0	18.0	9.0	27.5-0.8	BNPP 630V 473J 27.5S 5 ____
0.056	32.0	18.0	9.0	27.5-0.8	BNPP 630V 563J 27.5S 5 ____
0.068	32.0	18.0	9.0	27.5-0.8	BNPP 630V 683J 27.5S 5 ____
0.082	32.0	18.0	9.0	27.5-0.8	BNPP 630V 823J 27.5S 5 ____
0.1	32.0	18.0	9.0	27.5-0.8	BNPP 630V 104J 27.5S 5 ____
0.12	32.0	18.0	9.0	27.5-0.8	BNPP 630V 124J 27.5S 5 ____
0.15	32.0	20.0	10.0	27.5-0.8	BNPP 630V 154J 27.5S 5 ____
0.18	32.0	20.0	11.0	27.5-0.8	BNPP 630V 184J 27.5S 5 ____
0.22	32.0	22.0	12.0	27.5-0.8	BNPP 630V 224J 27.5S 5 ____
0.27	32.0	23.5	14.0	27.5-0.8	BNPP 630V 274J 27.5S 5 ____
0.33	32.0	24.5	15.0	27.5-0.8	BNPP 630V 334J 27.5S 5 ____
0.39	32.0	26.0	18.0	27.5-0.8	BNPP 630V 394J 27.5S 5 ____
0.47	32.0	30.0	20.0	27.5-0.8	BNPP 630V 474J 27.5S 5 ____
0.56	32.0	30.0	20.0	27.5-0.8	BNPP 630V 564J 27.5S 5 ____

800Vdc(250Vac)

Cap. (μF)	Dimensions(mm)			Pitch - d	PART NUMBER
	W (max.)	H (max.)	T (max.)		
0.00082	13.0	10.0	5.0	10.0-0.6	BNPP 800V 821J 10S 5 ____
0.001	13.0	11.0	5.0	10.0-0.6	BNPP 800V 102J 10S 5 ____
0.0012	13.0	11.0	5.0	10.0-0.6	BNPP 800V 122J 10S 5 ____
0.0015	13.0	10.0	5.0	10.0-0.6	BNPP 800V 152J 10S 5 ____
0.0018	13.0	10.0	5.0	10.0-0.6	BNPP 800V 182J 10S 5 ____
0.0022	13.0	10.0	5.0	10.0-0.6	BNPP 800V 222J 10S 5 ____
0.0027	13.0	10.0	5.0	10.0-0.6	BNPP 800V 272J 10S 5 ____
0.0033	13.0	11.0	5.0	10.0-0.6	BNPP 800V 332J 10S 5 ____
0.0039	13.0	11.0	5.0	10.0-0.6	BNPP 800V 392J 10S 5 ____
0.0047	13.0	12.0	6.0	10.0-0.6	BNPP 800V 472J 10S 5 ____
0.0056	13.0	12.0	6.0	10.0-0.6	BNPP 800V 562J 10S 5 ____
0.0068	13.0	12.0	6.0	10.0-0.6	BNPP 800V 682J 10S 5 ____
0.0082	13.0	13.0	7.0	10.0-0.6	BNPP 800V 822J 10S 5 ____
0.01	13.0	14.0	8.0	10.0-0.6	BNPP 800V 103J 10S 5 ____
0.0033	18.0	11.0	5.0	15.0-0.8	BNPP 800V 332J 15S 5 ____
0.0039	18.0	12.0	6.0	15.0-0.8	BNPP 800V 392J 15S 5 ____
0.0047	18.0	12.0	6.0	15.0-0.8	BNPP 800V 472J 15S 5 ____
0.0056	18.0	11.0	5.0	15.0-0.8	BNPP 800V 562J 15S 5 ____
0.0068	18.0	11.0	5.0	15.0-0.8	BNPP 800V 682J 15S 5 ____
0.0082	18.0	11.0	5.0	15.0-0.8	BNPP 800V 822J 15S 5 ____
0.01	18.0	11.0	5.0	15.0-0.8	BNPP 800V 103J 15S 5 ____
0.012	18.0	12.0	6.0	15.0-0.8	BNPP 800V 123J 15S 5 ____
0.015	18.0	12.0	6.0	15.0-0.8	BNPP 800V 153J 15S 5 ____
0.018	18.0	13.0	7.0	15.0-0.8	BNPP 800V 183J 15S 5 ____
0.022	18.0	13.5	7.5	15.0-0.8	BNPP 800V 223J 15S 5 ____
0.027	18.0	14.5	8.5	15.0-0.8	BNPP 800V 273J 15S 5 ____
0.033	18.0	16.0	10.0	15.0-0.8	BNPP 800V 333J 15S 5 ____
0.039	18.0	18.0	10.0	15.0-0.8	BNPP 800V 393J 15S 5 ____
0.047	18.0	18.0	10.0	15.0-0.8	BNPP 800V 473J 15S 5 ____
0.056	18.0	19.0	11.0	15.0-0.8	BNPP 800V 563J 15S 5 ____
0.068	18.0	21.0	12.0	15.0-0.8	BNPP 800V 683J 15S 5 ____
0.01	26.0	15.0	6.0	22.5-0.8	BNPP 800V 103J 22.5S 5 ____
0.012	26.0	16.5	7.0	22.5-0.8	BNPP 800V 123J 22.5S 5 ____
0.015	26.0	16.5	7.0	22.5-0.8	BNPP 800V 153J 22.5S 5 ____
0.018	26.0	15.0	6.0	22.5-0.8	BNPP 800V 183J 22.5S 5 ____
0.022	26.0	16.5	7.0	22.5-0.8	BNPP 800V 223J 22.5S 5 ____
0.027	26.0	15.0	6.0	22.5-0.8	BNPP 800V 273J 22.5S 5 ____
0.033	26.0	16.5	7.0	22.5-0.8	BNPP 800V 333J 22.5S 5 ____
0.039	26.0	16.5	7.0	22.5-0.8	BNPP 800V 393J 22.5S 5 ____
0.047	26.0	17.0	8.5	22.5-0.8	BNPP 800V 473J 22.5S 5 ____
0.056	26.0	17.0	8.5	22.5-0.8	BNPP 800V 563J 22.5S 5 ____
0.068	26.0	18.0	9.0	22.5-0.8	BNPP 800V 683J 22.5S 5 ____
0.082	26.0	19.0	10.0	22.5-0.8	BNPP 800V 823J 22.5S 5 ____
0.1	26.0	20.0	11.0	22.5-0.8	BNPP 800V 104J 22.5S 5 ____
0.12	26.0	22.0	12.0	22.5-0.8	BNPP 800V 124J 22.5S 5 ____
0.15	26.0	25.0	15.0	22.5-0.8	BNPP 800V 154J 22.5S 5 ____
0.18	26.0	25.0	15.0	22.5-0.8	BNPP 800V 184J 22.5S 5 ____
0.015	32.0	18.0	9.0	27.5-0.8	BNPP 800V 153J 27.5S 5 ____

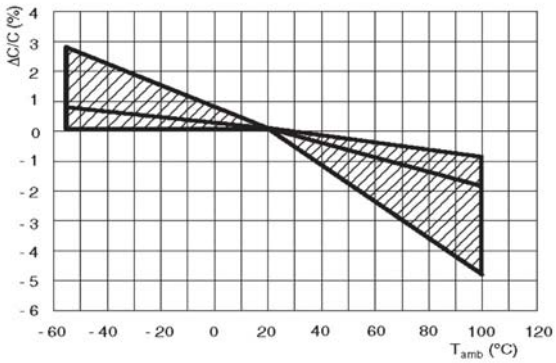
0.018	32.0	18.0	9.0	27.5-0.8	BNPP 800V 183J 27.5S 5 _____
0.022	32.0	18.0	9.0	27.5-0.8	BNPP 800V 223J 27.5S 5 _____
0.027	32.0	18.0	9.0	27.5-0.8	BNPP 800V 273J 27.5S 5 _____
0.033	32.0	18.0	9.0	27.5-0.8	BNPP 800V 333J 27.5S 5 _____
0.039	32.0	18.0	9.0	27.5-0.8	BNPP 800V 393J 27.5S 5 _____
0.047	32.0	18.0	9.0	27.5-0.8	BNPP 800V 473J 27.5S 5 _____
0.056	32.0	18.0	9.0	27.5-0.8	BNPP 800V 563J 27.5S 5 _____
0.068	32.0	18.0	9.0	27.5-0.8	BNPP 800V 683J 27.5S 5 _____
0.082	32.0	20.0	10.0	27.5-0.8	BNPP 800V 823J 27.5S 5 _____

0.1	32.0	20.0	11.0	27.5-0.8	BNPP 800V 104J 27.5S 5 _____
0.12	32.0	22.0	12.0	27.5-0.8	BNPP 800V 124J 27.5S 5 _____
0.15	32.0	22.0	13.0	27.5-0.8	BNPP 800V 154J 27.5S 5 _____
0.18	32.0	23.5	14.0	27.5-0.8	BNPP 800V 184J 27.5S 5 _____
0.22	32.0	25.5	16.0	27.5-0.8	BNPP 800V 224J 27.5S 5 _____
0.27	32.0	26.0	18.0	27.5-0.8	BNPP 800V 274J 27.5S 5 _____
0.33	32.0	30.0	20.0	27.5-0.8	BNPP 800V 334J 27.5S 5 _____
0.39	32.0	30.0	20.0	27.5-0.8	BNPP 800V 394J 27.5S 5 _____

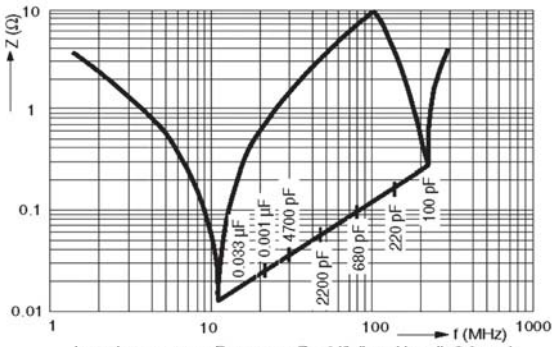
Electrical Characteristics (Typical Data)

Characteristics

Capacitance as a function of ambient temperature (typical curve)

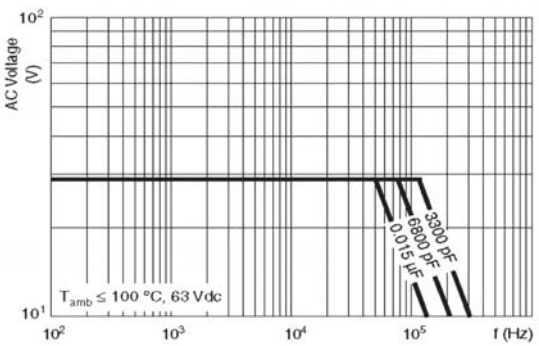


Impedance as a function of frequency (typical curve)

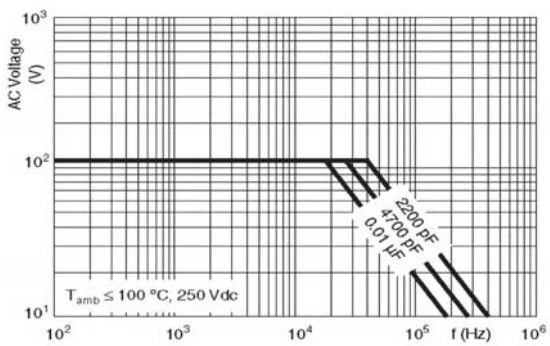


Impedance versus Frequency Z = f (f) (Lead length 2.0 mm)

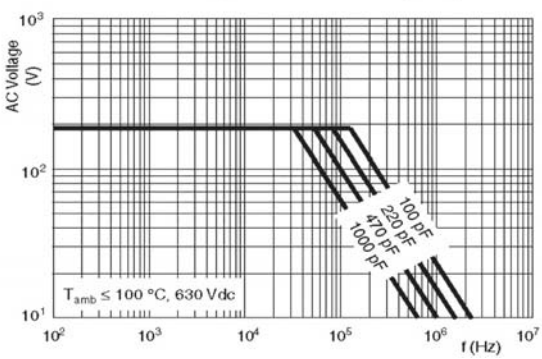
Max. RMS voltage as a function of frequency



Max. RMS voltage as a function of frequency



Max. RMS voltage as a function of frequency



NPPS

Non-inductive construction using Polypropylene film & Foil with flame retardant epoxy resin coating

■ Features

- High pulse duty
- Very low dissipation factor
- Negative capacitance change versus temperature
- Coated with flame-retardant(UL94 V-0) epoxy resin.
- RoHS directive compliant

■ Applications

- For high pulse and high frequency applications e.g.
- Switch mode power supplies
- Converter in drives and power electronics
- Deflection systems in monitors and TV-sets

■ Specifications

Reference Standard	IEC 60384-17
Climatic Category	40 / 105 / 21
Rated Temperature	105℃ +85℃~+105℃ decreasing factor 1.0% / ℃ for V_R(dc)
Operation Temperature Range	-40℃~105℃
Rated Voltage	630Vdc, 1000Vdc, 1250Vdc, 1600Vdc, 2000Vdc
Capacitance Range	0.00047μF~0.56μF
Capacitance Tolerance	G : ±2% H : ±3% J : ±5% K : ±10% M : ±20% ※Standard : J : ±5%, Other Tolerance Grade : available on request.
Voltage Proof	2.5U_R(dc) / 3sec
Dissipation Factor	≤0.1%(at 1kHz 20℃)
Rated Voltage	≥30,000MΩ C_R≤0.33μF 100Vdc 60sec 20℃
	≥10,000Ω·F C_R〉0.33μF 100Vdc 60sec 20℃

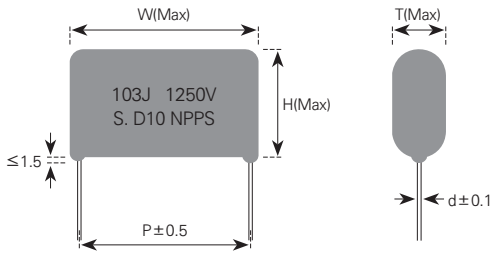
■ Part Number System

NPPS	630V	182	J	10	S	5	
Part-1	Part-2	Part-3	Part-4	Part-5	Part-6	Part-7	Part-8

Part-1 : Series Code(Series Name)-NPPS
Part-2 : Rated Voltage(DC : 630V~2000V)
Part-3 : Rated Capacitance Value(0.00047μF~0.560μF / 471~564)
Part-4 : Capacitance Tolerance(G : ±2% H : ±3% J : ±5% K : ±10% M : ±20%)
Part-5 : Lead Spacing(10mm / 15mm / 22.5mm / 27.5mm)
Part-6 : Forming-Type and Packing Code →
Part-7 : Size Number(1~4 : Min-Type / 5 : Standard-Type / 6~9 : Large-Type)
Part-8 : Internal Use

CODE	STYLE
B	Bending Forming
C	Straight Cutting
D	D-Type Forming
L	B-Type long Forming
M	C-Type long Forming
S	Straight
X	B-Type Forming
Y	C-Type Forming
Z	Z-Type Forming
T	A-Type Tapping
U	B-Type Tapping
V	C-Type Tapping

■ Dimensions



630Vdc(400Vac)					
Cap. (μF)	Dimensions(mm)			Pitch - d	PART NUMBER
	W (max.)	H (max.)	T (max.)		
0.0018	13.0	9.5	5.0	10.0-0.6	NPPS 630V 182J 10S 5 ____
0.0022	13.0	9.5	5.0	10.0-0.6	NPPS 630V 222J 10S 5 ____
0.0027	13.0	10.0	5.5	10.0-0.6	NPPS 630V 272J 10S 5 ____
0.0033	13.0	9.5	5.0	10.0-0.6	NPPS 630V 332J 10S 5 ____
0.0039	13.0	10.0	5.5	10.0-0.6	NPPS 630V 392J 10S 5 ____
0.0047	13.0	11.0	5.5	10.0-0.6	NPPS 630V 472J 10S 5 ____
0.0056	13.0	11.5	6.0	10.0-0.6	NPPS 630V 562J 10S 5 ____
0.0068	13.0	12.0	6.5	10.0-0.6	NPPS 630V 682J 10S 5 ____
0.0082	13.0	12.5	7.0	10.0-0.6	NPPS 630V 822J 10S 5 ____
0.01	13.0	13.0	8.0	10.0-0.6	NPPS 630V 103J 10S 5 ____
0.012	13.0	13.5	8.5	10.0-0.6	NPPS 630V 123J 10S 5 ____
0.015	13.0	14.5	9.5	10.0-0.6	NPPS 630V 153J 10S 5 ____
0.018	13.0	15.5	10.0	10.0-0.6	NPPS 630V 183J 10S 5 ____
0.022	13.0	16.5	11.0	10.0-0.6	NPPS 630V 223J 10S 5 ____
0.027	13.0	17.5	12.5	10.0-0.6	NPPS 630V 273J 10S 5 ____
0.0082	19.0	10.5	6.0	15.0-0.8	NPPS 630V 822J 15S 5 ____
0.01	19.0	10.5	6.0	15.0-0.8	NPPS 630V 103J 15S 5 ____
0.012	19.0	11.0	6.5	15.0-0.8	NPPS 630V 123J 15S 5 ____
0.015	19.0	10.5	6.0	15.0-0.8	NPPS 630V 153J 15S 5 ____
0.018	19.0	11.5	6.5	15.0-0.8	NPPS 630V 183J 15S 5 ____
0.022	19.0	12.0	7.0	15.0-0.8	NPPS 630V 223J 15S 5 ____
0.027	19.0	13.0	7.5	15.0-0.8	NPPS 630V 273J 15S 5 ____
0.033	19.0	13.5	8.5	15.0-0.8	NPPS 630V 333J 15S 5 ____
0.039	19.0	14.0	9.0	15.0-0.8	NPPS 630V 393J 15S 5 ____
0.047	19	15	10	15.0-0.8	NPPS 630V 473J 15S 5 ____
0.056	19.0	16.5	10.0	15.0-0.8	NPPS 630V 563J 15S 5 ____
0.068	19.0	17.5	11.0	15.0-0.8	NPPS 630V 683J 15S 5 ____
0.082	19.0	19.0	12.0	15.0-0.8	NPPS 630V 823J 15S 5 ____
0.1	19.0	20.0	13.5	15.0-0.8	NPPS 630V 104J 15S 5 ____
0.12	19.0	21.5	14.5	15.0-0.8	NPPS 630V 124J 15S 5 ____
0.022	28.0	12.0	7.0	22.5-0.8	NPPS 630V 223J 22.5S 5 ____
0.027	28.0	12.0	7.0	22.5-0.8	NPPS 630V 273J 22.5S 5 ____
0.033	28.0	12.0	6.5	22.5-0.8	NPPS 630V 333J 22.5S 5 ____
0.039	28.0	12.5	7.0	22.5-0.8	NPPS 630V 393J 22.5S 5 ____
0.047	28.0	13.0	7.5	22.5-0.8	NPPS 630V 473J 22.5S 5 ____
0.056	28.0	13.5	8.0	22.5-0.8	NPPS 630V 563J 22.5S 5 ____
0.068	28.0	14.0	9.0	22.5-0.8	NPPS 630V 683J 22.5S 5 ____
0.082	28.0	15.0	9.5	22.5-0.8	NPPS 630V 823J 22.5S 5 ____
0.1	28.0	15.5	10.5	22.5-0.8	NPPS 630V 104J 22.5S 5 ____
0.12	28.0	17.5	10.5	22.5-0.8	NPPS 630V 124J 22.5S 5 ____
0.15	28.0	18.5	12.0	22.5-0.8	NPPS 630V 154J 22.5S 5 ____
0.18	28.0	20.0	13.0	22.5-0.8	NPPS 630V 184J 22.5S 5 ____
0.22	28.0	22.0	13.5	22.5-0.8	NPPS 630V 224J 22.5S 5 ____
0.27	28.0	23.5	15.0	22.5-0.8	NPPS 630V 274J 22.5S 5 ____
0.33	28.0	25.0	17.0	22.5-0.8	NPPS 630V 334J 22.5S 5 ____
0.39	28.0	26.5	18.5	22.5-0.8	NPPS 630V 394J 22.5S 5 ____
0.022	31.0	12.0	7.0	27.5-0.8	NPPS 630V 223J 27.5S 5 ____
0.027	31.0	12.5	7.5	27.5-0.8	NPPS 630V 273J 27.5S 5 ____
0.033	31.0	12.5	7.0	27.5-0.8	NPPS 630V 333J 27.5S 5 ____
0.039	31.0	12.0	7.0	27.5-0.8	NPPS 630V 393J 27.5S 5 ____
0.047	31.0	12.5	7.5	27.5-0.8	NPPS 630V 473J 27.5S 5 ____
0.056	31.0	13.0	8.0	27.5-0.8	NPPS 630V 563J 27.5S 5 ____
0.068	31	14	8.5	27.5-0.8	NPPS 630V 683J 27.5S 5 ____
0.082	31.0	14.5	9.5	27.5-0.8	NPPS 630V 823J 27.5S 5 ____
0.1	31.0	15.5	10.0	27.5-0.8	NPPS 630V 104J 27.5S 5 ____
0.12	31.0	17.0	10.5	27.5-0.8	NPPS 630V 124J 27.5S 5 ____
0.15	31.0	18.5	11.5	27.5-0.8	NPPS 630V 154J 27.5S 5 ____
0.18	31.0	19.5	12.5	27.5-0.8	NPPS 630V 184J 27.5S 5 ____
0.22	31.0	21.5	13.0	27.5-0.8	NPPS 630V 224J 27.5S 5 ____
0.27	31.0	23.0	14.5	27.5-0.8	NPPS 630V 274J 27.5S 5 ____
0.33	31.0	25.5	15.5	27.5-0.8	NPPS 630V 334J 27.5S 5 ____
0.39	31.0	27.0	17.0	27.5-0.8	NPPS 630V 394J 27.5S 5 ____
0.47	31.0	28.5	18.5	27.5-0.8	NPPS 630V 474J 27.5S 5 ____
0.56	31.0	30.5	20.5	27.5-0.8	NPPS 630V 564J 27.5S 5 ____

1000Vdc(600Vac)

Cap. (μF)	Dimensions(mm)			Pitch - d	PART NUMBER
	W (max.)	H (max.)	T (max.)		
0.001	13.0	9.5	5.0	10.0-0.6	NPPS 1000V 102J 10S 5 ____
0.0012	13.0	9.5	5.0	10.0-0.6	NPPS 1000V 122J 10S 5 ____
0.0015	13.0	10.0	5.5	10.0-0.6	NPPS 1000V 152J 10S 5 ____
0.0018	13.0	9.5	5.0	10.0-0.6	NPPS 1000V 182J 10S 5 ____
0.0022	13.0	10.0	5.5	10.0-0.6	NPPS 1000V 222J 10S 5 ____
0.0027	13.0	10.5	6.0	10.0-0.6	NPPS 1000V 272J 10S 5 ____
0.0033	13.0	11.5	6.0	10.0-0.6	NPPS 1000V 332J 10S 5 ____
0.0039	13.0	11.5	6.5	10.0-0.6	NPPS 1000V 392J 10S 5 ____
0.0047	13.0	12.5	7.0	10.0-0.6	NPPS 1000V 472J 10S 5 ____
0.0056	13.0	13.0	7.5	10.0-0.6	NPPS 1000V 562J 10S 5 ____
0.0068	13.0	13.5	8.5	10.0-0.6	NPPS 1000V 682J 10S 5 ____
0.0082	13	14	9	10.0-0.6	NPPS 1000V 822J 10S 5 ____
0.01	13.0	15.0	10.0	10.0-0.6	NPPS 1000V 103J 10S 5 ____
0.012	13.0	16.0	11.0	10.0-0.6	NPPS 1000V 123J 10S 5 ____
0.015	13.0	17.0	12.0	10.0-0.6	NPPS 1000V 153J 10S 5 ____
0.0047	19.0	9.5	5.0	15.0-0.8	NPPS 1000V 472J 15S 5 ____
0.0056	19.0	9.5	5.5	15.0-0.8	NPPS 1000V 562J 15S 5 ____
0.0068	19.0	10.0	5.5	15.0-0.8	NPPS 1000V 682J 15S 5 ____
0.0082	19.0	10.5	6.0	15.0-0.8	NPPS 1000V 822J 15S 5 ____
0.01	19.0	11.0	6.5	15.0-0.8	NPPS 1000V 103J 15S 5 ____
0.012	19.0	11.5	7.0	15.0-0.8	NPPS 1000V 123J 15S 5 ____
0.015	19.0	12.5	7.5	15.0-0.8	NPPS 1000V 153J 15S 5 ____
0.018	19.0	13.0	8.0	15.0-0.8	NPPS 1000V 183J 15S 5 ____
0.022	19.0	14.0	9.0	15.0-0.8	NPPS 1000V 223J 15S 5 ____
0.027	19.0	15.0	9.5	15.0-0.8	NPPS 1000V 273J 15S 5 ____
0.033	19.0	16.5	10.0	15.0-0.8	NPPS 1000V 333J 15S 5 ____
0.039	19.0	17.5	11.0	15.0-0.8	NPPS 1000V 393J 15S 5 ____
0.047	19.0	18.5	12.0	15.0-0.8	NPPS 1000V 473J 15S 5 ____
0.056	19.0	19.5	13.0	15.0-0.8	NPPS 1000V 563J 15S 5 ____
0.068	19.0	21.0	14.0	15.0-0.8	NPPS 1000V 683J 15S 5 ____
0.012	28.0	12.0	7.0	22.5-0.8	NPPS 1000V 123J 22.5S 5 ____
0.015	28.0	12.5	7.5	22.5-0.8	NPPS 1000V 153J 22.5S 5 ____
0.018	28.0	12.5	7.5	22.5-0.8	NPPS 1000V 183J 22.5S 5 ____
0.022	28.0	12.0	7.0	22.5-0.8	NPPS 1000V 223J 22.5S 5 ____
0.027	28	13	7.5	22.5-0.8	NPPS 1000V 273J 22.5S 5 ____
0.033	28.0	13.5	8.0	22.5-0.8	NPPS 1000V 333J 22.5S 5 ____
0.039	28.0	14.0	9.0	22.5-0.8	NPPS 1000V 393J 22.5S 5 ____
0.047	28.0	14.5	9.5	22.5-0.8	NPPS 1000V 473J 22.5S 5 ____
0.056	28.0	15.5	10.0	22.5-0.8	NPPS 1000V 563J 22.5S 5 ____
0.068	28.0	17.5	10.5	22.5-0.8	NPPS 1000V 683J 22.5S 5 ____
0.082	28.0	18.0	11.5	22.5-0.8	NPPS 1000V 823J 22.5S 5 ____
0.1	28.0	19.5	12.5	22.5-0.8	NPPS 1000V 104J 22.5S 5 ____
0.12	28.0	21.5	13.0	22.5-0.8	NPPS 1000V 124J 22.5S 5 ____
0.15	28.0	23.0	14.5	22.5-0.8	NPPS 1000V 154J 22.5S 5 ____
0.18	28.0	25.0	15.5	22.5-0.8	NPPS 1000V 184J 22.5S 5 ____
0.22	28.0	27.0	17.0	22.5-0.8	NPPS 1000V 224J 22.5S 5 ____
0.27	28.0	29.0	19.0	22.5-0.8	NPPS 1000V 274J 22.5S 5 ____
0.015	31.0	12.5	7.5	27.5-0.8	NPPS 1000V 153J 27.5S 5 ____
0.018	31.0	13.0	7.5	27.5-0.8	NPPS 1000V 183J 27.5S 5 ____
0.022	31.0	13.0	7.5	27.5-0.8	NPPS 1000V 223J 27.5S 5 ____
0.027	31.0	12.5	7.5	27.5-0.8	NPPS 1000V 273J 27.5S 5 ____
0.033	31.0	13.0	8.0	27.5-0.8	NPPS 1000V 333J 27.5S 5 ____
0.039	31.0	13.5	8.5	27.5-0.8	NPPS 1000V 393J 27.5S 5 ____
0.047	31.0	14.5	9.0	27.5-0.8	NPPS 1000V 473J 27.5S 5 ____
0.056	31.0	15.0	10.0	27.5-0.8	NPPS 1000V 563J 27.5S 5 ____
0.068	31.0	16.0	11.0	27.5-0.8	NPPS 1000V 683J 27.5S 5 ____
0.082	31	18	11	27.5-0.8	NPPS 1000V 823J 27.5S 5 ____
0.1	31	19	12	27.5-0.8	NPPS 1000V 104J 27.5S 5 ____
0.12	31	21	12.5	27.5-0.8	NPPS 1000V 124J 27.5S 5 ____
0.15	31	22.5	14	27.5-0.8	NPPS 1000V 154J 27.5S 5 ____
0.18	31	24.5	15	27.5-0.8	NPPS 1000V 184J 27.5S 5 ____
0.22	31	26.5	16.5	27.5-0.8	NPPS 1000V 224J 27.5S 5 ____
0.27	31	28	18.5	27.5-0.8	NPPS 1000V 274J 27.5S 5 ____
0.33	31	30.5	20.5	27.5-0.8	NPPS 1000V 334J 27.5S 5 ____

1250Vdc(600Vac)

Cap. (μF)	Dimensions(mm)			Pitch - d	PART NUMBER
	W (max.)	H (max.)	T (max.)		
0.022	31	13	7.5	27.5-0.8	NPPS 1250V 223J 27.5S 5 ____
0.027	31	13.5	8.5	27.5-0.8	NPPS 1250V 273J 27.5S 5 ____
0.033	31	14.5	9	27.5-0.8	NPPS 1250V 333J 27.5S 5 ____
0.039	31	15	10	27.5-0.8	NPPS 1250V 393J 27.5S 5 ____
0.047	31	16	10.5	27.5-0.8	NPPS 1250V 473J 27.5S 5 ____
0.056	31	17.5	11	27.5-0.8	NPPS 1250V 563J 27.5S 5 ____

0.068	31	18.5	12	27.5-0.8	NPPS 1250V 683J 27.5S 5 ____
0.082	31	20.5	12	27.5-0.8	NPPS 1250V 823J 27.5S 5 ____
0.1	31	22	13.5	27.5-0.8	NPPS 1250V 104J 27.5S 5 ____
0.12	31	24	14	27.5-0.8	NPPS 1250V 124J 27.5S 5 ____
0.15	31	25.5	16	27.5-0.8	NPPS 1250V 154J 27.5S 5 ____
0.18	31	27.5	17.5	27.5-0.8	NPPS 1250V 184J 27.5S 5 ____
0.22	31	29.5	19.5	27.5-0.8	NPPS 1250V 224J 27.5S 5 ____

1600Vdc(650Vac)

Cap. (μF)	Dimensions(mm)			Pitch - d	PART NUMBER
	W (max.)	H (max.)	T (max.)		
0.001	19	10.5	6	15.0-0.8	NPPS 1600V 102J 15S 5 ____
0.0012	19	11	6.5	15.0-0.8	NPPS 1600V 122J 15S 5 ____
0.0015	19	10.5	6.5	15.0-0.8	NPPS 1600V 152J 15S 5 ____
0.0018	19	11	6.5	15.0-0.8	NPPS 1600V 182J 15S 5 ____
0.0022	19	10.5	6	15.0-0.8	NPPS 1600V 222J 15S 5 ____
0.0027	19	11	6.5	15.0-0.8	NPPS 1600V 272J 15S 5 ____
0.0033	19	11.5	7	15.0-0.8	NPPS 1600V 332J 15S 5 ____
0.0039	19	12	7.5	15.0-0.8	NPPS 1600V 392J 15S 5 ____
0.0047	19	13	7.5	15.0-0.8	NPPS 1600V 472J 15S 5 ____
0.0056	19	13.5	8.5	15.0-0.8	NPPS 1600V 562J 15S 5 ____
0.0068	19	14	9	15.0-0.8	NPPS 1600V 682J 15S 5 ____
0.0082	19	15	10	15.0-0.8	NPPS 1600V 822J 15S 5 ____
0.01	19	17	10	15.0-0.8	NPPS 1600V 103J 15S 5 ____
0.012	19	17.5	11	15.0-0.8	NPPS 1600V 123J 15S 5 ____
0.015	19	19	12	15.0-0.8	NPPS 1600V 153J 15S 5 ____
0.018	19	20	13.5	15.0-0.8	NPPS 1600V 183J 15S 5 ____
0.022	19	21.5	15	15.0-0.8	NPPS 1600V 223J 15S 5 ____
0.0033	28	12.5	7.5	22.5-0.8	NPPS 1600V 332J 22.5S 5 ____
0.0039	28	13	8	22.5-0.8	NPPS 1600V 392J 22.5S 5 ____
0.0047	28	12.5	7.5	22.5-0.8	NPPS 1600V 472J 22.5S 5 ____
0.0056	28	13	8	22.5-0.8	NPPS 1600V 562J 22.5S 5 ____
0.0068	28	12.5	7	22.5-0.8	NPPS 1600V 682J 22.5S 5 ____
0.0082	28	13	7.5	22.5-0.8	NPPS 1600V 822J 22.5S 5 ____
0.01	28	13.5	8.5	22.5-0.8	NPPS 1600V 103J 22.5S 5 ____
0.012	28	14	9	22.5-0.8	NPPS 1600V 123J 22.5S 5 ____
0.015	28	15	10	22.5-0.8	NPPS 1600V 153J 22.5S 5 ____
0.018	28	16	10.5	22.5-0.8	NPPS 1600V 183J 22.5S 5 ____
0.022	28	17.5	11	22.5-0.8	NPPS 1600V 223J 22.5S 5 ____
0.027	28	19	12	22.5-0.8	NPPS 1600V 273J 22.5S 5 ____
0.033	28	21	12.5	22.5-0.8	NPPS 1600V 333J 22.5S 5 ____
0.039	28	22	13.5	22.5-0.8	NPPS 1600V 393J 22.5S 5 ____
0.047	28	23.5	15	22.5-0.8	NPPS 1600V 473J 22.5S 5 ____
0.056	28	25.5	15.5	22.5-0.8	NPPS 1600V 563J 22.5S 5 ____
0.068	28	27	17	22.5-0.8	NPPS 1600V 683J 22.5S 5 ____
0.082	28	29	19	22.5-0.8	NPPS 1600V 823J 22.5S 5 ____
0.0039	31	13	7.5	27.5-0.8	NPPS 1600V 392J 27.5S 5 ____
0.0047	31	13.5	8	27.5-0.8	NPPS 1600V 472J 27.5S 5 ____
0.0056	31	13	7.5	27.5-0.8	NPPS 1600V 562J 27.5S 5 ____
0.0068	31	13.5	8.5	27.5-0.8	NPPS 1600V 682J 27.5S 5 ____
0.0082	31	12.5	7.5	27.5-0.8	NPPS 1600V 822J 27.5S 5 ____
0.01	31	13.5	8	27.5-0.8	NPPS 1600V 103J 27.5S 5 ____
0.012	31	14	8.5	27.5-0.8	NPPS 1600V 123J 27.5S 5 ____
0.015	31	14.5	9.5	27.5-0.8	NPPS 1600V 153J 27.5S 5 ____
0.018	31	15.5	10.5	27.5-0.8	NPPS 1600V 183J 27.5S 5 ____
0.022	31	17.5	10.5	27.5-0.8	NPPS 1600V 223J 27.5S 5 ____
0.027	31	18.5	11.5	27.5-0.8	NPPS 1600V 273J 27.5S 5 ____
0.033	31	20.5	12	27.5-0.8	NPPS 1600V 333J 27.5S 5 ____
0.039	31	21.5	13	27.5-0.8	NPPS 1600V 393J 27.5S 5 ____
0.047	31	22.5	14.5	27.5-0.8	NPPS 1600V 473J 27.5S 5 ____
0.056	31	25	15	27.5-0.8	NPPS 1600V 563J 27.5S 5 ____
0.068	31	26.5	16.5	27.5-0.8	NPPS 1600V 683J 27.5S 5 ____
0.082	31	28	18	27.5-0.8	NPPS 1600V 823J 27.5S 5 ____
0.1	31	30	20	27.5-0.8	NPPS 1600V 104J 27.5S 5 ____

2000Vdc(700Vac)

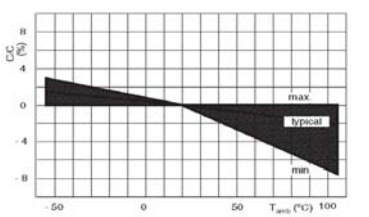
Cap. (μF)	Dimensions(mm)			Pitch - d	PART NUMBER
	W (max.)	H (max.)	T (max.)		
0.00047	19	11	6.5	15.0-0.8	NPPS 2000V 471J 15S 5 ____
0.00056	19	11.5	7	15.0-0.8	NPPS 2000V 561J 15S 5 ____
0.00068	19	11.5	7.5	15.0-0.8	NPPS 2000V 681J 15S 5 ____
0.00082	19	12.5	7.5	15.0-0.8	NPPS 2000V 821J 15S 5 ____
0.001	19	11	6.5	15.0-0.8	NPPS 2000V 102J 15S 5 ____
0.0012	19	12	6.5	15.0-0.8	NPPS 2000V 122J 15S 5 ____
0.0015	19	11	6.5	15.0-0.8	NPPS 2000V 152J 15S 5 ____
0.0018	19	12	7	15.0-0.8	NPPS 2000V 182J 15S 5 ____

0.0022	19	12.5	7.5	15.0-0.8	NPPS 2000V 222J 15S 5 _____
0.0027	19	13.5	8	15.0-0.8	NPPS 2000V 272J 15S 5 _____
0.0033	19	14	9	15.0-0.8	NPPS 2000V 332J 15S 5 _____
0.0039	19	14.5	9.5	15.0-0.8	NPPS 2000V 392J 15S 5 _____
0.0047	19	15.5	10	15.0-0.8	NPPS 2000V 472J 15S 5 _____
0.0056	19	17	10.5	15.0-0.8	NPPS 2000V 562J 15S 5 _____
0.0068	19	18	11.5	15.0-0.8	NPPS 2000V 682J 15S 5 _____
0.0082	19	19	12.5	15.0-0.8	NPPS 2000V 822J 15S 5 _____
0.01	19	20.5	13.5	15.0-0.8	NPPS 2000V 103J 15S 5 _____
0.012	19	22	15	15.0-0.8	NPPS 2000V 123J 15S 5 _____
0.0018	28	13	7.5	22.5-0.8	NPPS 2000V 182J 22.5S 5 _____
0.0022	28	13.5	8	22.5-0.8	NPPS 2000V 222J 22.5S 5 _____
0.0027	28	14	9	22.5-0.8	NPPS 2000V 272J 22.5S 5 _____
0.0033	28	12.5	7.5	22.5-0.8	NPPS 2000V 332J 22.5S 5 _____
0.0039	28	13	8	22.5-0.8	NPPS 2000V 392J 22.5S 5 _____
0.0047	28	12.5	7.5	22.5-0.8	NPPS 2000V 472J 22.5S 5 _____
0.0056	28	13	8	22.5-0.8	NPPS 2000V 562J 22.5S 5 _____
0.0068	28	14	8.5	22.5-0.8	NPPS 2000V 682J 22.5S 5 _____
0.0082	28	14.5	9.5	22.5-0.8	NPPS 2000V 822J 22.5S 5 _____
0.01	28	15	10	22.5-0.8	NPPS 2000V 103J 22.5S 5 _____
0.012	28	16	11	22.5-0.8	NPPS 2000V 123J 22.5S 5 _____
0.015	28	18	11	22.5-0.8	NPPS 2000V 153J 22.5S 5 _____
0.018	28	19	12	22.5-0.8	NPPS 2000V 183J 22.5S 5 _____
0.022	28	21	12.5	22.5-0.8	NPPS 2000V 223J 22.5S 5 _____

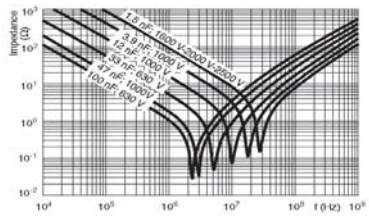
0.027	28	22.5	14	22.5-0.8	NPPS 2000V 273J 22.5S 5 _____
0.033	28	24.5	15	22.5-0.8	NPPS 2000V 333J 22.5S 5 _____
0.039	28	26	16	22.5-0.8	NPPS 2000V 393J 22.5S 5 _____
0.047	28	27.5	18	22.5-0.8	NPPS 2000V 473J 22.5S 5 _____
0.056	28	29.5	19.5	22.5-0.8	NPPS 2000V 563J 22.5S 5 _____
0.0027	31	14	8.5	27.5-0.8	NPPS 2000V 272J 27.5S 5 _____
0.0033	31	14.5	9	27.5-0.8	NPPS 2000V 332J 27.5S 5 _____
0.0039	31	13	7.5	27.5-0.8	NPPS 2000V 392J 27.5S 5 _____
0.0047	31	13.5	8	27.5-0.8	NPPS 2000V 472J 27.5S 5 _____
0.0056	31	13	7.5	27.5-0.8	NPPS 2000V 562J 27.5S 5 _____
0.0068	31	13.5	8.5	27.5-0.8	NPPS 2000V 682J 27.5S 5 _____
0.0082	31	14	9	27.5-0.8	NPPS 2000V 822J 27.5S 5 _____
0.01	31	15	9.5	27.5-0.8	NPPS 2000V 103J 27.5S 5 _____
0.012	31	15.5	10.5	27.5-0.8	NPPS 2000V 123J 27.5S 5 _____
0.015	31	17.5	11	27.5-0.8	NPPS 2000V 153J 27.5S 5 _____
0.018	31	18.5	11.5	27.5-0.8	NPPS 2000V 183J 27.5S 5 _____
0.022	31	19.5	13	27.5-0.8	NPPS 2000V 223J 27.5S 5 _____
0.027	31	22	13.5	27.5-0.8	NPPS 2000V 273J 27.5S 5 _____
0.033	31	23	15	27.5-0.8	NPPS 2000V 333J 27.5S 5 _____
0.039	31	25.5	15.5	27.5-0.8	NPPS 2000V 393J 27.5S 5 _____
0.047	31	27	17	27.5-0.8	NPPS 2000V 473J 27.5S 5 _____
0.056	31	28.5	18.5	27.5-0.8	NPPS 2000V 563J 27.5S 5 _____
0.068	31	30.5	20.5	27.5-0.8	NPPS 2000V 683J 27.5S 5 _____

Electrical Characteristics (Typical Data)

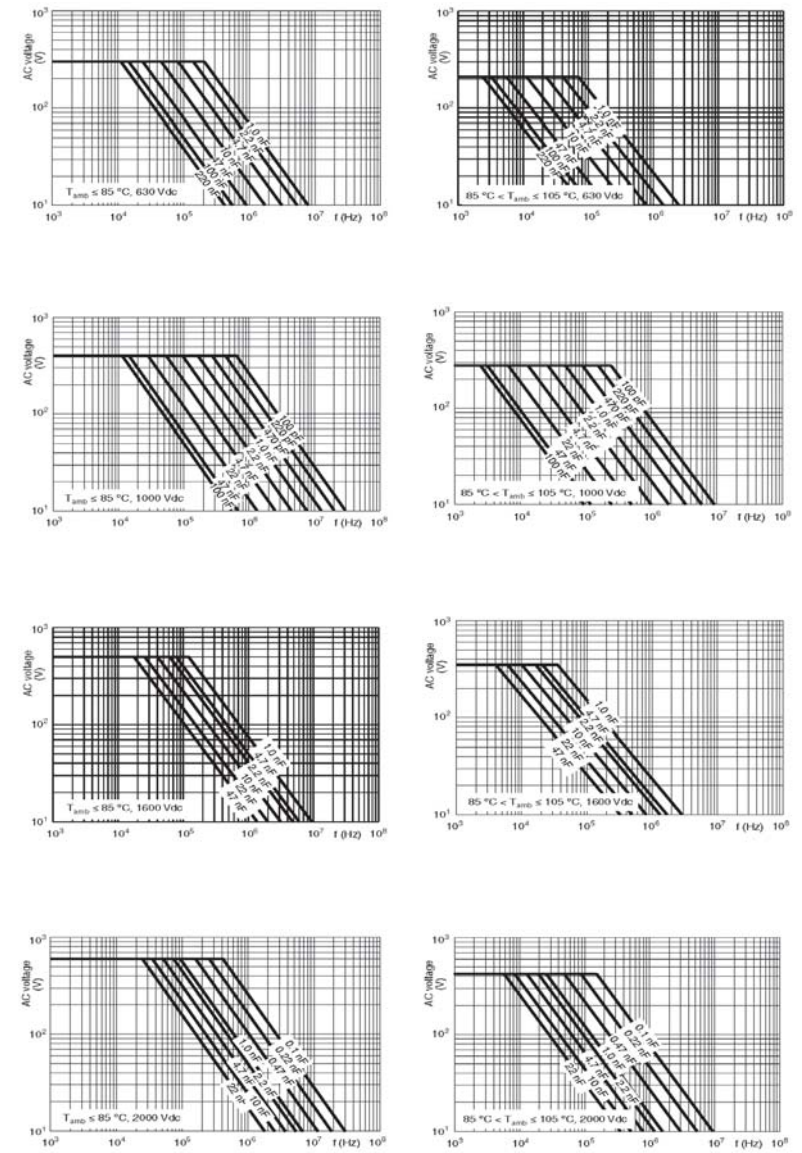
Capacitance as a function of ambient temperature



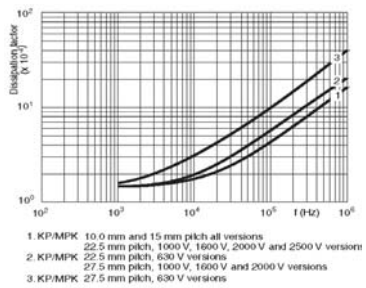
Impedance as a function of frequency



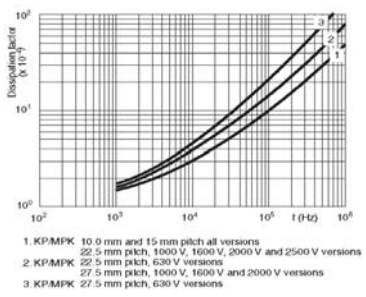
Max. RMS voltage as a function of frequency



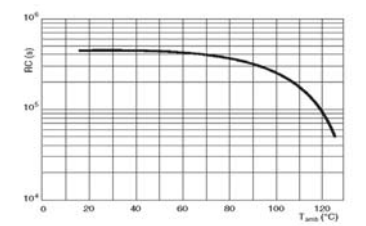
Tangent of loss angle



Maximun curves



Insulation resistance as a function of ambient temperature



BNPS

Non-inductive construction using Polypropylene film & Foil with flame retardant plastic case and epoxy resin filled.

■ Features

- High pulse duty
- Very low dissipation factor
- Negative capacitance change versus temperature
- Plastic case(UL94 V-0), Epoxy resin sealing.
- RoHS directive compliant

■ Applications

- For high pulse and high frequency applications e.g.
- Switch mode power supplies
- Converter in drives and power electronics
- Deflection systems in monitors and TV-sets

■ Specifications

Reference Standard	IEC 60384-17
Climatic Category	40 / 105 / 21
Rated Temperature	105℃ +85℃~+105℃ decreasing factor 1.0% / ℃ for V_R(dc)
Operation Temperature Range	-40℃~105℃
Rated Voltage	630Vdc, 1000Vdc, 1250Vdc, 1600Vdc, 2000Vdc
Capacitance Range	0.00047μF~0.56μF
Capacitance Tolerance	G : ±2% H : ±3% J : ±5% K : ±10% M : ±20% ※Standard : J : ±5%, Other Tolerance Grade : available on request.
Voltage Proof	2.5U_R(dc) / 3sec
Dissipation Factor	≤0.1%(at 1kHz 20℃)
Rated Voltage	≥30,000MΩ C_R≤0.33μF 100Vdc 60sec 20℃
	≥10,000Ω·F C_R〉0.33μF 100Vdc 60sec 20℃

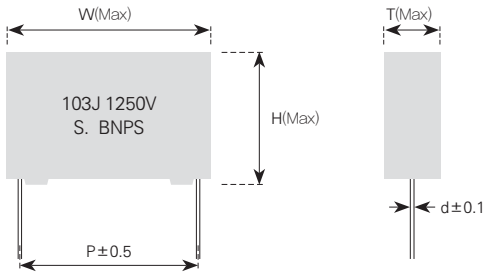
■ Part Number System

BNPS	630V	182	J	10	S	5	
Part-1	Part-2	Part-3	Part-4	Part-5	Part-6	Part-7	Part-8

Part-1 : Series Code(Series Name)-BNPS
Part-2 : Rated Voltage(DC : 630V~2000V)
Part-3 : Rated Capacitance Value(0.00047μF~0.560μF / 471~564)
Part-4 : Capacitance Tolerance(G : ±2% H : ±3% J : ±5% K : ±10% M : ±20%)
Part-5 : Lead Spacing(10mm / 15mm / 22.5mm / 27.5mm)
Part-6 : Forming-Type and Packing Code →
Part-7 : Size Number(1~4 : Min-Type / 5 : Standard-Type / 6~9 : Large-Type)
Part-8 : Internal Use

CODE	STYLE
B	Bending Forming
C	Straight Cutting
D	D-Type Forming
L	B-Type long Forming
M	C-Type long Forming
S	Straight
X	B-Type Forming
Y	C-Type Forming
Z	Z-Type Forming
T	A-Type Tapping
U	B-Type Tapping
V	C-Type Tapping

■ Dimensions



630Vdc(400Vac)

Cap. (μF)	Dimensions(mm) W (max.)	H (max.)	T (max.)	Pitch - d	PART NUMBER
0.0018	13.0	10.0	5.0	10.0-0.6	BNPS 630V 182J 10S 5 ____
0.0022	13.0	10.0	5.0	10.0-0.6	BNPS 630V 222J 10S 5 ____
0.0027	13.0	10.0	5.0	10.0-0.6	BNPS 630V 272J 10S 5 ____
0.0033	13.0	10.0	5.0	10.0-0.6	BNPS 630V 332J 10S 5 ____
0.0039	13.0	10.0	5.0	10.0-0.6	BNPS 630V 392J 10S 5 ____
0.0047	13.0	10.0	5.0	10.0-0.6	BNPS 630V 472J 10S 5 ____
0.0056	13.0	11.0	5.0	10.0-0.6	BNPS 630V 562J 10S 5 ____
0.0068	13.0	12.0	6.0	10.0-0.6	BNPS 630V 682J 10S 5 ____
0.0082	13.0	12.0	6.0	10.0-0.6	BNPS 630V 822J 10S 5 ____
0.01	13.0	13.0	7.0	10.0-0.6	BNPS 630V 103J 10S 5 ____
0.012	13.0	14.0	8.0	10.0-0.6	BNPS 630V 123J 10S 5 ____
0.0082	18.0	11.0	5.0	15.0-0.8	BNPS 630V 822J 15S 5 ____
0.01	18.0	11.0	5.0	15.0-0.8	BNPS 630V 103J 15S 5 ____
0.012	18.0	11.0	5.0	15.0-0.8	BNPS 630V 123J 15S 5 ____
0.015	18.0	11.0	5.0	15.0-0.8	BNPS 630V 153J 15S 5 ____
0.018	18.0	12.0	6.0	15.0-0.8	BNPS 630V 183J 15S 5 ____
0.022	18.0	12.0	6.0	15.0-0.8	BNPS 630V 223J 15S 5 ____
0.027	18.0	13.0	7.0	15.0-0.8	BNPS 630V 273J 15S 5 ____
0.033	18.0	13.5	7.5	15.0-0.8	BNPS 630V 333J 15S 5 ____
0.039	18.0	14.5	8.5	15.0-0.8	BNPS 630V 393J 15S 5 ____
0.047	18.0	17.5	8.5	15.0-0.8	BNPS 630V 473J 15S 5 ____
0.056	18.0	16.0	10.0	15.0-0.8	BNPS 630V 563J 15S 5 ____
0.068	18.0	18.0	10.0	15.0-0.8	BNPS 630V 683J 15S 5 ____
0.082	18.0	19.0	11.0	15.0-0.8	BNPS 630V 823J 15S 5 ____
0.022	26.0	15.0	6.0	22.5-0.8	BNPS 630V 223J 22.5S 5 ____
0.027	26.0	15.0	6.0	22.5-0.8	BNPS 630V 273J 22.5S 5 ____
0.033	26.0	15.0	6.0	22.5-0.8	BNPS 630V 333J 22.5S 5 ____
0.039	26.0	15.0	6.0	22.5-0.8	BNPS 630V 393J 22.5S 5 ____
0.047	26.0	15.0	6.0	22.5-0.8	BNPS 630V 473J 22.5S 5 ____
0.056	26.0	16.5	7.0	22.5-0.8	BNPS 630V 563J 22.5S 5 ____
0.068	26.0	17.0	8.5	22.5-0.8	BNPS 630V 683J 22.5S 5 ____
0.082	26.0	17.0	8.5	22.5-0.8	BNPS 630V 823J 22.5S 5 ____
0.1	26.0	18.0	9.0	22.5-0.8	BNPS 630V 104J 22.5S 5 ____
0.12	26.0	19.0	10.0	22.5-0.8	BNPS 630V 124J 22.5S 5 ____
0.15	26.0	22.0	12.0	22.5-0.8	BNPS 630V 154J 22.5S 5 ____
0.18	26.0	22.0	12.0	22.5-0.8	BNPS 630V 184J 22.5S 5 ____
0.22	26.0	25.0	15.0	22.5-0.8	BNPS 630V 224J 22.5S 5 ____
0.27	26.0	25.0	15.0	22.5-0.8	BNPS 630V 274J 22.5S 5 ____
0.022	32.0	18.0	9.0	27.5-0.8	BNPS 630V 223J 27.5S 5 ____
0.027	32.0	18.0	9.0	27.5-0.8	BNPS 630V 273J 27.5S 5 ____
0.033	32.0	18.0	9.0	27.5-0.8	BNPS 630V 333J 27.5S 5 ____
0.039	32.0	18.0	9.0	27.5-0.8	BNPS 630V 393J 27.5S 5 ____
0.047	32.0	18.0	9.0	27.5-0.8	BNPS 630V 473J 27.5S 5 ____
0.056	32.0	18.0	9.0	27.5-0.8	BNPS 630V 563J 27.5S 5 ____
0.068	32.0	18.0	9.0	27.5-0.8	BNPS 630V 683J 27.5S 5 ____
0.082	32.0	18.0	9.0	27.5-0.8	BNPS 630V 823J 27.5S 5 ____
0.1	32.0	18.0	9.0	27.5-0.8	BNPS 630V 104J 27.5S 5 ____
0.12	32.0	20.0	10.0	27.5-0.8	BNPS 630V 124J 27.5S 5 ____
0.15	32.0	20.0	11.0	27.5-0.8	BNPS 630V 154J 27.5S 5 ____
0.18	32.0	22.0	12.0	27.5-0.8	BNPS 630V 184J 27.5S 5 ____
0.22	32.0	22.0	13.0	27.5-0.8	BNPS 630V 224J 27.5S 5 ____
0.27	32.0	23.5	14.0	27.5-0.8	BNPS 630V 274J 27.5S 5 ____
0.33	32.0	25.5	16.0	27.5-0.8	BNPS 630V 334J 27.5S 5 ____
0.39	32.0	26.0	18.0	27.5-0.8	BNPS 630V 394J 27.5S 5 ____
0.47	32.0	30.0	20.0	27.5-0.8	BNPS 630V 474J 27.5S 5 ____
0.56	32.0	34.0	21.0	27.5-0.8	BNPS 630V 564J 27.5S 5 ____

1000Vdc(600Vac)

Cap. (μF)	Dimensions(mm) W (max.)	H (max.)	T (max.)	Pitch - d	PART NUMBER
0.001	13.0	10.0	5.0	10.0-0.6	BNPS 1000V 102J 10S 5 ____
0.0012	13.0	10.0	5.0	10.0-0.6	BNPS 1000V 122J 10S 5 ____
0.0015	13.0	10.0	5.0	10.0-0.6	BNPS 1000V 152J 10S 5 ____
0.0018	13.0	10.0	5.0	10.0-0.6	BNPS 1000V 182J 10S 5 ____

0.0022	13.0	10.0	5.0	10.0-0.6	BNPS 1000V 222J 10S 5 _____
0.0027	13.0	10.0	5.0	10.0-0.6	BNPS 1000V 272J 10S 5 _____
0.0033	13.0	12.0	6.0	10.0-0.6	BNPS 1000V 332J 10S 5 _____
0.0039	13.0	12.0	6.0	10.0-0.6	BNPS 1000V 392J 10S 5 _____
0.0047	13.0	12.0	6.0	10.0-0.6	BNPS 1000V 472J 10S 5 _____
0.0056	13.0	13.0	7.0	10.0-0.6	BNPS 1000V 562J 10S 5 _____
0.0068	13.0	14.0	8.0	10.0-0.6	BNPS 1000V 682J 10S 5 _____
0.0082	13.0	14.0	8.0	10.0-0.6	BNPS 1000V 822J 10S 5 _____
0.0047	18.0	11.0	5.0	15.0-0.8	BNPS 1000V 472J 15S 5 _____
0.0056	18.0	11.0	5.0	15.0-0.8	BNPS 1000V 562J 15S 5 _____
0.0068	18.0	11.0	5.0	15.0-0.8	BNPS 1000V 682J 15S 5 _____
0.0082	18.0	11.0	5.0	15.0-0.8	BNPS 1000V 822J 15S 5 _____
0.01	18.0	12.0	6.0	15.0-0.8	BNPS 1000V 103J 15S 5 _____
0.0120	18.0	12.0	6.0	15.0-0.8	BNPS 1000V 123J 15S 5 _____
0.0150	18.0	13.0	7.0	15.0-0.8	BNPS 1000V 153J 15S 5 _____
0.0180	18.0	14.5	8.5	15.0-0.8	BNPS 1000V 183J 15S 5 _____
0.0220	18.0	14.5	8.5	15.0-0.8	BNPS 1000V 223J 15S 5 _____
0.0270	18.0	16.0	10.0	15.0-0.8	BNPS 1000V 273J 15S 5 _____
0.0330	18.0	18.0	10.0	15.0-0.8	BNPS 1000V 333J 15S 5 _____
0.0390	18.0	19.0	11.0	15.0-0.8	BNPS 1000V 393J 15S 5 _____
0.0470	18.0	21.0	12.0	15.0-0.8	BNPS 1000V 473J 15S 5 _____
0.0560	18.0	21.0	12.0	15.0-0.8	BNPS 1000V 563J 15S 5 _____
0.0120	26.0	15.0	6.0	22.5-0.8	BNPS 1000V 123J 22.5S 5 _____
0.0150	26.0	15.0	6.0	22.5-0.8	BNPS 1000V 153J 22.5S 5 _____
0.0180	26.0	15.0	6.0	22.5-0.8	BNPS 1000V 183J 22.5S 5 _____
0.0220	26.0	15.0	6.0	22.5-0.8	BNPS 1000V 223J 22.5S 5 _____
0.0270	26.0	16.5	7.0	22.5-0.8	BNPS 1000V 273J 22.5S 5 _____
0.0330	26.0	16.5	7.0	22.5-0.8	BNPS 1000V 333J 22.5S 5 _____
0.0390	26.0	17.0	8.5	22.5-0.8	BNPS 1000V 393J 22.5S 5 _____
0.0470	26.0	17.0	8.5	22.5-0.8	BNPS 1000V 473J 22.5S 5 _____
0.0560	26.0	18.0	9.0	22.5-0.8	BNPS 1000V 563J 22.5S 5 _____
0.0680	26.0	19.0	10.0	22.5-0.8	BNPS 1000V 683J 22.5S 5 _____
0.0820	26.0	20.0	11.0	22.5-0.8	BNPS 1000V 823J 22.5S 5 _____
0.1	26.0	22.0	12.0	22.5-0.8	BNPS 1000V 104J 22.5S 5 _____
0.12	26.0	25.0	15.0	22.5-0.8	BNPS 1000V 124J 22.5S 5 _____
0.15	26.0	25.0	15.0	22.5-0.8	BNPS 1000V 154J 22.5S 5 _____
0.015	32.0	18.0	9.0	27.5-0.8	BNPS 1000V 153J 27.5S 5 _____
0.018	32.0	18.0	9.0	27.5-0.8	BNPS 1000V 183J 27.5S 5 _____
0.022	32.0	18.0	9.0	27.5-0.8	BNPS 1000V 223J 27.5S 5 _____
0.027	32.0	18.0	9.0	27.5-0.8	BNPS 1000V 273J 27.5S 5 _____
0.033	32.0	18.0	9.0	27.5-0.8	BNPS 1000V 333J 27.5S 5 _____
0.039	32.0	18.0	9.0	27.5-0.8	BNPS 1000V 393J 27.5S 5 _____
0.047	32.0	18.0	9.0	27.5-0.8	BNPS 1000V 473J 27.5S 5 _____
0.056	32.0	20.0	10.0	27.5-0.8	BNPS 1000V 563J 27.5S 5 _____
0.068	32.0	20.0	11.0	27.5-0.8	BNPS 1000V 683J 27.5S 5 _____
0.082	32.0	20.0	11.0	27.5-0.8	BNPS 1000V 823J 27.5S 5 _____
0.1	32.0	22.0	12.0	27.5-0.8	BNPS 1000V 104J 27.5S 5 _____
0.12	32.0	22.0	13.0	27.5-0.8	BNPS 1000V 124J 27.5S 5 _____
0.15	32.0	24.5	15.0	27.5-0.8	BNPS 1000V 154J 27.5S 5 _____
0.18	32.0	25.5	16.0	27.5-0.8	BNPS 1000V 184J 27.5S 5 _____
0.22	32.0	26.0	18.0	27.5-0.8	BNPS 1000V 224J 27.5S 5 _____
0.27	32.0	30.0	20.0	27.5-0.8	BNPS 1000V 274J 27.5S 5 _____
0.33	32.0	34.0	21.0	27.5-0.8	BNPS 1000V 334J 27.5S 5 _____

1250Vdc(600Vac)

Cap. (μF)	Dimensions(mm)			Pitch - d	PART NUMBER
	W (max.)	H (max.)	T (max.)		
0.0018	18.0	11.0	5.0	15.0-0.8	BNPS 1250V 182J 15S 5 _____
0.0022	18.0	12.0	6.0	15.0-0.8	BNPS 1250V 222J 15S 5 _____
0.0027	18.0	11.0	5.0	15.0-0.8	BNPS 1250V 272J 15S 5 _____
0.0033	18.0	12.0	6.0	15.0-0.8	BNPS 1250V 332J 15S 5 _____
0.0039	18.0	12.0	6.0	15.0-0.8	BNPS 1250V 392J 15S 5 _____
0.0047	18.0	12.0	6.0	15.0-0.8	BNPS 1250V 472J 15S 5 _____
0.0056	18.0	11.0	5.0	15.0-0.8	BNPS 1250V 562J 15S 5 _____
0.0068	18.0	12.0	6.0	15.0-0.8	BNPS 1250V 682J 15S 5 _____
0.0082	18.0	12.0	6.0	15.0-0.8	BNPS 1250V 822J 15S 5 _____
0.01	18.0	13.0	7.0	15.0-0.8	BNPS 1250V 103J 15S 5 _____
0.012	18.0	13.5	7.5	15.0-0.8	BNPS 1250V 123J 15S 5 _____
0.015	18.0	14.5	8.5	15.0-0.8	BNPS 1250V 153J 15S 5 _____
0.018	18.0	17.5	8.5	15.0-0.8	BNPS 1250V 183J 15S 5 _____
0.022	18.0	16.0	10.0	15.0-0.8	BNPS 1250V 223J 15S 5 _____
0.027	18.0	19.0	11.0	15.0-0.8	BNPS 1250V 273J 15S 5 _____
0.033	18.0	21.0	12.0	15.0-0.8	BNPS 1250V 333J 15S 5 _____
0.039	18.0	21.0	12.0	15.0-0.8	BNPS 1250V 393J 15S 5 _____
0.0056	26.0	15.0	6.0	22.5-0.8	BNPS 1250V 562J 22.5S 5 _____
0.0068	26.0	16.5	7.0	22.5-0.8	BNPS 1250V 682J 22.5S 5 _____
0.0082	26.0	15.0	6.0	22.5-0.8	BNPS 1250V 822J 22.5S 5 _____
0.010	26.0	15.0	6.0	22.5-0.8	BNPS 1250V 103J 22.5S 5 _____

0.012	26.0	15.0	6.0	22.5-0.8	BNPS 1250V 123J 22.5S 5 ____
0.015	26.0	15.0	6.0	22.5-0.8	BNPS 1250V 153J 22.5S 5 ____
0.018	26.0	15.0	6.0	22.5-0.8	BNPS 1250V 183J 22.5S 5 ____
0.022	26.0	16.5	7.0	22.5-0.8	BNPS 1250V 223J 22.5S 5 ____
0.027	26.0	17.0	8.5	22.5-0.8	BNPS 1250V 273J 22.5S 5 ____
0.033	26.0	17.0	8.5	22.5-0.8	BNPS 1250V 333J 22.5S 5 ____
0.039	26.0	17.0	8.5	22.5-0.8	BNPS 1250V 393J 22.5S 5 ____
0.047	26.0	19.0	10.0	22.5-0.8	BNPS 1250V 473J 22.5S 5 ____
0.056	26.0	20.0	11.0	22.5-0.8	BNPS 1250V 563J 22.5S 5 ____
0.068	26.0	22.0	12.0	22.5-0.8	BNPS 1250V 683J 22.5S 5 ____
0.082	26.0	25.0	15.0	22.5-0.8	BNPS 1250V 823J 22.5S 5 ____
0.1	26.0	25.0	15.0	22.5-0.8	BNPS 1250V 104J 22.5S 5 ____
0.12	26.0	25.0	15.0	22.5-0.8	BNPS 1250V 124J 22.5S 5 ____
0.0068	32.0	18.0	9.0	27.5-0.8	BNPS 1250V 682J 27.5S 5 ____
0.0082	32.0	18.0	9.0	27.5-0.8	BNPS 1250V 822J 27.5S 5 ____
0.01	32.0	18.0	9.0	27.5-0.8	BNPS 1250V 103J 27.5S 5 ____
0.012	32.0	18.0	9.0	27.5-0.8	BNPS 1250V 123J 27.5S 5 ____
0.015	32.0	18.0	9.0	27.5-0.8	BNPS 1250V 153J 27.5S 5 ____
0.018	32.0	18.0	9.0	27.5-0.8	BNPS 1250V 183J 27.5S 5 ____
0.022	32.0	18.0	9.0	27.5-0.8	BNPS 1250V 223J 27.5S 5 ____
0.027	32.0	18.0	9.0	27.5-0.8	BNPS 1250V 273J 27.5S 5 ____
0.033	32.0	18.0	9.0	27.5-0.8	BNPS 1250V 333J 27.5S 5 ____
0.039	32.0	18.0	9.0	27.5-0.8	BNPS 1250V 393J 27.5S 5 ____
0.047	32.0	20.0	10.0	27.5-0.8	BNPS 1250V 473J 27.5S 5 ____
0.056	32.0	20.0	11.0	27.5-0.8	BNPS 1250V 563J 27.5S 5 ____
0.068	32.0	22.0	12.0	27.5-0.8	BNPS 1250V 683J 27.5S 5 ____
0.082	32.0	22.0	13.0	27.5-0.8	BNPS 1250V 823J 27.5S 5 ____
0.1	32.0	23.5	14.0	27.5-0.8	BNPS 1250V 104J 27.5S 5 ____
0.12	32.0	24.5	15.0	27.5-0.8	BNPS 1250V 124J 27.5S 5 ____
0.15	32.0	26.0	18.0	27.5-0.8	BNPS 1250V 154J 27.5S 5 ____
0.18	32.0	30.0	20.0	27.5-0.8	BNPS 1250V 184J 27.5S 5 ____
0.22	32.0	34.0	21.0	27.5-0.8	BNPS 1250V 224J 27.5S 5 ____

1600Vdc(650Vac)

Cap. (μF)	Dimensions(mm)			Pitch - d	PART NUMBER
	W (max.)	H (max.)	T (max.)		
0.001	18.0	12.0	6.0	15.0-0.8	BNPS 1600V 102J 15S 5 ____
0.0012	18.0	12.0	6.0	15.0-0.8	BNPS 1600V 122J 15S 5 ____
0.0015	18.0	12.0	6.0	15.0-0.8	BNPS 1600V 152J 15S 5 ____
0.0018	18.0	12.0	6.0	15.0-0.8	BNPS 1600V 182J 15S 5 ____
0.0022	18.0	12.0	6.0	15.0-0.8	BNPS 1600V 222J 15S 5 ____
0.0027	18.0	12.0	6.0	15.0-0.8	BNPS 1600V 272J 15S 5 ____
0.0033	18.0	12.0	6.0	15.0-0.8	BNPS 1600V 332J 15S 5 ____
0.0039	18.0	13.0	7.0	15.0-0.8	BNPS 1600V 392J 15S 5 ____
0.0047	18.0	13.5	7.5	15.0-0.8	BNPS 1600V 472J 15S 5 ____
0.0056	18.0	14.5	8.5	15.0-0.8	BNPS 1600V 562J 15S 5 ____
0.0068	18.0	17.5	8.5	15.0-0.8	BNPS 1600V 682J 15S 5 ____
0.0082	18.0	16.0	10.0	15.0-0.8	BNPS 1600V 822J 15S 5 ____
0.01	18.0	18.0	10.0	15.0-0.8	BNPS 1600V 103J 15S 5 ____
0.012	18.0	19.0	11.0	15.0-0.8	BNPS 1600V 123J 15S 5 ____
0.015	18.0	21.0	12.0	15.0-0.8	BNPS 1600V 153J 15S 5 ____
0.0033	26.0	15.0	6.0	22.5-0.8	BNPS 1600V 332J 22.5S 5 ____
0.0039	26.0	15.0	6.0	22.5-0.8	BNPS 1600V 392J 22.5S 5 ____
0.0047	26.0	15.0	6.0	22.5-0.8	BNPS 1600V 472J 22.5S 5 ____
0.0056	26.0	15.0	6.0	22.5-0.8	BNPS 1600V 562J 22.5S 5 ____
0.0068	26.0	15.0	6.0	22.5-0.8	BNPS 1600V 682J 22.5S 5 ____
0.0082	26.0	15.0	6.0	22.5-0.8	BNPS 1600V 822J 22.5S 5 ____
0.01	26.0	16.5	7.0	22.5-0.8	BNPS 1600V 103J 22.5S 5 ____
0.012	26.0	16.5	7.0	22.5-0.8	BNPS 1600V 123J 22.5S 5 ____
0.015	26.0	17.0	8.5	22.5-0.8	BNPS 1600V 153J 22.5S 5 ____
0.018	26.0	17.0	8.5	22.5-0.8	BNPS 1600V 183J 22.5S 5 ____
0.022	26.0	18.0	9.0	22.5-0.8	BNPS 1600V 223J 22.5S 5 ____
0.01	32.0	18.0	9.0	27.5-0.8	BNPS 1600V 103J 27.5S 5 ____
0.012	32.0	18.0	9.0	27.5-0.8	BNPS 1600V 123J 27.5S 5 ____
0.015	32.0	18.0	9.0	27.5-0.8	BNPS 1600V 153J 27.5S 5 ____
0.018	32.0	18.0	9.0	27.5-0.8	BNPS 1600V 183J 27.5S 5 ____
0.022	32.0	18.0	9.0	27.5-0.8	BNPS 1600V 223J 27.5S 5 ____
0.027	32.0	20.0	10.0	27.5-0.8	BNPS 1600V 273J 27.5S 5 ____
0.033	32.0	20.0	11.0	27.5-0.8	BNPS 1600V 333J 27.5S 5 ____
0.039	32.0	22.0	12.0	27.5-0.8	BNPS 1600V 393J 27.5S 5 ____
0.047	32.0	22.0	13.0	27.5-0.8	BNPS 1600V 473J 27.5S 5 ____
0.056	32.0	23.5	14.0	27.5-0.8	BNPS 1600V 563J 27.5S 5 ____
0.068	32.0	25.5	16.0	27.5-0.8	BNPS 1600V 683J 27.5S 5 ____
0.082	32.0	26.0	18.0	27.5-0.8	BNPS 1600V 823J 27.5S 5 ____
0.1	32.0	30.0	20.0	27.5-0.8	BNPS 1600V 104J 27.5S 5 ____

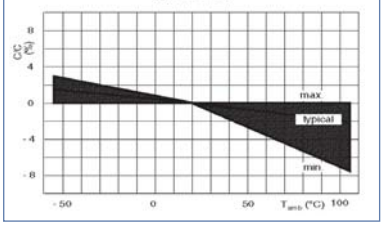
2000Vdc(700Vac)

Cap. (μF)	Dimensions(mm)			Pitch - d	PART NUMBER
	W (max.)	H (max.)	T (max.)		
0.00047	18.0	12.0	6.0	15.0-0.8	BNPS 2000V 471J 15S 5 _____
0.00056	18.0	12.0	6.0	15.0-0.8	BNPS 2000V 561J 15S 5 _____
0.00068	18.0	12.0	6.0	15.0-0.8	BNPS 2000V 681J 15S 5 _____
0.00082	18.0	13.0	7.0	15.0-0.8	BNPS 2000V 821J 15S 5 _____
0.001	18.0	12.0	6.0	15.0-0.8	BNPS 2000V 102J 15S 5 _____
0.0012	18.0	12.0	6.0	15.0-0.8	BNPS 2000V 122J 15S 5 _____
0.0015	18.0	12.0	6.0	15.0-0.8	BNPS 2000V 152J 15S 5 _____
0.0018	18.0	12.0	6.0	15.0-0.8	BNPS 2000V 182J 15S 5 _____
0.0022	18.0	13.0	7.0	15.0-0.8	BNPS 2000V 222J 15S 5 _____
0.0027	18.0	13.5	7.5	15.0-0.8	BNPS 2000V 272J 15S 5 _____
0.0033	18.0	14.5	8.5	15.0-0.8	BNPS 2000V 332J 15S 5 _____
0.0039	18.0	14.5	8.5	15.0-0.8	BNPS 2000V 392J 15S 5 _____
0.0047	18.0	16.0	10.0	15.0-0.8	BNPS 2000V 472J 15S 5 _____
0.0056	18.0	16.0	10.0	15.0-0.8	BNPS 2000V 562J 15S 5 _____
0.0068	18.0	19.0	11.0	15.0-0.8	BNPS 2000V 682J 15S 5 _____
0.0082	18.0	21.0	12.0	15.0-0.8	BNPS 2000V 822J 15S 5 _____
0.01	18.0	21.0	12.0	15.0-0.8	BNPS 2000V 103J 15S 5 _____
0.0018	26.0	16.5	7.0	22.5-0.8	BNPS 2000V 182J 22.5S 5 _____
0.0022	26.0	16.5	7.0	22.5-0.8	BNPS 2000V 222J 22.5S 5 _____
0.0027	26.0	17.0	8.5	22.5-0.8	BNPS 2000V 272J 22.5S 5 _____
0.0033	26.0	16.5	7.0	22.5-0.8	BNPS 2000V 332J 22.5S 5 _____
0.0039	26.0	16.5	7.0	22.5-0.8	BNPS 2000V 392J 22.5S 5 _____
0.0047	26.0	16.5	7.0	22.5-0.8	BNPS 2000V 472J 22.5S 5 _____
0.0056	26.0	16.5	7.0	22.5-0.8	BNPS 2000V 562J 22.5S 5 _____
0.0068	26.0	16.5	7.0	22.5-0.8	BNPS 2000V 682J 22.5S 5 _____
0.0082	26.0	17.0	8.5	22.5-0.8	BNPS 2000V 822J 22.5S 5 _____
0.01	26.0	17.0	8.5	22.5-0.8	BNPS 2000V 103J 22.5S 5 _____
0.012	26.0	18.0	9.0	22.5-0.8	BNPS 2000V 123J 22.5S 5 _____
0.015	26.0	20.0	11.0	22.5-0.8	BNPS 2000V 153J 22.5S 5 _____
0.018	26.0	22.0	12.0	22.5-0.8	BNPS 2000V 183J 22.5S 5 _____
0.022	26.0	22.0	12.0	22.5-0.8	BNPS 2000V 223J 22.5S 5 _____
0.027	26.0	25.0	15.0	22.5-0.8	BNPS 2000V 273J 22.5S 5 _____
0.033	26.0	25.0	15.0	22.5-0.8	BNPS 2000V 333J 22.5S 5 _____
0.0018	32.0	18.0	9.0	27.5-0.8	BNPS 2000V 182J 27.5S 5 _____
0.0022	32.0	18.0	9.0	27.5-0.8	BNPS 2000V 222J 27.5S 5 _____
0.0027	32.0	18.0	9.0	27.5-0.8	BNPS 2000V 272J 27.5S 5 _____
0.0033	32.0	18.0	9.0	27.5-0.8	BNPS 2000V 332J 27.5S 5 _____
0.0039	32.0	18.0	9.0	27.5-0.8	BNPS 2000V 392J 27.5S 5 _____
0.0047	32.0	18.0	9.0	27.5-0.8	BNPS 2000V 472J 27.5S 5 _____
0.0056	32.0	18.0	9.0	27.5-0.8	BNPS 2000V 562J 27.5S 5 _____
0.0068	32.0	18.0	9.0	27.5-0.8	BNPS 2000V 682J 27.5S 5 _____
0.0082	32.0	18.0	9.0	27.5-0.8	BNPS 2000V 822J 27.5S 5 _____
0.01	32.0	18.0	9.0	27.5-0.8	BNPS 2000V 103J 27.5S 5 _____
0.012	32.0	18.0	9.0	27.5-0.8	BNPS 2000V 123J 27.5S 5 _____
0.015	32.0	20.0	10.0	27.5-0.8	BNPS 2000V 153J 27.5S 5 _____
0.018	32.0	20.0	11.0	27.5-0.8	BNPS 2000V 183J 27.5S 5 _____
0.022	32.0	22.0	12.0	27.5-0.8	BNPS 2000V 223J 27.5S 5 _____
0.027	32.0	22.0	13.0	27.5-0.8	BNPS 2000V 273J 27.5S 5 _____
0.033	32.0	23.5	14.0	27.5-0.8	BNPS 2000V 333J 27.5S 5 _____
0.039	32.0	25.5	16.0	27.5-0.8	BNPS 2000V 393J 27.5S 5 _____
0.047	32.0	26.0	18.0	27.5-0.8	BNPS 2000V 473J 27.5S 5 _____
0.056	32.0	30.0	20.0	27.5-0.8	BNPS 2000V 563J 27.5S 5 _____
0.068	32.0	30.0	20.0	27.5-0.8	BNPS 2000V 683J 27.5S 5 _____

Electrical Characteristics (Typical Data)

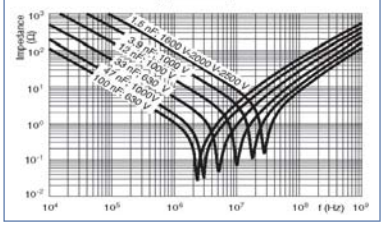
Capacitance as a function of ambient temperature

(typical curve)

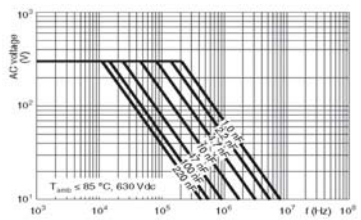


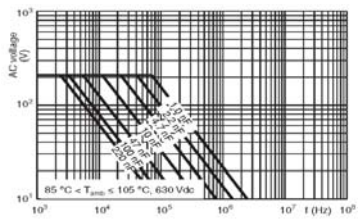
Impedance as a function of frequency

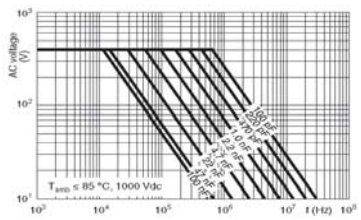
(typical curve)

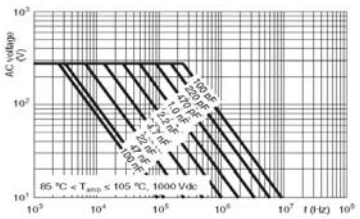


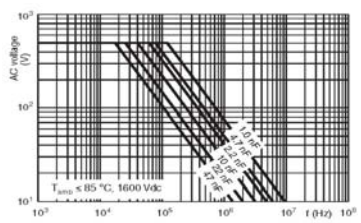
Max. RMS voltage as a function of frequency

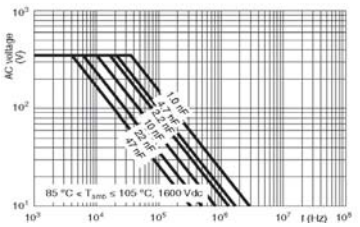




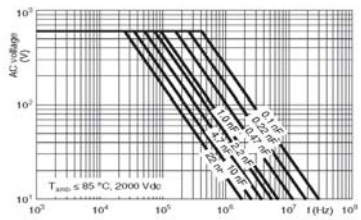




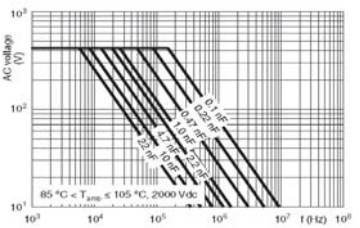




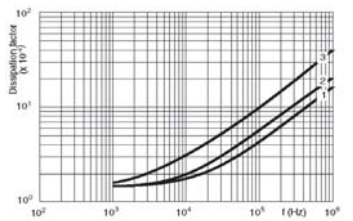
Max. RMS voltage (sinewave) as a function of frequency



Max. RMS voltage (sinewave) as a function of frequency

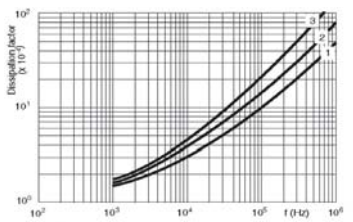


Tangent of loss angle



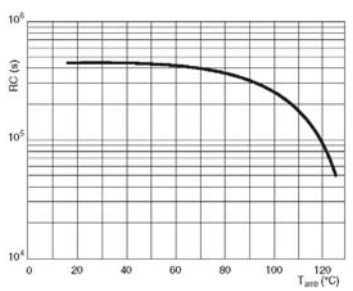
1. KP/MPK 10.0 mm and 15 mm pitch all versions
22.5 mm pitch, 1000 V, 1600 V, 2000 V and 2500 V versions
2. KP/MPK 22.5 mm pitch, 630 V versions
27.5 mm pitch, 1000 V, 1600 V and 2000 V versions
3. KP/MPK 27.5 mm pitch, 630 V versions

Maximun curves



1. KP/MPK 10.0 mm and 15 mm pitch all versions
22.5 mm pitch, 1000 V, 1600 V, 2000 V and 2500 V versions
2. KP/MPK 22.5 mm pitch, 630 V versions
27.5 mm pitch, 1000 V, 1600 V and 2000 V versions
3. KP/MPK 27.5 mm pitch, 630 V versions

Insulation resistance as a function of ambient temperature



MNPS

This standard specifies Series-Type Metallized polypropylene film / polypropylene film / Aluminum foil capacitors for electronic equipment.

■ Features

- High pulse duty
- Very low dissipation factor
- Negative capacitance change versus temperature
- miniature size of NPPS.
- Coated with flame-retardant(UL94 V-0) epoxy resin.
- RoHS directive compliant

■ Applications

- For high pulse and high frequency applications e.g.
- Switch mode power supplies
- Converter in drives and power electronics
- Deflection systems in monitors and TV-sets

■ Specifications

Reference Standard	IEC 60384-17
Climatic Category	40 / 105 / 21
Rated Temperature	105℃ +85℃~+105℃ decreasing factor 1.0% / ℃ for V_R(dc)
Operation Temperature Range	-40℃~105℃
Rated Voltage	630Vdc, 1000Vdc, 1250Vdc, 1600Vdc, 2000Vdc
Capacitance Range	0.00047μF~0.820μF
Capacitance Tolerance	G : ±2% H : ±3% J : ±5% K : ±10% M : ±20% ※Standard : J : ±5%, Other Tolerance Grade : available on request.
Voltage Proof	2.5U_R(dc) / 3sec
Dissipation Factor	≤0.1%(at 1kHz 20℃)
Rated Voltage	≥30,000MΩ C_R≤0.33μF 100Vdc 60sec 20℃
	≥10,000Ω·F C_R〉0.33μF 100Vdc 60sec 20℃

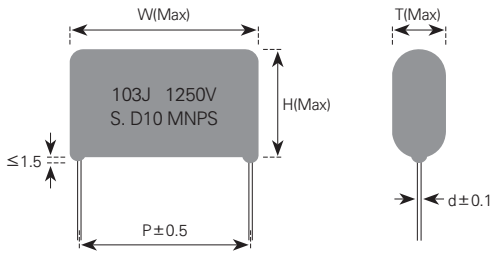
■ Part Number System

MNPS	630V	472	J	10	S	5	
Part-1	Part-2	Part-3	Part-4	Part-5	Part-6	Part-7	Part-8

Part-1 : Series Code(Series Name)-MNPS
Part-2 : Rated Voltage(DC : 630V~2000V)
Part-3 : Rated Capacitance Value(0.00047μF~0.820μF / 471~824)
Part-4 : Capacitance Tolerance(G : ±2% H : ±3% J : ±5% K : ±10% M : ±20%)
Part-5 : Lead Spacing(10mm / 15mm / 22.5mm / 27.5mm)
Part-6 : Forming-Type and Packing Code
Part-7 : Size Number(1~4 : Min-Type / 5 : Standard-Type / 6~9 : Large-Type)
Part-8 : Internal Use

CODE	STYLE
B	Bending Forming
C	Straight Cutting
D	D-Type Forming
L	B-Type long Forming
M	C-Type long Forming
S	Straight
X	B-Type Forming
Y	C-Type Forming
Z	Z-Type Forming
T	A-Type Tapping
U	B-Type Tapping
V	C-Type Tapping

■ Dimensions



630Vdc(400Vac)

Cap. (μF)	Dimensions(mm) W (max.)	H (max.)	T (max.)	Pitch - d	PART NUMBER
0.0047	13.0	10.0	6.0	10.0-0.6	MNPS 630V 472J 10S 5 ____
0.0056	13.0	10.0	5.5	10.0-0.6	MNPS 630V 562J 10S 5 ____
0.0068	13.0	9.5	5.0	10.0-0.6	MNPS 630V 682J 10S 5 ____
0.0082	13.0	10.0	5.5	10.0-0.6	MNPS 630V 822J 10S 5 ____
0.01	13.0	10.5	6.0	10.0-0.6	MNPS 630V 103J 10S 5 ____
0.012	13.0	11.5	6.0	10.0-0.6	MNPS 630V 123J 10S 5 ____
0.015	13.0	12.0	7.0	10.0-0.6	MNPS 630V 153J 10S 5 ____
0.018	13.0	12.5	7.5	10.0-0.6	MNPS 630V 183J 10S 5 ____
0.022	13.0	13.5	8.0	10.0-0.6	MNPS 630V 223J 10S 5 ____
0.027	13.0	14.0	9.0	10.0-0.6	MNPS 630V 273J 10S 5 ____
0.033	13.0	15.0	10.0	10.0-0.6	MNPS 630V 333J 10S 5 ____
0.039	13.0	16.0	10.5	10.0-0.6	MNPS 630V 393J 10S 5 ____
0.047	13.0	17.0	11.5	10.0-0.6	MNPS 630V 473J 10S 5 ____
0.01	19.0	10.0	5.5	15.0-0.8	MNPS 630V 103J 15S 5 ____
0.012	19.0	10.5	6.0	15.0-0.8	MNPS 630V 123J 15S 5 ____
0.015	19.0	10.0	5.5	15.0-0.8	MNPS 630V 153J 15S 5 ____
0.018	19.0	10.0	5.5	15.0-0.8	MNPS 630V 183J 15S 5 ____
0.022	19.0	10.5	6.0	15.0-0.8	MNPS 630V 223J 15S 5 ____
0.027	19.0	11.0	6.5	15.0-0.8	MNPS 630V 273J 15S 5 ____
0.033	19.0	11.5	7.0	15.0-0.8	MNPS 630V 333J 15S 5 ____
0.039	19.0	12.5	7.0	15.0-0.8	MNPS 630V 393J 15S 5 ____
0.047	19.0	13.0	7.5	15.0-0.8	MNPS 630V 473J 15S 5 ____
0.056	19.0	13.5	8.5	15.0-0.8	MNPS 630V 563J 15S 5 ____
0.068	19.0	14.5	9.0	15.0-0.8	MNPS 630V 683J 15S 5 ____
0.082	19.0	15.0	10.0	15.0-0.8	MNPS 630V 823J 15S 5 ____
0.1	19.0	17.0	10.5	15.0-0.8	MNPS 630V 104J 15S 5 ____
0.12	19.0	18.0	11.5	15.0-0.8	MNPS 630V 124J 15S 5 ____
0.15	19.0	19.5	12.5	15.0-0.8	MNPS 630V 154J 15S 5 ____
0.18	19.0	20.5	14.0	15.0-0.8	MNPS 630V 184J 15S 5 ____
0.22	19.0	22.0	15.5	15.0-0.8	MNPS 630V 224J 15S 5 ____
0.033	28.0	12.5	7.5	22.5-0.8	MNPS 630V 333J 22.5S 5 ____
0.039	28.0	12.0	7.0	22.5-0.8	MNPS 630V 393J 22.5S 5 ____
0.047	28.0	12.5	7.5	22.5-0.8	MNPS 630V 473J 22.5S 5 ____
0.056	28.0	12.5	7.0	22.5-0.8	MNPS 630V 563J 22.5S 5 ____
0.068	28.0	13.0	7.5	22.5-0.8	MNPS 630V 683J 22.5S 5 ____
0.082	28.0	13.5	8.0	22.5-0.8	MNPS 630V 823J 22.5S 5 ____
0.1	28.0	14.0	9.0	22.5-0.8	MNPS 630V 104J 22.5S 5 ____
0.12	28.0	15.0	9.5	22.5-0.8	MNPS 630V 124J 22.5S 5 ____
0.15	28.0	16.0	10.5	22.5-0.8	MNPS 630V 154J 22.5S 5 ____
0.18	28.0	18.0	11.0	22.5-0.8	MNPS 630V 184J 22.5S 5 ____
0.22	28.0	19.0	12.0	22.5-0.8	MNPS 630V 224J 22.5S 5 ____
0.27	28.0	21.0	12.5	22.5-0.8	MNPS 630V 274J 22.5S 5 ____
0.33	28.0	22.5	14.0	22.5-0.8	MNPS 630V 334J 22.5S 5 ____
0.39	28.0	24.5	14.5	22.5-0.8	MNPS 630V 394J 22.5S 5 ____
0.47	28.0	26.0	16.0	22.5-0.8	MNPS 630V 474J 22.5S 5 ____
0.56	28.0	27.5	17.5	22.5-0.8	MNPS 630V 564J 22.5S 5 ____
0.68	28.0	29.5	19.5	22.5-0.8	MNPS 630V 684J 22.5S 5 ____
0.047	31.0	13.0	7.5	27.5-0.8	MNPS 630V 473J 27.5S 5 ____
0.056	31.0	12.5	7.5	27.5-0.8	MNPS 630V 563J 27.5S 5 ____
0.082	31.0	12.5	7.5	27.5-0.8	MNPS 630V 823J 27.5S 5 ____
0.1	31.0	13.5	8.0	27.5-0.8	MNPS 630V 104J 27.5S 5 ____
0.12	31.0	14.0	9.0	27.5-0.8	MNPS 630V 124J 27.5S 5 ____
0.15	31.0	15.0	9.5	27.5-0.8	MNPS 630V 154J 27.5S 5 ____
0.18	31.0	15.5	10.5	27.5-0.8	MNPS 630V 184J 27.5S 5 ____
0.22	31.0	17.5	11.0	27.5-0.8	MNPS 630V 224J 27.5S 5 ____
0.27	31.0	18.5	12.0	27.5-0.8	MNPS 630V 274J 27.5S 5 ____
0.33	31.0	21.0	12.5	27.5-0.8	MNPS 630V 334J 27.5S 5 ____
0.39	31.0	22.0	13.5	27.5-0.8	MNPS 630V 394J 27.5S 5 ____
0.47	31.0	23.0	15.0	27.5-0.8	MNPS 630V 474J 27.5S 5 ____
0.56	31.0	25.5	15.5	27.5-0.8	MNPS 630V 564J 27.5S 5 ____
0.68	31.0	27.0	17.5	27.5-0.8	MNPS 630V 684J 27.5S 5 ____
0.82	31.0	29.0	19.0	27.5-0.8	MNPS 630V 824J 27.5S 5 ____

1000Vdc(600Vac)

Cap. (μF)	Dimensions(mm) W (max.)	H (max.)	T (max.)	Pitch - d	PART NUMBER
0.0022	13.0	10.0	5.5	10.0-0.6	MNPS 1000V 222J 10S 5 ____
0.0027	13.0	10.0	5.5	10.0-0.6	MNPS 1000V 272J 10S 5 ____

0.0033	13.0	10.0	5.5	10.0-0.6	MNPS 1000V 332J 10S 5 ____
0.0039	13.0	10.0	5.5	10.0-0.6	MNPS 1000V 392J 10S 5 ____
0.0047	13.0	10.0	6.0	10.0-0.6	MNPS 1000V 472J 10S 5 ____
0.0056	13.0	10.5	6.0	10.0-0.6	MNPS 1000V 562J 10S 5 ____
0.0068	13.0	11.5	6.5	10.0-0.6	MNPS 1000V 682J 10S 5 ____
0.0082	13.0	12.0	7.0	10.0-0.6	MNPS 1000V 822J 10S 5 ____
0.01	13.0	12.5	7.5	10.0-0.6	MNPS 1000V 103J 10S 5 ____
0.012	13.0	13.5	8.0	10.0-0.6	MNPS 1000V 123J 10S 5 ____
0.015	13.0	14.0	9.0	10.0-0.6	MNPS 1000V 153J 10S 5 ____
0.018	13.0	15.0	10.0	10.0-0.6	MNPS 1000V 183J 10S 5 ____
0.022	13.0	16.0	11.0	10.0-0.6	MNPS 1000V 223J 10S 5 ____
0.027	13.0	17.0	12.0	10.0-0.6	MNPS 1000V 273J 10S 5 ____
0.033	13.0	18.5	13.0	10.0-0.6	MNPS 1000V 333J 10S 5 ____
0.0068	19.0	10.5	6.0	15.0-0.8	MNPS 1000V 682J 15S 5 ____
0.0082	19.0	11.0	6.5	15.0-0.8	MNPS 1000V 822J 15S 5 ____
0.01	19.0	11.0	6.5	15.0-0.8	MNPS 1000V 103J 15S 5 ____
0.012	19.0	11.5	7.0	15.0-0.8	MNPS 1000V 123J 15S 5 ____
0.015	19.0	11.0	7.0	15.0-0.8	MNPS 1000V 153J 15S 5 ____
0.018	19.0	12.0	7.0	15.0-0.8	MNPS 1000V 183J 15S 5 ____
0.022	19.0	13.0	7.5	15.0-0.8	MNPS 1000V 223J 15S 5 ____
0.027	19.0	13.5	8.5	15.0-0.8	MNPS 1000V 273J 15S 5 ____
0.033	19.0	14.5	9.0	15.0-0.8	MNPS 1000V 333J 15S 5 ____
0.039	19.0	15.0	10.0	15.0-0.8	MNPS 1000V 393J 15S 5 ____
0.047	19.0	17.0	10.0	15.0-0.8	MNPS 1000V 473J 15S 5 ____
0.056	19.0	18.0	11.0	15.0-0.8	MNPS 1000V 563J 15S 5 ____
0.068	19.0	19.0	12.0	15.0-0.8	MNPS 1000V 683J 15S 5 ____
0.082	19.0	20.0	13.5	15.0-0.8	MNPS 1000V 823J 15S 5 ____
0.1	19.0	21.5	15.0	15.0-0.8	MNPS 1000V 104J 15S 5 ____
0.018	28.0	12.0	7.0	22.5-0.8	MNPS 1000V 183J 22.5S 5 ____
0.022	28.0	12.0	7.0	22.5-0.8	MNPS 1000V 223J 22.5S 5 ____
0.027	28.0	12.5	7.5	22.5-0.8	MNPS 1000V 273J 22.5S 5 ____
0.033	28.0	12.5	7.5	22.5-0.8	MNPS 1000V 333J 22.5S 5 ____
0.039	28.0	13.0	8.0	22.5-0.8	MNPS 1000V 393J 22.5S 5 ____
0.047	28.0	13.5	8.5	22.5-0.8	MNPS 1000V 473J 22.5S 5 ____
0.056	28.0	14.5	9.0	22.5-0.8	MNPS 1000V 563J 22.5S 5 ____
0.068	28.0	15.0	10.0	22.5-0.8	MNPS 1000V 683J 22.5S 5 ____
0.082	28.0	16.0	10.5	22.5-0.8	MNPS 1000V 823J 22.5S 5 ____
0.1	28.0	18.0	11.0	22.5-0.8	MNPS 1000V 104J 22.5S 5 ____
0.12	28.0	19.0	12.0	22.5-0.8	MNPS 1000V 124J 22.5S 5 ____
0.15	28.0	21.0	13.0	22.5-0.8	MNPS 1000V 154J 22.5S 5 ____
0.18	28.0	22.5	14.0	22.5-0.8	MNPS 1000V 184J 22.5S 5 ____
0.22	28.0	24.5	15.0	22.5-0.8	MNPS 1000V 224J 22.5S 5 ____
0.27	28.0	26.5	16.5	22.5-0.8	MNPS 1000V 274J 22.5S 5 ____
0.33	28.0	28.5	18.5	22.5-0.8	MNPS 1000V 334J 22.5S 5 ____
0.022	31.0	12.5	7.5	27.5-0.8	MNPS 1000V 223J 27.5S 5 ____
0.027	31.0	12.5	7.5	27.5-0.8	MNPS 1000V 273J 27.5S 5 ____
0.033	31.0	12.5	7.5	27.5-0.8	MNPS 1000V 333J 27.5S 5 ____
0.039	31.0	12.5	7.0	27.5-0.8	MNPS 1000V 393J 27.5S 5 ____
0.047	31.0	13.0	7.5	27.5-0.8	MNPS 1000V 473J 27.5S 5 ____
0.056	31.0	13.5	8.0	27.5-0.8	MNPS 1000V 563J 27.5S 5 ____
0.068	31.0	14.0	9.0	27.5-0.8	MNPS 1000V 683J 27.5S 5 ____
0.082	31.0	15.0	9.5	27.5-0.8	MNPS 1000V 823J 27.5S 5 ____
0.1	31.0	16.0	10.5	27.5-0.8	MNPS 1000V 104J 27.5S 5 ____
0.12	31.0	17.5	11.0	27.5-0.8	MNPS 1000V 124J 27.5S 5 ____
0.15	31.0	19.0	12.0	27.5-0.8	MNPS 1000V 154J 27.5S 5 ____
0.18	31.0	20.5	12.5	27.5-0.8	MNPS 1000V 184J 27.5S 5 ____
0.22	31.0	22.0	13.5	27.5-0.8	MNPS 1000V 224J 27.5S 5 ____
0.27	31.0	24.5	14.5	27.5-0.8	MNPS 1000V 274J 27.5S 5 ____
0.33	31.0	26.0	16.0	27.5-0.8	MNPS 1000V 334J 27.5S 5 ____
0.39	31.0	27.5	17.5	27.5-0.8	MNPS 1000V 394J 27.5S 5 ____
0.47	31.0	29.5	19.5	27.5-0.8	MNPS 1000V 474J 27.5S 5 ____
0.56	31.0	31.5	21.5	27.5-0.8	MNPS 1000V 564J 27.5S 5 ____

1250Vdc(600Vac)

Cap. (μF)	Dimensions(mm)			Pitch - d	PART NUMBER
	W (max.)	H (max.)	T (max.)		
0.0047	19.0	11.0	6.5	15.0-0.8	MNPS 1250V 472J 15S 5 ____
0.0056	19.0	11.0	7.0	15.0-0.8	MNPS 1250V 562J 15S 5 ____
0.0068	19.0	11.0	6.5	15.0-0.8	MNPS 1250V 682J 15S 5 ____
0.0082	19.0	11.5	7.0	15.0-0.8	MNPS 1250V 822J 15S 5 ____
0.01	19.0	11.0	6.5	15.0-0.8	MNPS 1250V 103J 15S 5 ____
0.012	19.0	11.5	7.0	15.0-0.8	MNPS 1250V 123J 15S 5 ____
0.015	19.0	12.5	7.0	15.0-0.8	MNPS 1250V 153J 15S 5 ____
0.018	19.0	13.0	8.0	15.0-0.8	MNPS 1250V 183J 15S 5 ____
0.022	19.0	14.0	8.5	15.0-0.8	MNPS 1250V 223J 15S 5 ____
0.027	19.0	14.5	9.5	15.0-0.8	MNPS 1250V 273J 15S 5 ____
0.033	19.0	15.5	10.5	15.0-0.8	MNPS 1250V 333J 15S 5 ____
0.039	19.0	16.5	11.0	15.0-0.8	MNPS 1250V 393J 15S 5 ____
0.047	19.0	18.5	11.5	15.0-0.8	MNPS 1250V 473J 15S 5 ____
0.056	19.0	19.5	12.5	15.0-0.8	MNPS 1250V 563J 15S 5 ____
0.068	19.0	20.5	14.0	15.0-0.8	MNPS 1250V 683J 15S 5 ____
0.082	19.0	22.0	15.5	15.0-0.8	MNPS 1250V 823J 15S 5 ____

0.0082	28.0	12.5	7.5	22.5-0.8	MNPS 1250V 822J 22.5S 5 ____
0.01	28.0	13.0	8.0	22.5-0.8	MNPS 1250V 103J 22.5S 5 ____
0.012	28.0	12.5	7.0	22.5-0.8	MNPS 1250V 123J 22.5S 5 ____
0.015	28.0	12.0	7.0	22.5-0.8	MNPS 1250V 153J 22.5S 5 ____
0.018	28.0	12.5	7.5	22.5-0.8	MNPS 1250V 183J 22.5S 5 ____
0.022	28.0	12.0	7.0	22.5-0.8	MNPS 1250V 223J 22.5S 5 ____
0.027	28.0	12.5	7.5	22.5-0.8	MNPS 1250V 273J 22.5S 5 ____
0.033	28.0	13.5	8.0	22.5-0.8	MNPS 1250V 333J 22.5S 5 ____
0.039	28.0	14.0	8.5	22.5-0.8	MNPS 1250V 393J 22.5S 5 ____
0.047	28.0	14.5	9.5	22.5-0.8	MNPS 1250V 473J 22.5S 5 ____
0.056	28.0	15.5	10.0	22.5-0.8	MNPS 1250V 563J 22.5S 5 ____
0.068	28.0	17.0	10.5	22.5-0.8	MNPS 1250V 683J 22.5S 5 ____
0.082	28.0	18.0	11.5	22.5-0.8	MNPS 1250V 823J 22.5S 5 ____
0.1	28.0	19.0	12.5	22.5-0.8	MNPS 1250V 104J 22.5S 5 ____
0.12	28.0	21.5	13.0	22.5-0.8	MNPS 1250V 124J 22.5S 5 ____
0.15	28.0	23.0	14.5	22.5-0.8	MNPS 1250V 154J 22.5S 5 ____
0.18	28.0	25.0	15.0	22.5-0.8	MNPS 1250V 184J 22.5S 5 ____
0.22	28.0	27.0	17.0	22.5-0.8	MNPS 1250V 224J 22.5S 5 ____
0.27	28.0	28.5	19.0	22.5-0.8	MNPS 1250V 274J 22.5S 5 ____
0.01	31.0	13.0	7.5	27.5-0.8	MNPS 1250V 103J 27.5S 5 ____
0.012	31.0	13.5	8.0	27.5-0.8	MNPS 1250V 123J 27.5S 5 ____
0.015	31.0	12.5	7.5	27.5-0.8	MNPS 1250V 153J 27.5S 5 ____
0.018	31.0	13.5	8.0	27.5-0.8	MNPS 1250V 183J 27.5S 5 ____
0.022	31.0	13.0	7.5	27.5-0.8	MNPS 1250V 223J 27.5S 5 ____
0.027	31.0	13.5	8.5	27.5-0.8	MNPS 1250V 273J 27.5S 5 ____
0.033	31.0	13.0	7.5	27.5-0.8	MNPS 1250V 333J 27.5S 5 ____
0.039	31.0	13.5	8.0	27.5-0.8	MNPS 1250V 393J 27.5S 5 ____
0.047	31.0	14.0	9.0	27.5-0.8	MNPS 1250V 473J 27.5S 5 ____
0.056	31.0	15.0	9.5	27.5-0.8	MNPS 1250V 563J 27.5S 5 ____
0.068	31.0	15.5	10.5	27.5-0.8	MNPS 1250V 683J 27.5S 5 ____
0.082	31.0	17.5	10.5	27.5-0.8	MNPS 1250V 823J 27.5S 5 ____
0.1	31.0	18.5	11.5	27.5-0.8	MNPS 1250V 104J 27.5S 5 ____
0.12	31.0	19.5	13.0	27.5-0.8	MNPS 1250V 124J 27.5S 5 ____
0.15	31.0	22.0	13.5	27.5-0.8	MNPS 1250V 154J 27.5S 5 ____
0.18	31.0	23.0	15.0	27.5-0.8	MNPS 1250V 184J 27.5S 5 ____
0.22	31.0	25.5	16.0	27.5-0.8	MNPS 1250V 224J 27.5S 5 ____
0.27	31.0	27.5	17.5	27.5-0.8	MNPS 1250V 274J 27.5S 5 ____
0.33	31.0	29.5	19.5	27.5-0.8	MNPS 1250V 334J 27.5S 5 ____
0.39	31.0	31.5	21.5	27.5-0.8	MNPS 1250V 394J 27.5S 5 ____

1600Vdc(650Vac)

Cap. (μF)	Dimensions(mm)			Pitch - d	PART NUMBER
	W (max.)	H (max.)	T (max.)		
0.0015	19.0	10.5	6.5	15.0-0.8	MNPS 1600V 152J 15S 5 ____
0.0018	19.0	11.0	7.0	15.0-0.8	MNPS 1600V 182J 15S 5 ____
0.0022	19.0	11.0	6.5	15.0-0.8	MNPS 1600V 222J 15S 5 ____
0.0027	19.0	11.5	7.0	15.0-0.8	MNPS 1600V 272J 15S 5 ____
0.0033	19.0	10.5	6.5	15.0-0.8	MNPS 1600V 332J 15S 5 ____
0.0039	19.0	11.0	6.5	15.0-0.8	MNPS 1600V 392J 15S 5 ____
0.0047	19.0	11.5	7.0	15.0-0.8	MNPS 1600V 472J 15S 5 ____
0.0056	19.0	12.5	7.5	15.0-0.8	MNPS 1600V 562J 15S 5 ____
0.0068	19.0	13.0	8.0	15.0-0.8	MNPS 1600V 682J 15S 5 ____
0.0082	19.0	14.0	8.5	15.0-0.8	MNPS 1600V 822J 15S 5 ____
0.01	19.0	15.0	9.5	15.0-0.8	MNPS 1600V 103J 15S 5 ____
0.012	19.0	15.5	10.5	15.0-0.8	MNPS 1600V 123J 15S 5 ____
0.015	19.0	17.5	11.0	15.0-0.8	MNPS 1600V 153J 15S 5 ____
0.018	19.0	18.5	12.0	15.0-0.8	MNPS 1600V 183J 15S 5 ____
0.022	19.0	20.0	13.0	15.0-0.8	MNPS 1600V 223J 15S 5 ____
0.027	19.0	21.5	14.5	15.0-0.8	MNPS 1600V 273J 15S 5 ____
0.0056	28.0	13.0	8.0	22.5-0.8	MNPS 1600V 562J 22.5S 5 ____
0.0068	28.0	12.5	7.5	22.5-0.8	MNPS 1600V 682J 22.5S 5 ____
0.0082	28.0	13.0	8.0	22.5-0.8	MNPS 1600V 822J 22.5S 5 ____
0.01	28.0	12.5	7.0	22.5-0.8	MNPS 1600V 103J 22.5S 5 ____
0.012	28.0	13.0	7.5	22.5-0.8	MNPS 1600V 123J 22.5S 5 ____
0.015	28.0	13.5	8.5	22.5-0.8	MNPS 1600V 153J 22.5S 5 ____
0.018	28.0	14.0	9.0	22.5-0.8	MNPS 1600V 183J 22.5S 5 ____
0.022	28.0	15.0	10.0	22.5-0.8	MNPS 1600V 223J 22.5S 5 ____
0.027	28.0	16.0	11.0	22.5-0.8	MNPS 1600V 273J 22.5S 5 ____
0.033	28.0	18.0	11.0	22.5-0.8	MNPS 1600V 333J 22.5S 5 ____
0.039	28.0	18.5	12.0	22.5-0.8	MNPS 1600V 393J 22.5S 5 ____
0.047	28.0	20.5	12.5	22.5-0.8	MNPS 1600V 473J 22.5S 5 ____
0.056	28.0	22.0	13.5	22.5-0.8	MNPS 1600V 563J 22.5S 5 ____
0.068	28.0	23.5	15.0	22.5-0.8	MNPS 1600V 683J 22.5S 5 ____
0.082	28.0	25.5	15.5	22.5-0.8	MNPS 1600V 823J 22.5S 5 ____
0.1	28.0	27.5	17.5	22.5-0.8	MNPS 1600V 104J 22.5S 5 ____
0.12	28.0	29.0	19.0	22.5-0.8	MNPS 1600V 124J 22.5S 5 ____
0.01	31.0	13.0	8.0	27.5-0.8	MNPS 1600V 103J 27.5S 5 ____
0.012	31.0	13.5	8.5	27.5-0.8	MNPS 1600V 123J 27.5S 5 ____
0.015	31.0	13.0	7.5	27.5-0.8	MNPS 1600V 153J 27.5S 5 ____
0.018	31.0	13.5	8.5	27.5-0.8	MNPS 1600V 183J 27.5S 5 ____
0.022	31.0	14.0	9.0	27.5-0.8	MNPS 1600V 223J 27.5S 5 ____

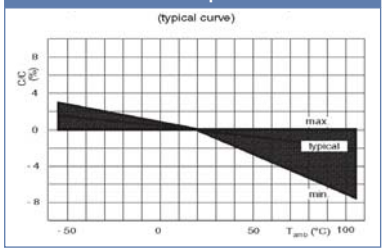
0.027	31.0	15.0	10.0	27.5-0.8	MNPS 1600V 273J 27.5S 5 ____
0.033	31.0	16.0	10.5	27.5-0.8	MNPS 1600V 333J 27.5S 5 ____
0.039	31.0	17.5	11.0	27.5-0.8	MNPS 1600V 393J 27.5S 5 ____
0.047	31.0	18.5	12.0	27.5-0.8	MNPS 1600V 473J 27.5S 5 ____
0.056	31.0	19.5	13.0	27.5-0.8	MNPS 1600V 563J 27.5S 5 ____
0.068	31.0	22.0	13.5	27.5-0.8	MNPS 1600V 683J 27.5S 5 ____
0.082	31.0	23.0	15.0	27.5-0.8	MNPS 1600V 823J 27.5S 5 ____
0.1	31.0	25.5	15.5	27.5-0.8	MNPS 1600V 104J 27.5S 5 ____
0.12	31.0	27.0	17.0	27.5-0.8	MNPS 1600V 124J 27.5S 5 ____
0.15	31.0	29.5	19.5	27.5-0.8	MNPS 1600V 154J 27.5S 5 ____
0.18	31.0	31.0	21.5	27.5-0.8	MNPS 1600V 184J 27.5S 5 ____

2000Vdc(700Vac)

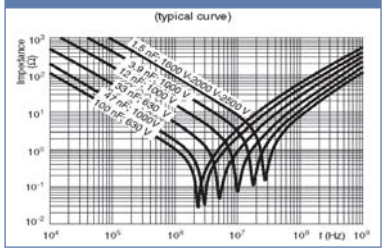
Cap. (μF)	Dimensions(mm)			Pitch - d	PART NUMBER
	W (max.)	H (max.)	T (max.)		
0.00047	19.0	10.0	6.0	15.0-0.8	MNPS 2000V 471J 15S 5 ____
0.00056	19.0	10.5	6.0	15.0-0.8	MNPS 2000V 561J 15S 5 ____
0.00068	19.0	11.0	6.5	15.0-0.8	MNPS 2000V 681J 15S 5 ____
0.00082	19.0	10.0	5.5	15.0-0.8	MNPS 2000V 821J 15S 5 ____
0.001	19.0	10.5	6.0	15.0-0.8	MNPS 2000V 102J 15S 5 ____
0.0012	19.0	10.0	5.5	15.0-0.8	MNPS 2000V 122J 15S 5 ____
0.0015	19.0	10.5	6.0	15.0-0.8	MNPS 2000V 152J 15S 5 ____
0.0018	19.0	11.0	6.5	15.0-0.8	MNPS 2000V 182J 15S 5 ____
0.0022	19.0	11.5	7.0	15.0-0.8	MNPS 2000V 222J 15S 5 ____
0.0027	19.0	12.5	7.0	15.0-0.8	MNPS 2000V 272J 15S 5 ____
0.0033	19.0	13.0	8.0	15.0-0.8	MNPS 2000V 332J 15S 5 ____
0.0039	19.0	13.5	8.5	15.0-0.8	MNPS 2000V 392J 15S 5 ____
0.0047	19.0	14.5	9.0	15.0-0.8	MNPS 2000V 472J 15S 5 ____
0.0056	19.0	15.0	10.0	15.0-0.8	MNPS 2000V 562J 15S 5 ____
0.0068	19.0	17.0	10.0	15.0-0.8	MNPS 2000V 682J 15S 5 ____
0.0082	19.0	18.0	11.0	15.0-0.8	MNPS 2000V 822J 15S 5 ____
0.01	19.0	19.0	12.0	15.0-0.8	MNPS 2000V 103J 15S 5 ____
0.012	19.0	20.0	13.5	15.0-0.8	MNPS 2000V 123J 15S 5 ____
0.015	19.0	21.5	15.0	15.0-0.8	MNPS 2000V 153J 15S 5 ____
0.0027	28.0	13.0	7.5	22.5-0.8	MNPS 2000V 272J 22.5S 5 ____
0.0033	28.0	13.5	8.0	22.5-0.8	MNPS 2000V 332J 22.5S 5 ____
0.0039	28.0	14.0	9.0	22.5-0.8	MNPS 2000V 392J 22.5S 5 ____
0.0047	28.0	14.5	9.5	22.5-0.8	MNPS 2000V 472J 22.5S 5 ____
0.0056	28.0	13.0	8.0	22.5-0.8	MNPS 2000V 562J 22.5S 5 ____
0.0068	28.0	12.5	7.5	22.5-0.8	MNPS 2000V 682J 22.5S 5 ____
0.0082	28.0	13.0	8.0	22.5-0.8	MNPS 2000V 822J 22.5S 5 ____
0.01	28.0	13.5	8.5	22.5-0.8	MNPS 2000V 103J 22.5S 5 ____
0.012	28.0	14.5	9.0	22.5-0.8	MNPS 2000V 123J 22.5S 5 ____
0.015	28.0	15.5	10.0	22.5-0.8	MNPS 2000V 153J 22.5S 5 ____
0.018	28.0	16.0	11.0	22.5-0.8	MNPS 2000V 183J 22.5S 5 ____
0.022	28.0	18.0	11.0	22.5-0.8	MNPS 2000V 223J 22.5S 5 ____
0.027	28.0	19.0	12.5	22.5-0.8	MNPS 2000V 273J 22.5S 5 ____
0.033	28.0	21.5	13.0	22.5-0.8	MNPS 2000V 333J 22.5S 5 ____
0.039	28.0	22.5	14.0	22.5-0.8	MNPS 2000V 393J 22.5S 5 ____
0.047	28.0	24.5	14.5	22.5-0.8	MNPS 2000V 473J 22.5S 5 ____
0.056	28.0	26.0	16.0	22.5-0.8	MNPS 2000V 563J 22.5S 5 ____
0.068	28.0	28.0	18.0	22.5-0.8	MNPS 2000V 683J 22.5S 5 ____
0.082	28.0	29.5	19.5	22.5-0.8	MNPS 2000V 823J 22.5S 5 ____
0.0033	31.0	13.0	7.5	27.5-0.8	MNPS 2000V 332J 27.5S 5 ____
0.0039	31.0	13.5	8.0	27.5-0.8	MNPS 2000V 392J 27.5S 5 ____
0.0047	31.0	14.0	8.5	27.5-0.8	MNPS 2000V 472J 27.5S 5 ____
0.0056	31.0	14.5	9.5	27.5-0.8	MNPS 2000V 562J 27.5S 5 ____
0.0068	31.0	13.0	7.5	27.5-0.8	MNPS 2000V 682J 27.5S 5 ____
0.0082	31.0	13.5	8.5	27.5-0.8	MNPS 2000V 822J 27.5S 5 ____
0.01	31.0	13.0	8.0	27.5-0.8	MNPS 2000V 103J 27.5S 5 ____
0.012	31.0	13.5	8.5	27.5-0.8	MNPS 2000V 123J 27.5S 5 ____
0.015	31.0	14.5	9.0	27.5-0.8	MNPS 2000V 153J 27.5S 5 ____
0.018	31.0	15.0	10.0	27.5-0.8	MNPS 2000V 183J 27.5S 5 ____
0.022	31.0	16.0	11.0	27.5-0.8	MNPS 2000V 223J 27.5S 5 ____
0.027	31.0	18.0	11.0	27.5-0.8	MNPS 2000V 273J 27.5S 5 ____
0.033	31.0	19.0	12.5	27.5-0.8	MNPS 2000V 333J 27.5S 5 ____
0.039	31.0	21.0	12.5	27.5-0.8	MNPS 2000V 393J 27.5S 5 ____
0.047	31.0	22.0	14.0	27.5-0.8	MNPS 2000V 473J 27.5S 5 ____
0.056	31.0	24.5	14.5	27.5-0.8	MNPS 2000V 563J 27.5S 5 ____
0.068	31.0	26.0	16.0	27.5-0.8	MNPS 2000V 683J 27.5S 5 ____
0.082	31.0	27.5	17.5	27.5-0.8	MNPS 2000V 823J 27.5S 5 ____
0.1	31.0	29.5	19.5	27.5-0.8	MNPS 2000V 104J 27.5S 5 ____
0.12	31.0	31.5	21.5	27.5-0.8	MNPS 2000V 124J 27.5S 5 ____

Electrical Characteristics (Typical Data)

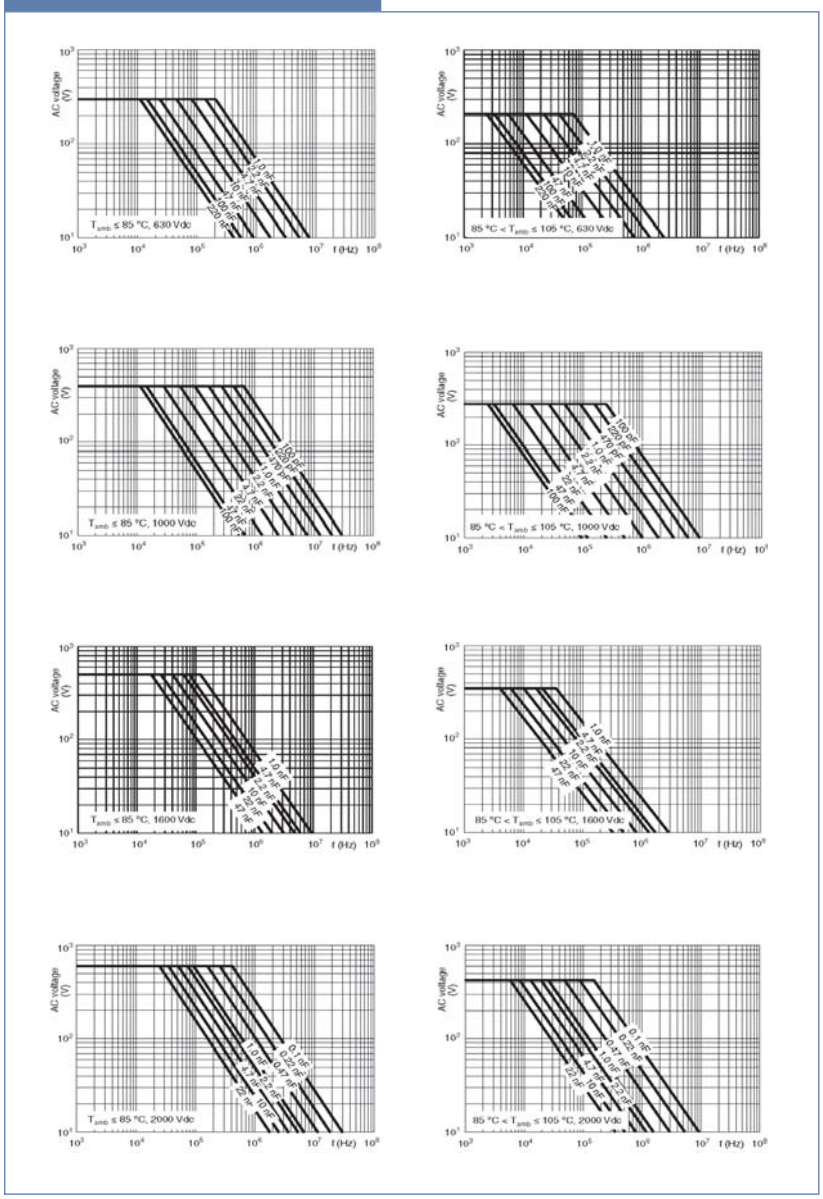
Capacitance as a function of ambient temperature



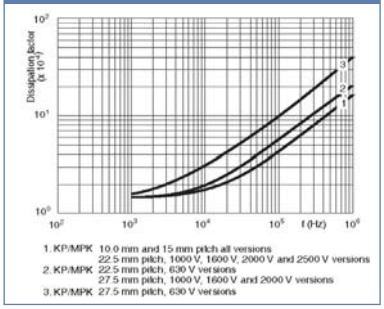
Impedance as a function of frequency



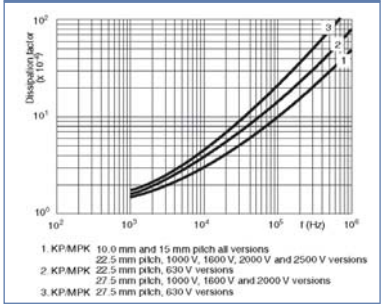
Max. RMS voltage as a function of frequency



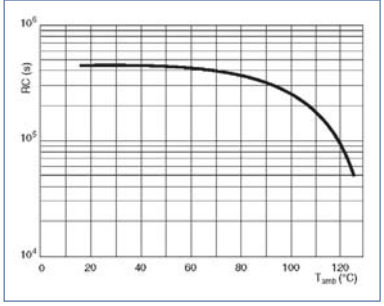
Tangent of loss angle



Maximun curves



Insulation resistance as a function of ambient temperature



BMNPS

This standard specifies Series-Type Metallized polypropylene film / polypropylene film / Aluminum foil capacitors for electronic equipment.

■ Features

- High pulse duty
- Very low dissipation factor
- Negative capacitance change versus temperature
- miniature size of NPPS.
- Plastic case(UL94 V-0), Epoxy resin sealing.
- RoHS directive compliant

■ Applications

- For high pulse and high frequency applications e.g.
- Switch mode power supplies
- Converter in drives and power electronics
- Deflection systems in monitors and TV-sets

■ Specifications

Reference Standard	IEC 60384-17
Climatic Category	40 / 105 / 21
Rated Temperature	105℃ +85℃~+105℃ decreasing factor 1.0% / ℃ for V_R(dc)
Operation Temperature Range	-40℃~+105℃
Rated Voltage	630Vdc, 1000Vdc, 1250Vdc, 1600Vdc, 2000Vdc
Capacitance Range	0.00047μF~0.82μF
Capacitance Tolerance	G : ±2% H : ±3% J : ±5% K : ±10% M : ±20% ※Standard : J : ±5%, Other Tolerance Grade : available on request.
Voltage Proof	2.5U_R(dc) / 3sec
Dissipation Factor	≤0.1%(at 1kHz 20℃)
Rated Voltage	≥30,000MΩ C_R≤0.33μF 100Vdc 60sec 20℃
	≥10,000Ω·F C_R〉0.33μF 100Vdc 60sec 20℃

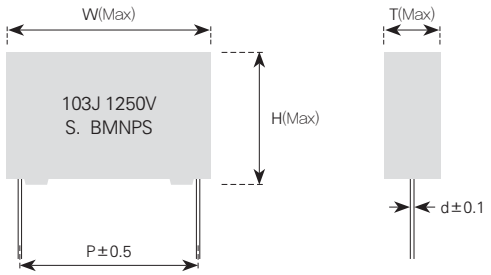
■ Part Number System

BMNPS	630V	472	J	10	S	5	
Part-1	Part-2	Part-3	Part-4	Part-5	Part-6	Part-7	Part-8

Part-1 : Series Code(Series Name)-BMNPS
Part-2 : Rated Voltage(DC : 630V~2000V)
Part-3 : Rated Capacitance Value(0.00047μF~0.820μF / 471~824)
Part-4 : Capacitance Tolerance(G : ±2% H : ±3% J : ±5% K : ±10% M : ±20%)
Part-5 : Lead Spacing(10mm / 15mm / 22.5mm / 27.5mm)
Part-6 : Forming-Type and Packing Code →
Part-7 : Size Number(1~4 : Min-Type / 5 : Standard-Type / 6~9 : Large-Type)
Part-8 : Internal Use

CODE	STYLE
B	Bending Forming
C	Straight Cutting
D	D-Type Forming
L	B-Type long Forming
M	C-Type long Forming
S	Straight
X	B-Type Forming
Y	C-Type Forming
Z	Z-Type Forming
T	A-Type Tapping
U	B-Type Tapping
V	C-Type Tapping

■ Dimensions



630Vdc(400Vac)

Cap. (μF)	Dimensions(mm) W (max.)	H (max.)	T (max.)	Pitch - d	PART NUMBER
0.0047	13.0	10.0	5.0	10.0-0.6	BMNPS 630V 472J 10S 5 ____
0.0056	13.0	10.0	5.0	10.0-0.6	BMNPS 630V 562J 10S 5 ____
0.0068	13.0	10.0	5.0	10.0-0.6	BMNPS 630V 682J 10S 5 ____
0.0082	13.0	10.0	5.0	10.0-0.6	BMNPS 630V 822J 10S 5 ____
0.01	13.0	10.0	5.0	10.0-0.6	BMNPS 630V 103J 10S 5 ____
0.012	13.0	12.0	6.0	10.0-0.6	BMNPS 630V 123J 10S 5 ____
0.015	13.0	12.0	6.0	10.0-0.6	BMNPS 630V 153J 10S 5 ____
0.018	13.0	13.0	7.0	10.0-0.6	BMNPS 630V 183J 10S 5 ____
0.022	13.0	14.0	8.0	10.0-0.6	BMNPS 630V 223J 10S 5 ____
0.027	13.0	14.0	8.0	10.0-0.6	BMNPS 630V 273J 10S 5 ____
0.01	18.0	11.0	5.0	15.0-0.8	BMNPS 630V 103J 15S 5 ____
0.012	18.0	11.0	5.0	15.0-0.8	BMNPS 630V 123J 15S 5 ____
0.015	18.0	11.0	5.0	15.0-0.8	BMNPS 630V 153J 15S 5 ____
0.018	18.0	11.0	5.0	15.0-0.8	BMNPS 630V 183J 15S 5 ____
0.022	18.0	11.0	5.0	15.0-0.8	BMNPS 630V 223J 15S 5 ____
0.027	18.0	11.0	5.0	15.0-0.8	BMNPS 630V 273J 15S 5 ____
0.033	18.0	12.0	6.0	15.0-0.8	BMNPS 630V 333J 15S 5 ____
0.039	18.0	12.0	6.0	15.0-0.8	BMNPS 630V 393J 15S 5 ____
0.047	18.0	13.0	7.0	15.0-0.8	BMNPS 630V 473J 15S 5 ____
0.056	18.0	14.5	8.5	15.0-0.8	BMNPS 630V 563J 15S 5 ____
0.068	18.0	14.5	8.5	15.0-0.8	BMNPS 630V 683J 15S 5 ____
0.082	18.0	16.0	10.0	15.0-0.8	BMNPS 630V 823J 15S 5 ____
0.1	18.0	16.0	10.0	15.0-0.8	BMNPS 630V 104J 15S 5 ____
0.12	18.0	19.0	11.0	15.0-0.8	BMNPS 630V 124J 15S 5 ____
0.15	18.0	21.0	12.0	15.0-0.8	BMNPS 630V 154J 15S 5 ____
0.033	26.0	15.0	6.0	22.5-0.8	BMNPS 630V 333J 22.5S 5 ____
0.039	26.0	15.0	6.0	22.5-0.8	BMNPS 630V 393J 22.5S 5 ____
0.039	26.0	16.5	7.0	22.5-0.8	BMNPS 630V 393J 22.5S 5 ____
0.047	26.0	15.0	6.0	22.5-0.8	BMNPS 630V 473J 22.5S 5 ____
0.056	26.0	15.0	6.0	22.5-0.8	BMNPS 630V 563J 22.5S 5 ____
0.068	26.0	15.0	6.0	22.5-0.8	BMNPS 630V 683J 22.5S 5 ____
0.082	26.0	16.5	7.0	22.5-0.8	BMNPS 630V 823J 22.5S 5 ____
0.1	26.0	17.0	8.5	22.5-0.8	BMNPS 630V 104J 22.5S 5 ____
0.12	26.0	17.0	8.5	22.5-0.8	BMNPS 630V 124J 22.5S 5 ____
0.15	26.0	18.0	9.0	22.5-0.8	BMNPS 630V 154J 22.5S 5 ____
0.18	26.0	19.0	10.0	22.5-0.8	BMNPS 630V 184J 22.5S 5 ____
0.22	26.0	22.0	12.0	22.5-0.8	BMNPS 630V 224J 22.5S 5 ____
0.27	26.0	22.0	12.0	22.5-0.8	BMNPS 630V 274J 22.5S 5 ____
0.33	26.0	25.0	15.0	22.5-0.8	BMNPS 630V 334J 22.5S 5 ____
0.39	26.0	25.0	15.0	22.5-0.8	BMNPS 630V 394J 22.5S 5 ____
0.047	32.0	18.0	9.0	27.5-0.8	BMNPS 630V 473J 27.5S 5 ____
0.056	32.0	18.0	9.0	27.5-0.8	BMNPS 630V 563J 27.5S 5 ____
0.068	32.0	18.0	9.0	27.5-0.8	BMNPS 630V 683J 27.5S 5 ____
0.082	32.0	18.0	9.0	27.5-0.8	BMNPS 630V 823J 27.5S 5 ____
0.1	32.0	18.0	9.0	27.5-0.8	BMNPS 630V 104J 27.5S 5 ____
0.12	32.0	18.0	9.0	27.5-0.8	BMNPS 630V 124J 27.5S 5 ____
0.15	32.0	18.0	9.0	27.5-0.8	BMNPS 630V 154J 27.5S 5 ____
0.18	32.0	18.0	9.0	27.5-0.8	BMNPS 630V 184J 27.5S 5 ____
0.22	32.0	20.0	10.0	27.5-0.8	BMNPS 630V 224J 27.5S 5 ____
0.27	32.0	20.0	11.0	27.5-0.8	BMNPS 630V 274J 27.5S 5 ____
0.33	32.0	22.0	13.0	27.5-0.8	BMNPS 630V 334J 27.5S 5 ____
0.39	32.0	23.5	14.0	27.5-0.8	BMNPS 630V 394J 27.5S 5 ____
0.47	32.0	24.5	15.0	27.5-0.8	BMNPS 630V 474J 27.5S 5 ____
0.56	32.0	26.0	18.0	27.5-0.8	BMNPS 630V 564J 27.5S 5 ____
0.68	32.0	30.0	20.0	27.5-0.8	BMNPS 630V 684J 27.5S 5 ____
0.82	32.0	30.0	20.0	27.5-0.8	BMNPS 630V 824J 27.5S 5 ____

1000Vdc(600Vac)

Cap. (μF)	Dimensions(mm) W (max.)	H (max.)	T (max.)	Pitch - d	PART NUMBER
0.0022	13.0	10.0	5.0	10.0-0.6	BMNPS 1000V 222J 10S 5 ____
0.0027	13.0	10.0	5.0	10.0-0.6	BMNPS 1000V 272J 10S 5 ____
0.0033	13.0	10.0	5.0	10.0-0.6	BMNPS 1000V 332J 10S 5 ____
0.0039	13.0	10.0	5.0	10.0-0.6	BMNPS 1000V 392J 10S 5 ____

0.0047	13.0	10.0	5.0	10.0-0.6	BMNPS 1000V 472J 10S 5 ____
0.0056	13.0	11.0	5.0	10.0-0.6	BMNPS 1000V 562J 10S 5 ____
0.0068	13.0	12.0	6.0	10.0-0.6	BMNPS 1000V 682J 10S 5 ____
0.0082	13.0	12.0	6.0	10.0-0.6	BMNPS 1000V 822J 10S 5 ____
0.01	13.0	13.0	7.0	10.0-0.6	BMNPS 1000V 103J 10S 5 ____
0.012	13.0	14.0	8.0	10.0-0.6	BMNPS 1000V 123J 10S 5 ____
0.015	13.0	14.0	8.0	10.0-0.6	BMNPS 1000V 153J 10S 5 ____
0.0068	18.0	11.0	5.0	15.0-0.8	BMNPS 1000V 682J 15S 5 ____
0.0082	18.0	11.0	5.0	15.0-0.8	BMNPS 1000V 822J 15S 5 ____
0.01	18.0	11.0	5.0	15.0-0.8	BMNPS 1000V 103J 15S 5 ____
0.012	18.0	12.0	6.0	15.0-0.8	BMNPS 1000V 123J 15S 5 ____
0.015	18.0	12.0	6.0	15.0-0.8	BMNPS 1000V 153J 15S 5 ____
0.018	18.0	12.0	6.0	15.0-0.8	BMNPS 1000V 183J 15S 5 ____
0.022	18.0	13.0	7.0	15.0-0.8	BMNPS 1000V 223J 15S 5 ____
0.027	18.0	14.5	8.5	15.0-0.8	BMNPS 1000V 273J 15S 5 ____
0.033	18.0	14.5	8.5	15.0-0.8	BMNPS 1000V 333J 15S 5 ____
0.039	18.0	17.5	8.5	15.0-0.8	BMNPS 1000V 393J 15S 5 ____
0.047	18.0	18.0	10.0	15.0-0.8	BMNPS 1000V 473J 15S 5 ____
0.056	18.0	18.0	10.0	15.0-0.8	BMNPS 1000V 563J 15S 5 ____
0.068	18.0	21.0	12.0	15.0-0.8	BMNPS 1000V 683J 15S 5 ____
0.082	18.0	21.0	12.0	15.0-0.8	BMNPS 1000V 823J 15S 5 ____
0.018	26.0	15.0	6.0	22.5-0.8	BMNPS 1000V 183J 22.5S 5 ____
0.022	26.0	15.0	6.0	22.5-0.8	BMNPS 1000V 223J 22.5S 5 ____
0.027	26.0	15.0	6.0	22.5-0.8	BMNPS 1000V 273J 22.5S 5 ____
0.033	26.0	15.0	6.0	22.5-0.8	BMNPS 1000V 333J 22.5S 5 ____
0.039	26.0	16.5	7.0	22.5-0.8	BMNPS 1000V 393J 22.5S 5 ____
0.047	26.0	16.5	7.0	22.5-0.8	BMNPS 1000V 473J 22.5S 5 ____
0.056	26.0	17.0	8.5	22.5-0.8	BMNPS 1000V 563J 22.5S 5 ____
0.068	26.0	17.0	8.5	22.5-0.8	BMNPS 1000V 683J 22.5S 5 ____
0.082	26.0	18.0	9.0	22.5-0.8	BMNPS 1000V 823J 22.5S 5 ____
0.1	26.0	19.0	10.0	22.5-0.8	BMNPS 1000V 104J 22.5S 5 ____
0.12	26.0	22.0	12.0	22.5-0.8	BMNPS 1000V 124J 22.5S 5 ____
0.15	26.0	22.0	12.0	22.5-0.8	BMNPS 1000V 154J 22.5S 5 ____
0.18	26.0	25.0	15.0	22.5-0.8	BMNPS 1000V 184J 22.5S 5 ____
0.22	26.0	25.0	15.0	22.5-0.8	BMNPS 1000V 224J 22.5S 5 ____
0.022	32.0	18.0	9.0	27.5-0.8	BMNPS 1000V 223J 27.5S 5 ____
0.027	32.0	18.0	9.0	27.5-0.8	BMNPS 1000V 273J 27.5S 5 ____
0.033	32.0	18.0	9.0	27.5-0.8	BMNPS 1000V 333J 27.5S 5 ____
0.039	32.0	18.0	9.0	27.5-0.8	BMNPS 1000V 393J 27.5S 5 ____
0.047	32.0	18.0	9.0	27.5-0.8	BMNPS 1000V 473J 27.5S 5 ____
0.056	32.0	18.0	9.0	27.5-0.8	BMNPS 1000V 563J 27.5S 5 ____
0.068	32.0	18.0	9.0	27.5-0.8	BMNPS 1000V 683J 27.5S 5 ____
0.082	32.0	18.0	9.0	27.5-0.8	BMNPS 1000V 823J 27.5S 5 ____
0.1	32.0	18.0	9.0	27.5-0.8	BMNPS 1000V 104J 27.5S 5 ____
0.12	32.0	20.0	10.0	27.5-0.8	BMNPS 1000V 124J 27.5S 5 ____
0.15	32.0	20.0	11.0	27.5-0.8	BMNPS 1000V 154J 27.5S 5 ____
0.18	32.0	22.0	13.0	27.5-0.8	BMNPS 1000V 184J 27.5S 5 ____
0.22	32.0	23.5	14.0	27.5-0.8	BMNPS 1000V 224J 27.5S 5 ____
0.27	32.0	24.5	15.0	27.5-0.8	BMNPS 1000V 274J 27.5S 5 ____
0.33	32.0	26.0	18.0	27.5-0.8	BMNPS 1000V 334J 27.5S 5 ____
0.39	32.0	30.0	20.0	27.5-0.8	BMNPS 1000V 394J 27.5S 5 ____
0.47	32.0	30.0	20.0	27.5-0.8	BMNPS 1000V 474J 27.5S 5 ____
0.56	32.0	34.0	21.0	27.5-0.8	BMNPS 1000V 564J 27.5S 5 ____

1250Vdc(600Vac)

Cap. (μF)	Dimensions(mm)			Pitch - d	PART NUMBER
	W (max.)	H (max.)	T (max.)		
0.0033	18.0	12.0	6.0	15.0-0.8	BMNPS 1250V 332J 15S 5 ____
0.0039	18.0	12.0	6.0	15.0-0.8	BMNPS 1250V 392J 15S 5 ____
0.0047	18.0	11.0	5.0	15.0-0.8	BMNPS 1250V 472J 15S 5 ____
0.0056	18.0	12.0	6.0	15.0-0.8	BMNPS 1250V 562J 15S 5 ____
0.0068	18.0	12.0	6.0	15.0-0.8	BMNPS 1250V 682J 15S 5 ____
0.0082	18.0	12.0	6.0	15.0-0.8	BMNPS 1250V 822J 15S 5 ____
0.01	18.0	12.0	6.0	15.0-0.8	BMNPS 1250V 103J 15S 5 ____
0.012	18.0	12.0	6.0	15.0-0.8	BMNPS 1250V 123J 15S 5 ____
0.015	18.0	12.0	6.0	15.0-0.8	BMNPS 1250V 153J 15S 5 ____
0.018	18.0	13.0	7.0	15.0-0.8	BMNPS 1250V 183J 15S 5 ____
0.022	18.0	14.5	8.5	15.0-0.8	BMNPS 1250V 223J 15S 5 ____
0.027	18.0	17.5	8.5	15.0-0.8	BMNPS 1250V 273J 15S 5 ____
0.033	18.0	16.0	10.0	15.0-0.8	BMNPS 1250V 333J 15S 5 ____
0.039	18.0	18.0	10.0	15.0-0.8	BMNPS 1250V 393J 15S 5 ____
0.047	18.0	19.0	11.0	15.0-0.8	BMNPS 1250V 473J 15S 5 ____
0.056	18.0	21.0	12.0	15.0-0.8	BMNPS 1250V 563J 15S 5 ____
0.0082	26.0	15.0	6.0	22.5-0.8	BMNPS 1250V 822J 22.5S 5 ____
0.01	26.0	16.5	7.0	22.5-0.8	BMNPS 1250V 103J 22.5S 5 ____
0.012	26.0	15.0	6.0	22.5-0.8	BMNPS 1250V 123J 22.5S 5 ____
0.015	26.0	15.0	6.0	22.5-0.8	BMNPS 1250V 153J 22.5S 5 ____
0.018	26.0	15.0	6.0	22.5-0.8	BMNPS 1250V 183J 22.5S 5 ____

0.022	26.0	15.0	6.0	22.5-0.8	BMNPS 1250V 223J 22.5S 5 ____
0.027	26.0	15.0	6.0	22.5-0.8	BMNPS 1250V 273J 22.5S 5 ____
0.033	26.0	16.5	7.0	22.5-0.8	BMNPS 1250V 333J 22.5S 5 ____
0.039	26.0	16.5	7.0	22.5-0.8	BMNPS 1250V 393J 22.5S 5 ____
0.047	26.0	17.0	8.5	22.5-0.8	BMNPS 1250V 473J 22.5S 5 ____
0.056	26.0	17.0	8.5	22.5-0.8	BMNPS 1250V 563J 22.5S 5 ____
0.068	26.0	19.0	10.0	22.5-0.8	BMNPS 1250V 683J 22.5S 5 ____
0.082	26.0	20.0	11.0	22.5-0.8	BMNPS 1250V 823J 22.5S 5 ____
0.1	26.0	22.0	12.0	22.5-0.8	BMNPS 1250V 104J 22.5S 5 ____
0.12	26.0	22.0	12.0	22.5-0.8	BMNPS 1250V 124J 22.5S 5 ____
0.15	26.0	25.0	15.0	22.5-0.8	BMNPS 1250V 154J 22.5S 5 ____
0.18	26.0	25.0	15.0	22.5-0.8	BMNPS 1250V 184J 22.5S 5 ____
0.01	32.0	18.0	9.0	27.5-0.8	BMNPS 1250V 103J 27.5S 5 ____
0.012	32.0	18.0	9.0	27.5-0.8	BMNPS 1250V 123J 27.5S 5 ____
0.015	32.0	18.0	9.0	27.5-0.8	BMNPS 1250V 153J 27.5S 5 ____
0.018	32.0	18.0	9.0	27.5-0.8	BMNPS 1250V 183J 27.5S 5 ____
0.022	32.0	18.0	9.0	27.5-0.8	BMNPS 1250V 223J 27.5S 5 ____
0.027	32.0	18.0	9.0	27.5-0.8	BMNPS 1250V 273J 27.5S 5 ____
0.033	32.0	18.0	9.0	27.5-0.8	BMNPS 1250V 333J 27.5S 5 ____
0.039	32.0	18.0	9.0	27.5-0.8	BMNPS 1250V 393J 27.5S 5 ____
0.047	32.0	18.0	9.0	27.5-0.8	BMNPS 1250V 473J 27.5S 5 ____
0.056	32.0	18.0	9.0	27.5-0.8	BMNPS 1250V 563J 27.5S 5 ____
0.068	32.0	18.0	9.0	27.5-0.8	BMNPS 1250V 683J 27.5S 5 ____
0.082	32.0	20.0	10.0	27.5-0.8	BMNPS 1250V 823J 27.5S 5 ____
0.1	32.0	20.0	11.0	27.5-0.8	BMNPS 1250V 104J 27.5S 5 ____
0.12	32.0	22.0	12.0	27.5-0.8	BMNPS 1250V 124J 27.5S 5 ____
0.15	32.0	23.5	14.0	27.5-0.8	BMNPS 1250V 154J 27.5S 5 ____
0.18	32.0	24.5	15.0	27.5-0.8	BMNPS 1250V 184J 27.5S 5 ____
0.22	32.0	26.0	18.0	27.5-0.8	BMNPS 1250V 224J 27.5S 5 ____
0.27	32.0	30.0	20.0	27.5-0.8	BMNPS 1250V 274J 27.5S 5 ____
0.33	32.0	34.0	21.0	27.5-0.8	BMNPS 1250V 334J 27.5S 5 ____
0.39	32.0	34.0	21.0	27.5-0.8	BMNPS 1250V 394J 27.5S 5 ____

1600Vdc(650Vac)

Cap. (μF)	Dimensions(mm)			Pitch - d	PART NUMBER
	W (max.)	H (max.)	T (max.)		
0.0015	18.0	11.0	5.0	15.0-0.8	BMNPS 1600V 152J 15S 5 ____
0.0018	18.0	12.0	6.0	15.0-0.8	BMNPS 1600V 182J 15S 5 ____
0.0022	18.0	11.0	5.0	15.0-0.8	BMNPS 1600V 222J 15S 5 ____
0.0027	18.0	12.0	6.0	15.0-0.8	BMNPS 1600V 272J 15S 5 ____
0.0033	18.0	11.0	5.0	15.0-0.8	BMNPS 1600V 332J 15S 5 ____
0.0039	18.0	12.0	6.0	15.0-0.8	BMNPS 1600V 392J 15S 5 ____
0.0047	18.0	12.0	6.0	15.0-0.8	BMNPS 1600V 472J 15S 5 ____
0.0056	18.0	13.0	7.0	15.0-0.8	BMNPS 1600V 562J 15S 5 ____
0.0068	18.0	13.5	7.5	15.0-0.8	BMNPS 1600V 682J 15S 5 ____
0.0082	18.0	14.5	8.5	15.0-0.8	BMNPS 1600V 822J 15S 5 ____
0.01	18.0	17.5	8.5	15.0-0.8	BMNPS 1600V 103J 15S 5 ____
0.012	18.0	16.0	10.0	15.0-0.8	BMNPS 1600V 123J 15S 5 ____
0.015	18.0	18.0	10.0	15.0-0.8	BMNPS 1600V 153J 15S 5 ____
0.018	18.0	19.0	11.0	15.0-0.8	BMNPS 1600V 183J 15S 5 ____
0.022	18.0	21.0	12.0	15.0-0.8	BMNPS 1600V 223J 15S 5 ____
0.0056	26.0	16.5	7.0	22.5-0.8	BMNPS 1600V 562J 22.5S 5 ____
0.0068	26.0	15.0	6.0	22.5-0.8	BMNPS 1600V 682J 22.5S 5 ____
0.0082	26.0	16.5	7.0	22.5-0.8	BMNPS 1600V 822J 22.5S 5 ____
0.01	26.0	15.0	6.0	22.5-0.8	BMNPS 1600V 103J 22.5S 5 ____
0.012	26.0	15.0	6.0	22.5-0.8	BMNPS 1600V 123J 22.5S 5 ____
0.015	26.0	16.5	7.0	22.5-0.8	BMNPS 1600V 153J 22.5S 5 ____
0.018	26.0	17.0	8.5	22.5-0.8	BMNPS 1600V 183J 22.5S 5 ____
0.022	26.0	17.0	8.5	22.5-0.8	BMNPS 1600V 223J 22.5S 5 ____
0.027	26.0	18.0	9.0	22.5-0.8	BMNPS 1600V 273J 22.5S 5 ____
0.033	26.0	19.0	10.0	22.5-0.8	BMNPS 1600V 333J 22.5S 5 ____
0.039	26.0	20.0	11.0	22.5-0.8	BMNPS 1600V 393J 22.5S 5 ____
0.047	26.0	22.0	12.0	22.5-0.8	BMNPS 1600V 473J 22.5S 5 ____
0.056	26.0	25.0	15.0	22.5-0.8	BMNPS 1600V 563J 22.5S 5 ____
0.068	26.0	25.0	15.0	22.5-0.8	BMNPS 1600V 683J 22.5S 5 ____
0.0068	32.0	18.0	9.0	27.5-0.8	BMNPS 1600V 682J 27.5S 5 ____
0.0082	32.0	18.0	9.0	27.5-0.8	BMNPS 1600V 822J 27.5S 5 ____
0.01	32.0	18.0	9.0	27.5-0.8	BMNPS 1600V 103J 27.5S 5 ____
0.012	32.0	18.0	9.0	27.5-0.8	BMNPS 1600V 123J 27.5S 5 ____
0.015	32.0	18.0	9.0	27.5-0.8	BMNPS 1600V 153J 27.5S 5 ____
0.018	32.0	18.0	9.0	27.5-0.8	BMNPS 1600V 183J 27.5S 5 ____
0.022	32.0	18.0	9.0	27.5-0.8	BMNPS 1600V 223J 27.5S 5 ____
0.027	32.0	18.0	9.0	27.5-0.8	BMNPS 1600V 273J 27.5S 5 ____
0.033	32.0	20.0	10.0	27.5-0.8	BMNPS 1600V 333J 27.5S 5 ____
0.039	32.0	20.0	10.0	27.5-0.8	BMNPS 1600V 393J 27.5S 5 ____
0.047	32.0	20.0	11.0	27.5-0.8	BMNPS 1600V 473J 27.5S 5 ____
0.056	32.0	22.0	12.0	27.5-0.8	BMNPS 1600V 563J 27.5S 5 ____
0.068	32.0	23.5	14.0	27.5-0.8	BMNPS 1600V 683J 27.5S 5 ____

0.082	32.0	24.5	15.0	27.5-0.8	BMNPS 1600V 823J 27.5S 5 ____
0.1	32.0	26.0	18.0	27.5-0.8	BMNPS 1600V 104J 27.5S 5 ____
0.12	32.0	30.0	20.0	27.5-0.8	BMNPS 1600V 124J 27.5S 5 ____
0.15	32.0	30.0	20.0	27.5-0.8	BMNPS 1600V 154J 27.5S 5 ____
0.18	32.0	34.0	21.0	27.5-0.8	BMNPS 1600V 184J 27.5S 5 ____

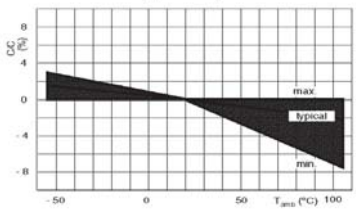
2000Vdc(700Vac)

Cap. (μF)	Dimensions(mm)			Pitch - d	PART NUMBER
	W (max.)	H (max.)	T (max.)		
0.00047	18.0	11.0	5.0	15.0-0.8	BMNPS 2000V 471J 15S 5 ____
0.00056	18.0	11.0	5.0	15.0-0.8	BMNPS 2000V 561J 15S 5 ____
0.00068	18.0	12.0	6.0	15.0-0.8	BMNPS 2000V 681J 15S 5 ____
0.00082	18.0	11.0	5.0	15.0-0.8	BMNPS 2000V 821J 15S 5 ____
0.001	18.0	11.0	5.0	15.0-0.8	BMNPS 2000V 102J 15S 5 ____
0.0012	18.0	11.0	5.0	15.0-0.8	BMNPS 2000V 122J 15S 5 ____
0.0015	18.0	11.0	5.0	15.0-0.8	BMNPS 2000V 152J 15S 5 ____
0.0018	18.0	12.0	6.0	15.0-0.8	BMNPS 2000V 182J 15S 5 ____
0.0022	18.0	12.0	6.0	15.0-0.8	BMNPS 2000V 222J 15S 5 ____
0.0027	18.0	12.0	6.0	15.0-0.8	BMNPS 2000V 272J 15S 5 ____
0.0033	18.0	13.0	7.0	15.0-0.8	BMNPS 2000V 332J 15S 5 ____
0.0039	18.0	14.5	8.5	15.0-0.8	BMNPS 2000V 392J 15S 5 ____
0.0047	18.0	14.5	8.5	15.0-0.8	BMNPS 2000V 472J 15S 5 ____
0.0056	18.0	17.5	8.5	15.0-0.8	BMNPS 2000V 562J 15S 5 ____
0.0068	18.0	16.0	10.0	15.0-0.8	BMNPS 2000V 682J 15S 5 ____
0.0082	18.0	18.0	10.0	15.0-0.8	BMNPS 2000V 822J 15S 5 ____
0.01	18.0	21.0	12.0	15.0-0.8	BMNPS 2000V 103J 15S 5 ____
0.012	18.0	21.0	12.0	15.0-0.8	BMNPS 2000V 123J 15S 5 ____
0.0027	26.0	15.0	6.0	22.5-0.8	BMNPS 2000V 272J 22.5S 5 ____
0.0033	26.0	16.5	7.0	22.5-0.8	BMNPS 2000V 332J 22.5S 5 ____
0.0039	26.0	16.5	7.0	22.5-0.8	BMNPS 2000V 392J 22.5S 5 ____
0.0047	26.0	17.0	8.5	22.5-0.8	BMNPS 2000V 472J 22.5S 5 ____
0.0056	26.0	16.5	7.0	22.5-0.8	BMNPS 2000V 562J 22.5S 5 ____
0.0068	26.0	15.0	6.0	22.5-0.8	BMNPS 2000V 682J 22.5S 5 ____
0.0082	26.0	16.5	7.0	22.5-0.8	BMNPS 2000V 822J 22.5S 5 ____
0.01	26.0	16.5	7.0	22.5-0.8	BMNPS 2000V 103J 22.5S 5 ____
0.012	26.0	17.0	8.5	22.5-0.8	BMNPS 2000V 123J 22.5S 5 ____
0.015	26.0	17.0	8.5	22.5-0.8	BMNPS 2000V 153J 22.5S 5 ____
0.018	26.0	19.0	10.0	22.5-0.8	BMNPS 2000V 183J 22.5S 5 ____
0.022	26.0	20.0	11.0	22.5-0.8	BMNPS 2000V 223J 22.5S 5 ____
0.027	26.0	22.0	12.0	22.5-0.8	BMNPS 2000V 273J 22.5S 5 ____
0.033	26.0	22.0	12.0	22.5-0.8	BMNPS 2000V 333J 22.5S 5 ____
0.039	26.0	25.0	15.0	22.5-0.8	BMNPS 2000V 393J 22.5S 5 ____
0.047	26.0	25.0	15.0	22.5-0.8	BMNPS 2000V 473J 22.5S 5 ____
0.0033	32.0	18.0	9.0	27.5-0.8	BMNPS 2000V 332J 27.5S 5 ____
0.0039	32.0	18.0	9.0	27.5-0.8	BMNPS 2000V 392J 27.5S 5 ____
0.0047	32.0	18.0	9.0	27.5-0.8	BMNPS 2000V 472J 27.5S 5 ____
0.0056	32.0	18.0	9.0	27.5-0.8	BMNPS 2000V 562J 27.5S 5 ____
0.0068	32.0	18.0	9.0	27.5-0.8	BMNPS 2000V 682J 27.5S 5 ____
0.0082	32.0	18.0	9.0	27.5-0.8	BMNPS 2000V 822J 27.5S 5 ____
0.01	32.0	18.0	9.0	27.5-0.8	BMNPS 2000V 103J 27.5S 5 ____
0.012	32.0	18.0	9.0	27.5-0.8	BMNPS 2000V 123J 27.5S 5 ____
0.015	32.0	18.0	9.0	27.5-0.8	BMNPS 2000V 153J 27.5S 5 ____
0.018	32.0	18.0	9.0	27.5-0.8	BMNPS 2000V 183J 27.5S 5 ____
0.022	32.0	20.0	10.0	27.5-0.8	BMNPS 2000V 223J 27.5S 5 ____
0.027	32.0	20.0	11.0	27.5-0.8	BMNPS 2000V 273J 27.5S 5 ____
0.033	32.0	22.0	12.0	27.5-0.8	BMNPS 2000V 333J 27.5S 5 ____
0.039	32.0	22.0	13.0	27.5-0.8	BMNPS 2000V 393J 27.5S 5 ____
0.047	32.0	23.5	14.0	27.5-0.8	BMNPS 2000V 473J 27.5S 5 ____
0.056	32.0	24.5	15.0	27.5-0.8	BMNPS 2000V 563J 27.5S 5 ____
0.068	32.0	26.0	18.0	27.5-0.8	BMNPS 2000V 683J 27.5S 5 ____
0.082	32.0	30.0	20.0	27.5-0.8	BMNPS 2000V 823J 27.5S 5 ____
0.1	32.0	30.0	20.0	27.5-0.8	BMNPS 2000V 104J 27.5S 5 ____
0.12	32.0	37.0	22.0	27.5-0.8	BMNPS 2000V 124J 27.5S 5 ____

Electrical Characteristics (Typical Data)

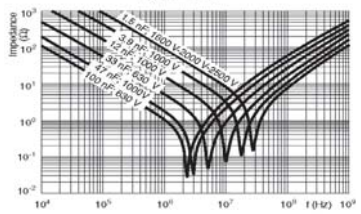
Capacitance as a function of ambient temperature

(typical curve)

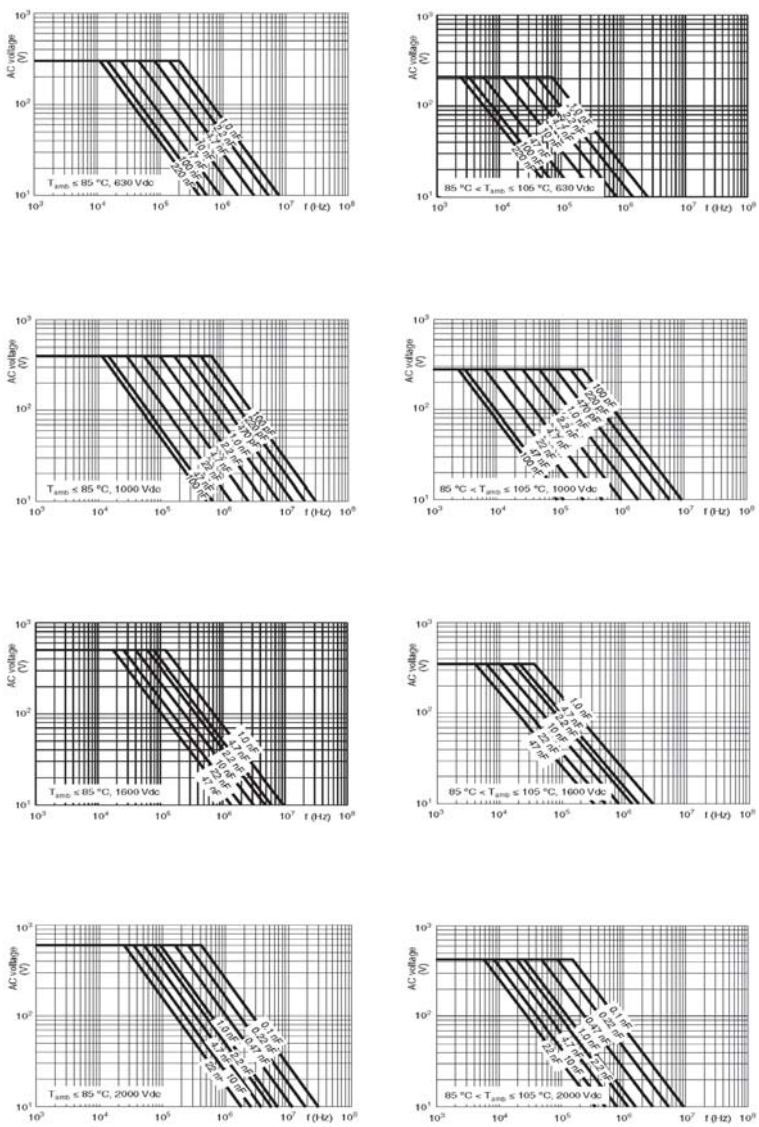


Impedance as a function of frequency

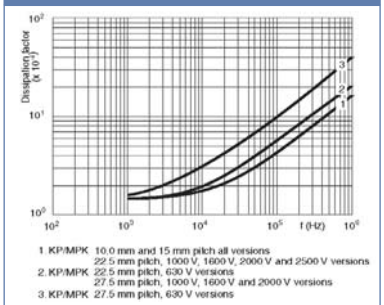
(typical curve)



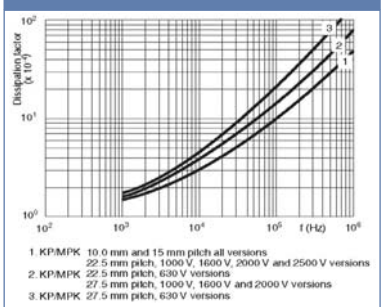
Max. RMS voltage as a function of frequency



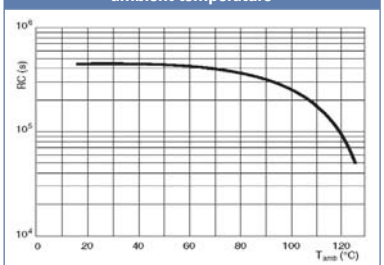
Tangent of loss angle



Maximun curves



Insulation resistance as a function of ambient temperature



DMPP

This standard specifies Double sided-Metallized polypropylene film capacitors for electronic equipment.

■ Features

- Pulse duty construction
- Self-healing
- Very low dissipation factor
- Negative capacitance change versus temperature
- miniature size of NPPS.
- Coated with flame-retardant(UL94 V-0) epoxy resin.
- RoHS directive compliant

■ Applications

- For pulse applications e.g.
- Switch mode power supplies
- TV and monitor sets
- electronic ballasts and compact lamps
- snubber and silicon-controlled rectifier(SCR) commutation circuits

■ Specifications

Reference Standard	IEC 60384-17 / IEC 60384-16
Climatic Category	40 / 105 / 21
Rated Temperature	85℃ for V_R(dc) ; 75℃ for V_R(ac) ;
Operation Temperature Range	-40℃~+105℃ +85℃~+105℃ decreasing factor 1.0% / ℃ for V_R(dc) +75℃~+105℃ decreasing factor 1.0% / ℃ for V_R(dc)
Rated Voltage	250Vdc, 400Vdc, 630Vdc, 1000Vdc, 1600Vdc, 2000Vdc, 2500Vdc, 3000Vdc
Capacitance Range	0.00047μF~3.30μF
Capacitance Tolerance	J : ±5% K : ±10% M : ±20% ※Standard : J : ±5%, Other Tolerance Grade : available on request.
Voltage Proof	1.75U_R(dc) / 3sec
Dissipation Factor	≤0.1%(at 1kHz 20℃)
Rated Voltage	≥30,000MΩ C_R≤0.33μF 100Vdc 60sec 20℃
	≥10,000Ω·F C_R〉0.33μF 100Vdc 60sec 20℃

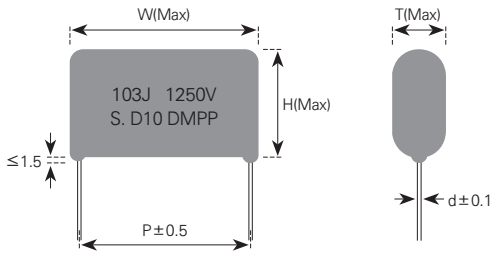
■ Part Number System

DMPP	250V	223	J	10	S	5	
Part-1	Part-2	Part-3	Part-4	Part-5	Part-6	Part-7	Part-8

Part-1 : Series Code(Series Name)-DMPP
Part-2 : Rated Voltage(DC : 250V~3000V)
Part-3 : Rated Capacitance Value(0.00047μF~3.30μF / 471~335)
Part-4 : Capacitance Tolerance(J : ±5% K : ±10% M : ±20%)
Part-5 : Lead Spacing(10mm / 15mm / 22.5mm / 27.5mm)
Part-6 : Forming-Type and Packing Code
Part-7 : Size Number(1~4 : Min-Type / 5 : Standard-Type / 6~9 : Large-Type)
Part-8 : Internal Use

CODE	STYLE
B	Bending Forming
C	Straight Cutting
D	D-Type Forming
L	B-Type long Forming
M	C-Type long Forming
S	Straight
X	B-Type Forming
Y	C-Type Forming
Z	Z-Type Forming
T	A-Type Tapping
U	B-Type Tapping
V	C-Type Tapping

■ Dimensions



250Vdc(180Vac)					
Cap. (μF)	Dimensions(mm) W (max.)	H (max.)	T (max.)	Pitch - d	PART NUMBER
0.022	13.0	8.5	5.0	10.0-0.6	DMPP 250V 223J 10 S 5 ____
0.027	13.0	9.0	5.0	10.0-0.6	DMPP 250V 273J 10 S 5 ____
0.033	13.0	10.0	5.0	10.0-0.6	DMPP 250V 333J 10 S 5 ____
0.039	13.0	10.5	5.5	10.0-0.6	DMPP 250V 393J 10 S 5 ____
0.047	13.0	10.5	6.0	10.0-0.6	DMPP 250V 473J 10 S 5 ____
0.056	13.0	11.5	6.0	10.0-0.6	DMPP 250V 563J 10 S 5 ____
0.068	13.0	12.0	6.5	10.0-0.6	DMPP 250V 683J 10 S 5 ____
0.082	13.0	12.5	7.0	10.0-0.6	DMPP 250V 823J 10 S 5 ____
0.1	13.0	13.0	8.0	10.0-0.6	DMPP 250V 104J 10 S 5 ____
0.056	18.0	9.0	5.5	15.0-0.8	DMPP 250V 563J 15 S 5 ____
0.068	18.0	10.0	5.5	15.0-0.8	DMPP 250V 683J 15 S 5 ____
0.082	18.0	10.5	5.5	15.0-0.8	DMPP 250V 823J 15 S 5 ____
0.1	18.0	11.0	6.0	15.0-0.8	DMPP 250V 104J 15 S 5 ____
0.12	18.0	11.5	6.5	15.0-0.8	DMPP 250V 124J 15 S 5 ____
0.15	18.0	12.5	7.0	15.0-0.8	DMPP 250V 154J 15 S 5 ____
0.18	18.0	13.0	7.5	15.0-0.8	DMPP 250V 184J 15 S 5 ____
0.22	18.0	13.5	8.5	15.0-0.8	DMPP 250V 224J 15 S 5 ____
0.27	18.0	14.5	9.0	15.0-0.8	DMPP 250V 274J 15 S 5 ____
0.33	18.0	15.5	10.0	15.0-0.8	DMPP 250V 334J 15 S 5 ____
0.39	18.0	16.0	11.0	15.0-0.8	DMPP 250V 394J 15 S 5 ____
0.47	18.0	18.0	11.0	15.0-0.8	DMPP 250V 474J 15 S 5 ____
0.15	27.0	10.5	6.5	22.5-0.8	DMPP 250V 154J 22.5 S 5 ____
0.18	27.0	11.0	7.0	22.5-0.8	DMPP 250V 184J 22.5 S 5 ____
0.22	27.0	12.5	7.0	22.5-0.8	DMPP 250V 224J 22.5 S 5 ____
0.27	27.0	14.0	7.0	22.5-0.8	DMPP 250V 274J 22.5 S 5 ____
0.33	27.0	15.5	7.0	22.5-0.8	DMPP 250V 334J 22.5 S 5 ____
0.39	27.0	16.0	8.0	22.5-0.8	DMPP 250V 394J 22.5 S 5 ____
0.47	27.0	17.0	8.5	22.5-0.8	DMPP 250V 474J 22.5 S 5 ____
0.56	27.0	17.5	9.0	22.5-0.8	DMPP 250V 564J 22.5 S 5 ____
0.68	27.0	18.5	10.0	22.5-0.8	DMPP 250V 684J 22.5 S 5 ____
0.82	27.0	19.5	11.0	22.5-0.8	DMPP 250V 824J 22.5 S 5 ____
1.0	27.0	20.5	12.0	22.5-0.8	DMPP 250V 105J 22.5 S 5 ____
1.2	27.0	22.5	12.5	22.5-0.8	DMPP 250V 125J 22.5 S 5 ____
0.47	32.0	15.0	8.0	27.5-0.8	DMPP 250V 474J 27.5 S 5 ____
0.56	32.0	15.5	8.5	27.5-0.8	DMPP 250V 564J 27.5 S 5 ____
0.68	32.0	16.5	9.5	27.5-0.8	DMPP 250V 684J 27.5 S 5 ____
0.82	32.0	18.0	10.0	27.5-0.8	DMPP 250V 824J 27.5 S 5 ____
1.0	32.0	18.0	11.5	27.5-0.8	DMPP 250V 105J 27.5 S 5 ____
1.2	32.0	20.0	12.0	27.5-0.8	DMPP 250V 125J 27.5 S 5 ____
1.5	32.0	21.5	13.0	27.5-0.8	DMPP 250V 155J 27.5 S 5 ____
1.8	32.0	23.0	14.5	27.5-0.8	DMPP 250V 185J 27.5 S 5 ____
2.2	32.0	24.5	16.0	27.5-0.8	DMPP 250V 225J 27.5 S 5 ____
2.7	32.0	27.0	17.0	27.5-0.8	DMPP 250V 275J 27.5 S 5 ____
3.3	32.0	29.0	19.0	27.5-0.8	DMPP 250V 335J 27.5 S 5 ____

400Vdc(250Vac)					
Cap. (μF)	Dimensions(mm) W (max.)	H (max.)	T (max.)	Pitch - d	PART NUMBER
0.01	13.0	8.5	4.5	10.0-0.6	DMPP 400V 103J 10 S 5 ____
0.012	13.0	8.5	5.0	10.0-0.6	DMPP 400V 123J 10 S 5 ____
0.015	13.0	9.5	5.0	10.0-0.6	DMPP 400V 153J 10 S 5 ____
0.018	13.0	9.5	5.0	10.0-0.6	DMPP 400V 183J 10 S 5 ____
0.022	13.0	10.5	5.5	10.0-0.6	DMPP 400V 223J 10 S 5 ____
0.027	13.0	11.0	6.0	10.0-0.6	DMPP 400V 273J 10 S 5 ____
0.033	13.0	11.5	6.0	10.0-0.6	DMPP 400V 333J 10 S 5 ____
0.039	13.0	12.0	6.5	10.0-0.6	DMPP 400V 393J 10 S 5 ____
0.047	13.0	12.5	7.0	10.0-0.6	DMPP 400V 473J 10 S 5 ____
0.056	13.0	13.0	7.5	10.0-0.6	DMPP 400V 563J 10 S 5 ____
0.068	13.0	13.5	8.5	10.0-0.6	DMPP 400V 683J 10 S 5 ____
0.027	18.0	8.5	5.0	15.0-0.8	DMPP 400V 273J 15 S 5 ____
0.033	18.0	9.5	5.0	15.0-0.8	DMPP 400V 333J 15 S 5 ____
0.039	18.0	10.5	5.0	15.0-0.8	DMPP 400V 393J 15 S 5 ____
0.047	18.0	11.0	5.5	15.0-0.8	DMPP 400V 473J 15 S 5 ____
0.056	18.0	11.0	6.0	15.0-0.8	DMPP 400V 563J 15 S 5 ____

0.068	18.0	11.0	6.5	15.0-0.8	DMPP 400V 683J 15 S 5 ____
0.082	18.0	12.0	7.0	15.0-0.8	DMPP 400V 823J 15 S 5 ____
0.1	18.0	12.5	7.5	15.0-0.8	DMPP 400V 104J 15 S 5 ____
0.12	18.0	13.5	8.0	15.0-0.8	DMPP 400V 124J 15 S 5 ____
0.15	18.0	14.0	9.0	15.0-0.8	DMPP 400V 154J 15 S 5 ____
0.18	18.0	15.0	10.0	15.0-0.8	DMPP 400V 184J 15 S 5 ____
0.22	18.0	16.0	11.0	15.0-0.8	DMPP 400V 224J 15 S 5 ____
0.27	18.0	18.0	11.0	15.0-0.8	DMPP 400V 274J 15 S 5 ____
0.33	18.0	19.0	12.5	15.0-0.8	DMPP 400V 334J 15 S 5 ____
0.10	27.0	10.5	7.0	22.5-0.8	DMPP 400V 104J 22.5 S 5 ____
0.12	27.0	11.5	7.0	22.5-0.8	DMPP 400V 124J 22.5 S 5 ____
0.15	27.0	14.0	7.0	22.5-0.8	DMPP 400V 154J 22.5 S 5 ____
0.18	27.0	15.5	7.0	22.5-0.8	DMPP 400V 184J 22.5 S 5 ____
0.22	27.0	15.0	8.0	22.5-0.8	DMPP 400V 224J 22.5 S 5 ____
0.27	27.0	17.0	8.5	22.5-0.8	DMPP 400V 274J 22.5 S 5 ____
0.33	27.0	17.5	9.5	22.5-0.8	DMPP 400V 334J 22.5 S 5 ____
0.39	27.0	18.5	10.0	22.5-0.8	DMPP 400V 394J 22.5 S 5 ____
0.47	27.0	19.5	11.0	22.5-0.8	DMPP 400V 474J 22.5 S 5 ____
0.56	27.0	21.0	11.5	22.5-0.8	DMPP 400V 564J 22.5 S 5 ____
0.68	27.0	22.5	12.5	22.5-0.8	DMPP 400V 684J 22.5 S 5 ____
0.82	27.0	23.0	14.5	22.5-0.8	DMPP 400V 824J 22.5 S 5 ____
1.0	27.0	25.0	15.5	22.5-0.8	DMPP 400V 105J 22.5 S 5 ____
0.12	32.0	10.5	7.0	27.5-0.8	DMPP 400V 124J 27.5 S 5 ____
0.15	32.0	11.5	7.0	27.5-0.8	DMPP 400V 154J 27.5 S 5 ____
0.18	32.0	12.5	7.5	27.5-0.8	DMPP 400V 184J 27.5 S 5 ____
0.22	32.0	13.0	8.0	27.5-0.8	DMPP 400V 224J 27.5 S 5 ____
0.27	32.0	15.0	8.0	27.5-0.8	DMPP 400V 274J 27.5 S 5 ____
0.33	32.0	15.5	9.0	27.5-0.8	DMPP 400V 334J 27.5 S 5 ____
0.39	32.0	16.5	9.5	27.5-0.8	DMPP 400V 394J 27.5 S 5 ____
0.47	32.0	18.0	10.0	27.5-0.8	DMPP 400V 474J 27.5 S 5 ____
0.56	32.0	18.0	11.5	27.5-0.8	DMPP 400V 564J 27.5 S 5 ____
0.68	32.0	20.0	11.5	27.5-0.8	DMPP 400V 684J 27.5 S 5 ____
0.82	32.0	20.5	13.5	27.5-0.8	DMPP 400V 824J 27.5 S 5 ____
1.0	32.0	21.0	15.5	27.5-0.8	DMPP 400V 105J 27.5 S 5 ____
1.2	32.0	24.0	15.5	27.5-0.8	DMPP 400V 125J 27.5 S 5 ____
1.5	32.0	25.5	17.5	27.5-0.8	DMPP 400V 155J 27.5 S 5 ____
1.8	32.0	28.0	18.5	27.5-0.8	DMPP 400V 185J 27.5 S 5 ____

630Vdc(400Vac)

Cap. (μF)	Dimensions(mm)			Pitch - d	PART NUMBER
	W (max.)	H (max.)	T (max.)		
0.0039	14.0	8.5	4.5	10.0-0.6	DMPP 630V 392J 10 S 5 ____
0.0047	14.0	8.5	5.0	10.0-0.6	DMPP 630V 472J 10 S 5 ____
0.0056	14.0	9.0	5.5	10.0-0.6	DMPP 630V 562J 10 S 5 ____
0.0068	14.0	10.0	5.5	10.0-0.6	DMPP 630V 682J 10 S 5 ____
0.0082	14.0	11.0	5.5	10.0-0.6	DMPP 630V 822J 10 S 5 ____
0.01	14.0	10.5	6.5	10.0-0.6	DMPP 630V 103J 10 S 5 ____
0.012	14.0	11.5	6.5	10.0-0.6	DMPP 630V 123J 10 S 5 ____
0.015	14.0	12.0	7.5	10.0-0.6	DMPP 630V 153J 10 S 5 ____
0.018	14.0	13.0	7.5	10.0-0.6	DMPP 630V 183J 10 S 5 ____
0.022	14.0	13.5	8.5	10.0-0.6	DMPP 630V 223J 10 S 5 ____
0.01	19.0	8.5	4.5	15.0-0.8	DMPP 630V 103J 15 S 5 ____
0.012	19.0	8.5	5.0	15.0-0.8	DMPP 630V 123J 15 S 5 ____
0.015	19.0	9.0	5.5	15.0-0.8	DMPP 630V 153J 15 S 5 ____
0.018	19.0	9.5	5.5	15.0-0.8	DMPP 630V 183J 15 S 5 ____
0.022	19.0	10.5	6.0	15.0-0.8	DMPP 630V 223J 15 S 5 ____
0.027	19.0	11.0	6.0	15.0-0.8	DMPP 630V 273J 15 S 5 ____
0.033	19.0	11.5	7.0	15.0-0.8	DMPP 630V 333J 15 S 5 ____
0.039	19.0	12.5	7.0	15.0-0.8	DMPP 630V 393J 15 S 5 ____
0.047	19.0	13.0	7.5	15.0-0.8	DMPP 630V 473J 15 S 5 ____
0.056	19.0	13.5	8.5	15.0-0.8	DMPP 630V 563J 15 S 5 ____
0.068	19.0	14.5	9.0	15.0-0.8	DMPP 630V 683J 15 S 5 ____
0.082	19.0	15.0	10.0	15.0-0.8	DMPP 630V 823J 15 S 5 ____
0.1	19.0	16.0	11.0	15.0-0.8	DMPP 630V 104J 15 S 5 ____
0.12	19.0	17.0	12.0	15.0-0.8	DMPP 630V 124J 15 S 5 ____
0.033	27.0	10.0	6.5	22.5-0.8	DMPP 630V 333J 22.5 S 5 ____
0.039	27.0	10.5	6.5	22.5-0.8	DMPP 630V 393J 22.5 S 5 ____
0.047	27.0	11.0	7.0	22.5-0.8	DMPP 630V 473J 22.5 S 5 ____
0.056	27.0	11.5	7.5	22.5-0.8	DMPP 630V 563J 22.5 S 5 ____
0.068	27.0	12.5	7.5	22.5-0.8	DMPP 630V 683J 22.5 S 5 ____
0.082	27.0	14.5	7.5	22.5-0.8	DMPP 630V 823J 22.5 S 5 ____
0.1	27.0	16.0	7.5	22.5-0.8	DMPP 630V 104J 22.5 S 5 ____
0.12	27.0	16.5	8.5	22.5-0.8	DMPP 630V 124J 22.5 S 5 ____
0.15	27.0	17.5	9.5	22.5-0.8	DMPP 630V 154J 22.5 S 5 ____
0.18	27.0	18.5	10.0	22.5-0.8	DMPP 630V 184J 22.5 S 5 ____
0.22	27.0	19.5	11.5	22.5-0.8	DMPP 630V 224J 22.5 S 5 ____
0.27	27.0	21.0	12.5	22.5-0.8	DMPP 630V 274J 22.5 S 5 ____

0.33	27.0	21.5	14.5	22.5-0.8	DMPP 630V 334J 22.5 S 5 ____
0.39	27.0	23.5	15.0	22.5-0.8	DMPP 630V 394J 22.5 S 5 ____
0.1	32.0	13.0	8.0	27.5-0.8	DMPP 630V 104J 27.5 S 5 ____
0.12	32.0	13.5	8.5	27.5-0.8	DMPP 630V 124J 27.5 S 5 ____
0.15	32.0	14.5	9.5	27.5-0.8	DMPP 630V 154J 27.5 S 5 ____
0.18	32.0	16.0	9.5	27.5-0.8	DMPP 630V 184J 27.5 S 5 ____
0.22	32.0	17.0	10.5	27.5-0.8	DMPP 630V 224J 27.5 S 5 ____
0.27	32.0	18.0	11.5	27.5-0.8	DMPP 630V 274J 27.5 S 5 ____
0.33	32.0	20.0	12.0	27.5-0.8	DMPP 630V 334J 27.5 S 5 ____
0.39	32.0	20.5	13.5	27.5-0.8	DMPP 630V 394J 27.5 S 5 ____
0.47	32.0	22.5	14.0	27.5-0.8	DMPP 630V 474J 27.5 S 5 ____
0.56	32.0	24.0	15.5	27.5-0.8	DMPP 630V 564J 27.5 S 5 ____
0.68	32.0	26.5	16.5	27.5-0.8	DMPP 630V 684J 27.5 S 5 ____
0.82	32.0	28.0	18.0	27.5-0.8	DMPP 630V 824J 27.5 S 5 ____
1.0	32.0	30.0	20.0	27.5-0.8	DMPP 630V 105J 27.5 S 5 ____

1000Vdc(600Vac)

Cap. (μF)	Dimensions(mm)			Pitch - d	PART NUMBER
	W (max.)	H (max.)	T (max.)		
0.0022	14.0	8.5	5.0	10.0-0.6	DMPP 1000V 222J 10 S 5 ____
0.0027	14.0	9.5	5.0	10.0-0.6	DMPP 1000V 272J 10 S 5 ____
0.0033	14.0	10.5	5.0	10.0-0.6	DMPP 1000V 332J 10 S 5 ____
0.0039	14.0	9.5	6.0	10.0-0.6	DMPP 1000V 392J 10 S 5 ____
0.0047	14.0	11.0	6.0	10.0-0.6	DMPP 1000V 472J 10 S 5 ____
0.0056	14.0	10.5	7.0	10.0-0.6	DMPP 1000V 562J 10 S 5 ____
0.0068	14.0	11.5	7.0	10.0-0.6	DMPP 1000V 682J 10 S 5 ____
0.0082	14.0	12.0	7.5	10.0-0.6	DMPP 1000V 822J 10 S 5 ____
0.01	14.0	12.5	8.0	10.0-0.6	DMPP 1000V 103J 10 S 5 ____
0.012	14.0	14.0	8.5	10.0-0.6	DMPP 1000V 123J 10 S 5 ____
0.015	14.0	14.5	9.5	10.0-0.6	DMPP 1000V 153J 10 S 5 ____
0.0068	19.0	9.0	5.0	15.0-0.8	DMPP 1000V 682J 15 S 5 ____
0.0082	19.0	9.0	5.5	15.0-0.8	DMPP 1000V 822J 15 S 5 ____
0.01	19.0	10.0	5.5	15.0-0.8	DMPP 1000V 103J 15 S 5 ____
0.012	19.0	10.5	6.0	15.0-0.8	DMPP 1000V 123J 15 S 5 ____
0.015	19.0	11.5	6.0	15.0-0.8	DMPP 1000V 153J 15 S 5 ____
0.018	19.0	11.5	7.0	15.0-0.8	DMPP 1000V 183J 15 S 5 ____
0.022	19.0	12.5	7.5	15.0-0.8	DMPP 1000V 223J 15 S 5 ____
0.027	19.0	13.0	8.0	15.0-0.8	DMPP 1000V 273J 15 S 5 ____
0.033	19.0	14.0	8.5	15.0-0.8	DMPP 1000V 333J 15 S 5 ____
0.039	19.0	14.5	9.5	15.0-0.8	DMPP 1000V 393J 15 S 5 ____
0.047	19.0	15.5	10.0	15.0-0.8	DMPP 1000V 473J 15 S 5 ____
0.056	19.0	16.5	11.0	15.0-0.8	DMPP 1000V 563J 15 S 5 ____
0.068	19.0	17.5	12.0	15.0-0.8	DMPP 1000V 683J 15 S 5 ____
0.022	27.0	10.5	7.0	22.5-0.8	DMPP 1000V 223J 22.5 S 5 ____
0.027	27.0	11.0	7.5	22.5-0.8	DMPP 1000V 273J 22.5 S 5 ____
0.033	27.0	12.5	7.5	22.5-0.8	DMPP 1000V 333J 22.5 S 5 ____
0.039	27.0	14.0	7.0	22.5-0.8	DMPP 1000V 393J 22.5 S 5 ____
0.047	27.0	15.5	7.5	22.5-0.8	DMPP 1000V 473J 22.5 S 5 ____
0.056	27.0	15.0	8.5	22.5-0.8	DMPP 1000V 563J 22.5 S 5 ____
0.068	27.0	16.0	9.0	22.5-0.8	DMPP 1000V 683J 22.5 S 5 ____
0.082	27.0	17.0	10.0	22.5-0.8	DMPP 1000V 823J 22.5 S 5 ____
0.1	27.0	18.5	10.5	22.5-0.8	DMPP 1000V 104J 22.5 S 5 ____
0.12	27.0	19.5	11.5	22.5-0.8	DMPP 1000V 124J 22.5 S 5 ____
0.15	27.0	21.0	12.5	22.5-0.8	DMPP 1000V 154J 22.5 S 5 ____
0.18	27.0	22.5	14.0	22.5-0.8	DMPP 1000V 184J 22.5 S 5 ____
0.068	32.0	14.0	8.5	27.5-0.8	DMPP 1000V 683J 27.5 S 5 ____
0.082	32.0	15.5	8.5	27.5-0.8	DMPP 1000V 823J 27.5 S 5 ____
0.1	32.0	16.5	9.5	27.5-0.8	DMPP 1000V 104J 27.5 S 5 ____
0.12	32.0	17.0	10.5	27.5-0.8	DMPP 1000V 124J 27.5 S 5 ____
0.15	32.0	18.5	11.5	27.5-0.8	DMPP 1000V 154J 27.5 S 5 ____
0.18	32.0	20.5	12.0	27.5-0.8	DMPP 1000V 184J 27.5 S 5 ____
0.22	32.0	21.5	13.0	27.5-0.8	DMPP 1000V 224J 27.5 S 5 ____
0.27	32.0	23.0	14.5	27.5-0.8	DMPP 1000V 274J 27.5 S 5 ____
0.33	32.0	24.5	16.0	27.5-0.8	DMPP 1000V 334J 27.5 S 5 ____
0.39	32.0	25.0	18.5	27.5-0.8	DMPP 1000V 394J 27.5 S 5 ____
0.47	32.0	28.5	18.5	27.5-0.8	DMPP 1000V 474J 27.5 S 5 ____
0.56	32.0	30.5	20.5	27.5-0.8	DMPP 1000V 564J 27.5 S 5 ____
0.68	32.0	32.5	23.0	27.5-0.8	DMPP 1000V 684J 27.5 S 5 ____

1600Vdc(650Vac)

Cap. (μF)	Dimensions(mm)			Pitch - d	PART NUMBER
	W (max.)	H (max.)	T (max.)		
0.0033	19.0	9.0	5.0	15.0-0.8	DMPP 1600V 332J 15 S 5 ____
0.0039	19.0	9.0	5.5	15.0-0.8	DMPP 1600V 392J 15 S 5 ____
0.0047	19.0	9.5	6.0	15.0-0.8	DMPP 1600V 472J 15 S 5 ____
0.0056	19.0	10.5	6.0	15.0-0.8	DMPP 1600V 562J 15 S 5 ____

0.0068	19.0	11.0	6.5	15.0-0.8	DMPP 1600V 682J 15 S 5 ____
0.01	19.0	12.5	7.0	15.0-0.8	DMPP 1600V 103J 15 S 5 ____
0.012	19.0	13.0	7.5	15.0-0.8	DMPP 1600V 123J 15 S 5 ____
0.015	19.0	13.5	8.5	15.0-0.8	DMPP 1600V 153J 15 S 5 ____
0.018	19.0	14.5	9.5	15.0-0.8	DMPP 1600V 183J 15 S 5 ____
0.022	19.0	15.5	10.0	15.0-0.8	DMPP 1600V 223J 15 S 5 ____
0.027	19.0	16.5	11.0	15.0-0.8	DMPP 1600V 273J 15 S 5 ____
0.033	19.0	17.5	12.5	15.0-0.8	DMPP 1600V 333J 15 S 5 ____
0.039	19.0	18.5	13.5	15.0-0.8	DMPP 1600V 393J 15 S 5 ____
0.047	19.0	20.5	14.0	15.0-0.8	DMPP 1600V 473J 15 S 5 ____
0.015	27.0	11.0	7.5	22.5-0.8	DMPP 1600V 153J 22.5 S 5 ____
0.018	27.0	12.5	7.5	22.5-0.8	DMPP 1600V 183J 22.5 S 5 ____
0.022	27.0	14.0	7.5	22.5-0.8	DMPP 1600V 223J 22.5 S 5 ____
0.027	27.0	16.0	7.5	22.5-0.8	DMPP 1600V 273J 22.5 S 5 ____
0.033	27.0	16.5	8.0	22.5-0.8	DMPP 1600V 333J 22.5 S 5 ____
0.039	27.0	16.0	9.5	22.5-0.8	DMPP 1600V 393J 22.5 S 5 ____
0.047	27.0	18.0	9.5	22.5-0.8	DMPP 1600V 473J 22.5 S 5 ____
0.056	27.0	19.0	10.5	22.5-0.8	DMPP 1600V 563J 22.5 S 5 ____
0.068	27.0	20.0	11.5	22.5-0.8	DMPP 1600V 683J 22.5 S 5 ____
0.082	27.0	22.0	12.0	22.5-0.8	DMPP 1600V 823J 22.5 S 5 ____
0.1	27.0	23.5	13.5	22.5-0.8	DMPP 1600V 104J 22.5 S 5 ____
0.033	32.0	13.5	8.0	27.5-0.8	DMPP 1600V 333J 27.5 S 5 ____
0.039	32.0	14.0	8.5	27.5-0.8	DMPP 1600V 393J 27.5 S 5 ____
0.047	32.0	15.5	9.0	27.5-0.8	DMPP 1600V 473J 27.5 S 5 ____
0.056	32.0	16.5	9.5	27.5-0.8	DMPP 1600V 563J 27.5 S 5 ____
0.068	32.0	17.0	10.5	27.5-0.8	DMPP 1600V 683J 27.5 S 5 ____
0.082	32.0	19.0	10.5	27.5-0.8	DMPP 1600V 823J 27.5 S 5 ____
0.1	32.0	19.0	12.5	27.5-0.8	DMPP 1600V 104J 27.5 S 5 ____
0.12	32.0	20.5	13.5	27.5-0.8	DMPP 1600V 124J 27.5 S 5 ____
0.15	32.0	22.0	15.0	27.5-0.8	DMPP 1600V 154J 27.5 S 5 ____
0.18	32.0	24.0	16.0	27.5-0.8	DMPP 1600V 184J 27.5 S 5 ____
0.22	32.0	26.0	17.5	27.5-0.8	DMPP 1600V 224J 27.5 S 5 ____
0.27	32.0	28.5	19.0	27.5-0.8	DMPP 1600V 274J 27.5 S 5 ____
0.33	32.0	31.0	21.0	27.5-0.8	DMPP 1600V 334J 27.5 S 5 ____
0.39	32.0	33.0	23.0	27.5-0.8	DMPP 1600V 394J 27.5 S 5 ____

2000Vdc(700Vac)

Cap. (μF)	Dimensions(mm)			Pitch - d	PART NUMBER
	W (max.)	H (max.)	T (max.)		
0.001	19.0	8.0	4.5	15.0-0.8	DMPP 2000V 102J 15 S 5 ____
0.0012	19.0	8.5	5.0	15.0-0.8	DMPP 2000V 102J 15 S 5 ____
0.0015	19.0	8.5	5.0	15.0-0.8	DMPP 2000V 152J 15 S 5 ____
0.0018	19.0	9.0	5.0	15.0-0.8	DMPP 2000V 182J 15 S 5 ____
0.0022	19.0	9.0	5.5	15.0-0.8	DMPP 2000V 222J 15 S 5 ____
0.0027	19.0	9.5	6.0	15.0-0.8	DMPP 2000V 272J 15 S 5 ____
0.0033	19.0	10.5	6.0	15.0-0.8	DMPP 2000V 332J 15 S 5 ____
0.0039	19.0	11.5	6.0	15.0-0.8	DMPP 2000V 392J 15 S 5 ____
0.0047	19.0	11.5	7.0	15.0-0.8	DMPP 2000V 472J 15 S 5 ____
0.0056	19.0	12.5	7.0	15.0-0.8	DMPP 2000V 562J 15 S 5 ____
0.0068	19.0	13.0	7.5	15.0-0.8	DMPP 2000V 682J 15 S 5 ____
0.0082	19.0	13.5	8.5	15.0-0.8	DMPP 2000V 822J 15 S 5 ____
0.01	19.0	14.5	9.0	15.0-0.8	DMPP 2000V 103J 15 S 5 ____
0.012	19.0	15.0	10.0	15.0-0.8	DMPP 2000V 123J 15 S 5 ____
0.015	19.0	16.0	11.0	15.0-0.8	DMPP 2000V 153J 15 S 5 ____
0.018	19.0	17.0	12.0	15.0-0.8	DMPP 2000V 183J 15 S 5 ____
0.0068	27.0	10.5	7.0	22.5-0.8	DMPP 2000V 682J 22.5 S 5 ____
0.0082	27.0	11.0	7.5	22.5-0.8	DMPP 2000V 822J 22.5 S 5 ____
0.01	27.0	12.5	7.5	22.5-0.8	DMPP 2000V 103J 22.5 S 5 ____
0.012	27.0	14.0	7.0	22.5-0.8	DMPP 2000V 123J 22.5 S 5 ____
0.015	27.0	16.0	7.5	22.5-0.8	DMPP 2000V 153J 22.5 S 5 ____
0.018	27.0	16.5	8.0	22.5-0.8	DMPP 2000V 183J 22.5 S 5 ____
0.022	27.0	17.0	9.0	22.5-0.8	DMPP 2000V 223J 22.5 S 5 ____
0.027	27.0	18.0	9.5	22.5-0.8	DMPP 2000V 273J 22.5 S 5 ____
0.033	27.0	19.0	10.5	22.5-0.8	DMPP 2000V 333J 22.5 S 5 ____
0.039	27.0	20.0	11.5	22.5-0.8	DMPP 2000V 393J 22.5 S 5 ____
0.047	27.0	22.0	12.0	22.5-0.8	DMPP 2000V 473J 22.5 S 5 ____
0.056	27.0	23.0	13.0	22.5-0.8	DMPP 2000V 563J 22.5 S 5 ____
0.068	27.0	23.5	15.0	22.5-0.8	DMPP 2000V 683J 22.5 S 5 ____
0.082	27.0	26.0	16.0	22.5-0.8	DMPP 2000V 823J 22.5 S 5 ____
0.01	32.0	10.5	7.0	27.5-0.8	DMPP 2000V 103J 27.5 S 5 ____
0.012	32.0	11.0	7.5	27.5-0.8	DMPP 2000V 123J 27.5 S 5 ____
0.015	32.0	11.5	8.0	27.5-0.8	DMPP 2000V 153J 27.5 S 5 ____
0.018	32.0	12.5	8.5	27.5-0.8	DMPP 2000V 183J 27.5 S 5 ____
0.022	32.0	14.0	8.5	27.5-0.8	DMPP 2000V 223J 27.5 S 5 ____
0.027	32.0	15.5	9.0	27.5-0.8	DMPP 2000V 273J 27.5 S 5 ____

0.033	32.0	16.5	9.5	27.5-0.8	DMPP 2000V 333J 27.5 S 5 ____
0.039	32.0	18.0	9.5	27.5-0.8	DMPP 2000V 393J 27.5 S 5 ____
0.047	32.0	18.0	11.5	27.5-0.8	DMPP 2000V 473J 27.5 S 5 ____
0.056	32.0	19.0	12.0	27.5-0.8	DMPP 2000V 563J 27.5 S 5 ____
0.068	32.0	20.0	13.5	27.5-0.8	DMPP 2000V 683J 27.5 S 5 ____
0.082	32.0	22.5	14.0	27.5-0.8	DMPP 2000V 823J 27.5 S 5 ____
0.1	32.0	24.5	15.0	27.5-0.8	DMPP 2000V 104J 27.5 S 5 ____
0.12	32.0	26.0	16.0	27.5-0.8	DMPP 2000V 124J 27.5 S 5 ____
0.15	32.0	28.0	18.5	27.5-0.8	DMPP 2000V 154J 27.5 S 5 ____
0.18	32.0	30.0	20.0	27.5-0.8	DMPP 2000V 184J 27.5 S 5 ____
0.22	32.0	32.0	22.5	27.5-0.8	DMPP 2000V 224J 27.5 S 5 ____

2500Vdc(750Vac)

Cap. (μF)	Dimensions(mm)			Pitch - d	PART NUMBER
	W (max.)	H (max.)	T (max.)		
0.001	18.0	10.5	6.0	15.0-0.8	DMPP 2500V 102J 15 S 5 ____
0.0012	18.0	11.5	6.0	15.0-0.8	DMPP 2500V 122J 15 S 5 ____
0.0015	18.0	12.0	6.5	15.0-0.8	DMPP 2500V 152J 15 S 5 ____
0.0018	18.0	12.5	7.5	15.0-0.8	DMPP 2500V 182J 15 S 5 ____
0.0022	18.0	13.0	8.0	15.0-0.8	DMPP 2500V 222J 15 S 5 ____
0.0027	18.0	14.0	8.5	15.0-0.8	DMPP 2500V 272J 15 S 5 ____
0.0033	18.0	14.5	9.5	15.0-0.8	DMPP 2500V 332J 15 S 5 ____
0.0039	18.0	16.5	9.5	15.0-0.8	DMPP 2500V 392J 15 S 5 ____
0.0047	18.0	16.5	11.0	15.0-0.8	DMPP 2500V 472J 15 S 5 ____
0.0056	18.0	18.0	11.5	15.0-0.8	DMPP 2500V 562J 15 S 5 ____
0.0068	18.0	19.5	12.5	15.0-0.8	DMPP 2500V 682J 15 S 5 ____
0.0082	18.0	20.5	13.5	15.0-0.8	DMPP 2500V 822J 15 S 5 ____
0.0047	26.0	12.5	7.5	22.5-0.8	DMPP 2500V 472J 22.5 S 5 ____
0.0056	26.0	14.0	7.5	22.5-0.8	DMPP 2500V 562J 22.5 S 5 ____
0.0068	26.0	16.0	7.5	22.5-0.8	DMPP 2500V 682J 22.5 S 5 ____
0.0082	26.0	16.5	8.0	22.5-0.8	DMPP 2500V 822J 22.5 S 5 ____
0.01	26.0	16.0	9.5	22.5-0.8	DMPP 2500V 103J 22.5 S 5 ____
0.012	26.0	17.0	10.0	22.5-0.8	DMPP 2500V 123J 22.5 S 5 ____
0.015	26.0	18.0	11.0	22.5-0.8	DMPP 2500V 153J 22.5 S 5 ____
0.018	26.0	19.0	12.0	22.5-0.8	DMPP 2500V 183J 22.5 S 5 ____
0.022	26.0	20.0	13.5	22.5-0.8	DMPP 2500V 223J 22.5 S 5 ____
0.027	26.0	21.5	15.0	22.5-0.8	DMPP 2500V 273J 22.5 S 5 ____
0.033	26.0	24.0	15.5	22.5-0.8	DMPP 2500V 333J 22.5 S 5 ____
0.0068	31.0	13.0	7.5	27.5-0.8	DMPP 2500V 682J 27.5 S 5 ____
0.0082	31.0	13.5	8.0	27.5-0.8	DMPP 2500V 822J 27.5 S 5 ____
0.01	31.0	14.0	9.0	27.5-0.8	DMPP 2500V 103J 27.5 S 5 ____
0.012	31.0	14.5	9.5	27.5-0.8	DMPP 2500V 123J 27.5 S 5 ____
0.015	31.0	16.5	10.0	27.5-0.8	DMPP 2500V 153J 27.5 S 5 ____
0.018	31.0	17.5	10.5	27.5-0.8	DMPP 2500V 183J 27.5 S 5 ____
0.022	31.0	18.5	12.0	27.5-0.8	DMPP 2500V 223J 27.5 S 5 ____
0.027	31.0	19.5	13.0	27.5-0.8	DMPP 2500V 273J 27.5 S 5 ____
0.033	31.0	22.0	13.5	27.5-0.8	DMPP 2500V 333J 27.5 S 5 ____
0.039	31.0	22.0	15.5	27.5-0.8	DMPP 2500V 393J 27.5 S 5 ____
0.047	31.0	24.5	16.0	27.5-0.8	DMPP 2500V 473J 27.5 S 5 ____
0.056	31.0	25.0	18.5	27.5-0.8	DMPP 2500V 563J 27.5 S 5 ____
0.068	31.0	28.0	19.5	27.5-0.8	DMPP 2500V 683J 27.5 S 5 ____
0.082	31.0	30.0	21.5	27.5-0.8	DMPP 2500V 823J 27.5 S 5 ____
0.1	31.0	33.0	23.0	27.5-0.8	DMPP 2500V 104J 27.5 S 5 ____

3000Vdc(800Vac)

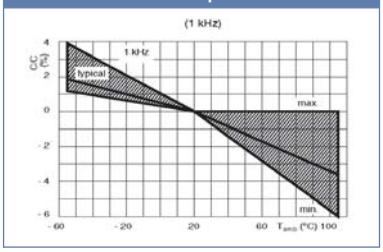
Cap. (μF)	Dimensions(mm)			Pitch - d	PART NUMBER
	W (max.)	H (max.)	T (max.)		
0.00047	18.0	10.0	5.5	15.0-0.8	DMPP 3000V 471J 15 S 5 ____
0.00056	18.0	11.0	5.5	15.0-0.8	DMPP 3000V 561J 15 S 5 ____
0.00068	18.0	11.0	6.0	15.0-0.8	DMPP 3000V 681J 15 S 5 ____
0.00082	18.0	11.5	6.5	15.0-0.8	DMPP 3000V 821J 15 S 5 ____
0.001	18.0	12.0	7.0	15.0-0.8	DMPP 3000V 102J 15 S 5 ____
0.0012	18.0	12.5	7.5	15.0-0.8	DMPP 3000V 122J 15 S 5 ____
0.0015	18.0	13.5	8.5	15.0-0.8	DMPP 3000V 152J 15 S 5 ____
0.0018	18.0	14.0	9.0	15.0-0.8	DMPP 3000V 182J 15 S 5 ____
0.0022	18.0	16.0	9.0	15.0-0.8	DMPP 3000V 222J 15 S 5 ____
0.0027	18.0	16.0	11.0	15.0-0.8	DMPP 3000V 272J 15 S 5 ____
0.0033	18.0	17.0	12.0	15.0-0.8	DMPP 3000V 332J 15 S 5 ____
0.0039	18.0	19.0	12.0	15.0-0.8	DMPP 3000V 392J 15 S 5 ____
0.0047	18.0	21.0	12.5	15.0-0.8	DMPP 3000V 472J 15 S 5 ____
0.0022	26.0	12.0	6.5	22.5-0.8	DMPP 3000V 222J 22.5 S 5 ____
0.0027	26.0	13.5	6.5	22.5-0.8	DMPP 3000V 272J 22.5 S 5 ____
0.0033	26.0	15.0	7.0	22.5-0.8	DMPP 3000V 332J 22.5 S 5 ____
0.0039	26.0	14.5	7.5	22.5-0.8	DMPP 3000V 392J 22.5 S 5 ____
0.0047	26.0	16.0	8.0	22.5-0.8	DMPP 3000V 472J 22.5 S 5 ____
0.0056	26.0	15.5	9.0	22.5-0.8	DMPP 3000V 562J 22.5 S 5 ____

0.0068	26.0	16.5	10.0	22.5-0.8	DMPP 3000V 682J 22.5 S 5 _____
0.0082	26.0	17.5	10.5	22.5-0.8	DMPP 3000V 822J 22.5 S 5 _____
0.01	26.0	18.5	11.5	22.5-0.8	DMPP 3000V 103J 22.5 S 5 _____
0.012	26.0	19.5	12.5	22.5-0.8	DMPP 3000V 123J 22.5 S 5 _____
0.015	26.0	21.0	14.0	22.5-0.8	DMPP 3000V 153J 22.5 S 5 _____
0.018	26.0	22.0	15.5	22.5-0.8	DMPP 3000V 183J 22.5 S 5 _____
0.022	26.0	24.5	16.0	22.5-0.8	DMPP 3000V 223J 22.5 S 5 _____
0.0047	31.0	13.0	8.0	27.5-0.8	DMPP 3000V 472J 27.5 S 5 _____
0.0056	31.0	13.5	8.5	27.5-0.8	DMPP 3000V 562J 27.5 S 5 _____
0.0068	31.0	14.5	9.0	27.5-0.8	DMPP 3000V 682J 27.5 S 5 _____
0.0082	31.0	15.0	10.0	27.5-0.8	DMPP 3000V 822J 27.5 S 5 _____

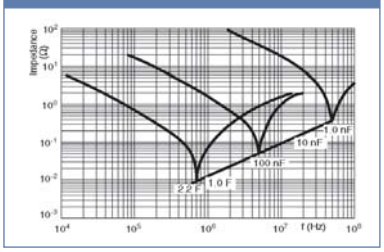
0.01	31.0	17.0	10.0	27.5-0.8	DMPP 3000V 103J 27.5 S 5 _____
0.012	31.0	18.0	11.0	27.5-0.8	DMPP 3000V 123J 27.5 S 5 _____
0.015	31.0	19.0	12.5	27.5-0.8	DMPP 3000V 153J 27.5 S 5 _____
0.018	31.0	20.0	13.5	27.5-0.8	DMPP 3000V 183J 27.5 S 5 _____
0.022	31.0	21.5	14.5	27.5-0.8	DMPP 3000V 223J 27.5 S 5 _____
0.027	31.0	24.0	15.5	27.5-0.8	DMPP 3000V 273J 27.5 S 5 _____
0.033	31.0	24.5	18.0	27.5-0.8	DMPP 3000V 333J 27.5 S 5 _____
0.039	31.0	27.0	18.5	27.5-0.8	DMPP 3000V 393J 27.5 S 5 _____
0.047	31.0	28.0	21.5	27.5-0.8	DMPP 3000V 473J 27.5 S 5 _____
0.056	31.0	31.5	21.5	27.5-0.8	DMPP 3000V 563J 27.5 S 5 _____

Electrical Characteristics (Typical Data)

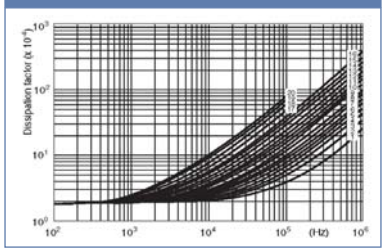
Capacitance as a function of ambient temperature



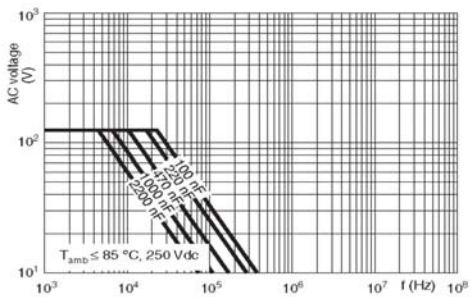
Impedance as a function of frequency

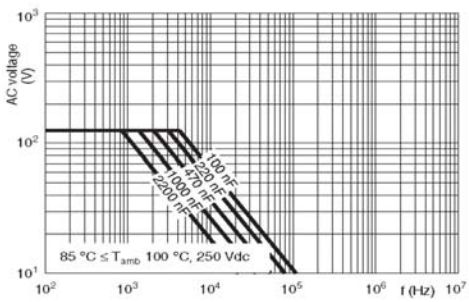


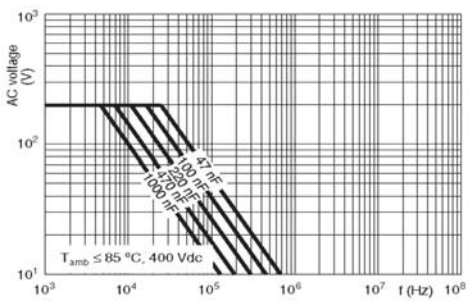
Tangent of loss angle as a function of frequency

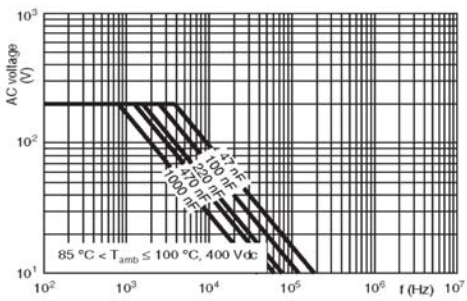


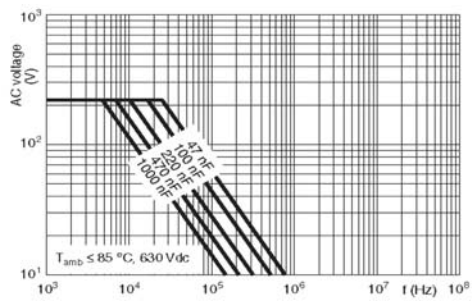
Max. RMS voltage as a function of frequency

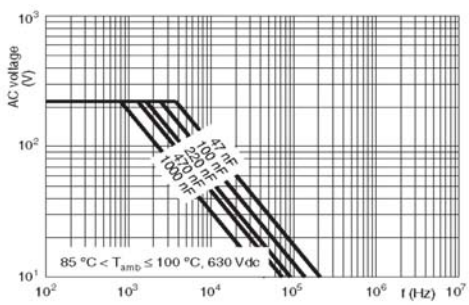






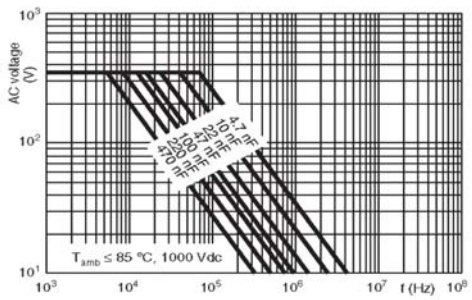


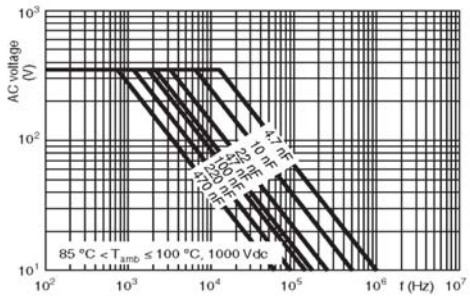


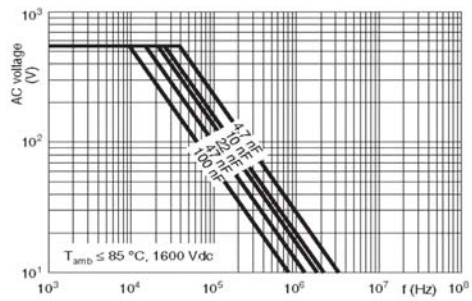


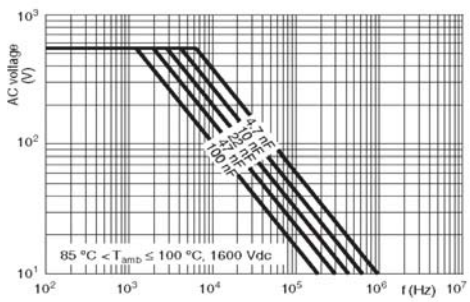
Electrical Characteristics (Typical Data)

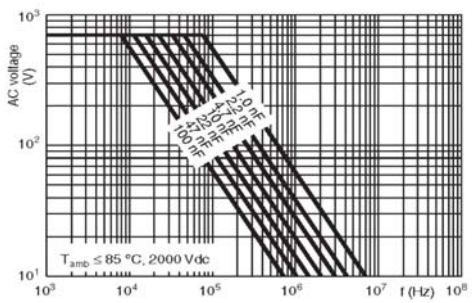
Max. RMS voltage as a function of frequency

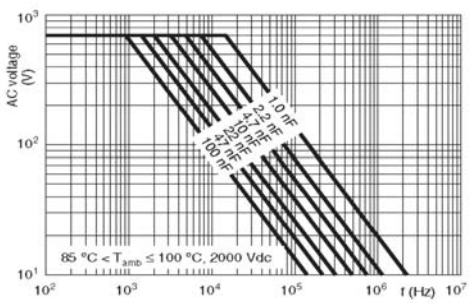


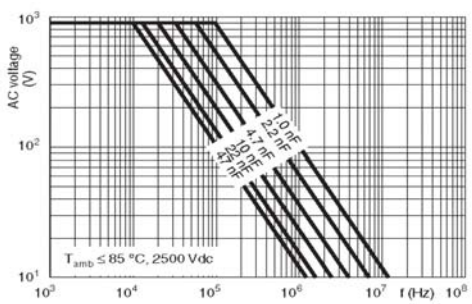


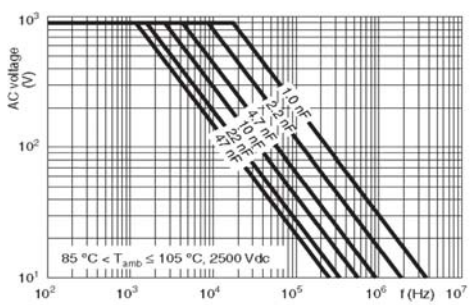












BDMPP

This standard specifies Double sided-Metallized polypropylene film capacitors for electronic equipment.

■ Features

- Pulse duty construction
- Self-healing
- Very low dissipation factor
- Negative capacitance change versus temperature
- miniature size of NPPS.
- Plastic case(UL94 V-0), Epoxy resin sealing.
- RoHS directive compliant

■ Applications

- For pulse applications e.g.
- Switch mode power supplies
- TV and monitor sets
- electronic ballasts and compact lamps
- snubber and silicon-controlled rectifier(SCR) commutation circuits

■ Specifications

Reference Standard	IEC 60384-17 / IEC 60384-16
Climatic Category	40 / 105 / 21
Rated Temperature	85℃ for V_R(dc) ; 75℃ for V_R(ac) ;
Operation Temperature Range	-40℃~+105℃ +85℃~+105℃ decreasing factor 1.0% / ℃ for V_R(dc) +75℃~+105℃ decreasing factor 1.0% / ℃ for V_R(dc)
Rated Voltage	250Vdc, 400Vdc, 630Vdc, 1000Vdc, 1600Vdc, 2000Vdc, 2500Vdc, 3000Vdc
Capacitance Range	0.00047μF~3.30μF
Capacitance Tolerance	J : ±5% K : ±10% M : ±20% ※Standard : J : ±5%, Other Tolerance Grade : available on request.
Voltage Proof	1.75U_R(dc) / 3sec
Dissipation Factor	≤0.1%(at 1kHz 20℃)
Rated Voltage	≥30,000MΩ C_R≤0.33μF 100Vdc 60sec 20℃
	≥10,000Ω·F C_R〉0.33μF 100Vdc 60sec 20℃

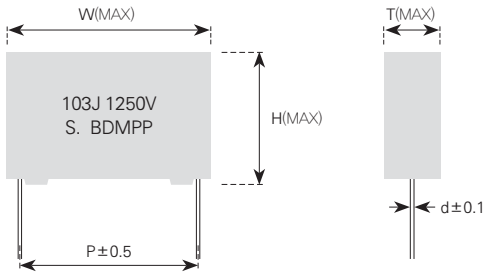
■ Part Number System

BDMPP	250V	473	J	10	S	5	
Part-1	Part-2	Part-3	Part-4	Part-5	Part-6	Part-7	Part-8

Part-1 : Series Code(Series Name)-BDMPP
Part-2 : Rated Voltage(DC : 250V~3000V)
Part-3 : Rated Capacitance Value(0.00047μF~3.30μF / 471~335)
Part-4 : Capacitance Tolerance(J : ±5% K : ±10% M : ±20%)
Part-5 : Lead Spacing(10mm / 15mm / 22.5mm / 27.5mm)
Part-6 : Forming-Type and Packing Code
Part-7 : Size Number(1~4 : Min-Type / 5 : Standard-Type / 6~9 : Large-Type)
Part-8 : Internal Use

CODE	STYLE
B	Bending Forming
C	Straight Cutting
D	D-Type Forming
L	B-Type long Forming
M	C-Type long Forming
S	Straight
X	B-Type Forming
Y	C-Type Forming
Z	Z-Type Forming
T	A-Type Tapping
U	B-Type Tapping
V	C-Type Tapping

■ Dimensions



250Vdc(180Vac)

Cap. (μF)	Dimensions(mm) W (max.)	H (max.)	T (max.)	Pitch - d	PART NUMBER
0.047	13	11	5	10-0.6	BDMPP 250V 473J 10S 5 ____
0.056	13	11	5	10-0.6	BDMPP 250V 563J 10S 5 ____
0.068	13	12	6	10-0.6	BDMPP 250V 683J 10S 5 ____
0.082	13	12	6	10-0.6	BDMPP 250V 823J 10S 5 ____
0.068	18	11	5	15-0.8	BDMPP 250V 683J 15S 5 ____
0.082	18	11	5	15-0.8	BDMPP 250V 823J 15S 5 ____
0.1	18	11	5	15-0.8	BDMPP 250V 104J 15S 5 ____
0.12	18	12	6	15-0.8	BDMPP 250V 124J 15S 5 ____
0.15	18	12	6	15-0.8	BDMPP 250V 154J 15S 5 ____
0.18	18	13.5	7.5	15-0.8	BDMPP 250V 184J 15S 5 ____
0.22	18	13.5	7.5	15-0.8	BDMPP 250V 224J 15S 5 ____
0.27	18	14.5	8.5	15-0.8	BDMPP 250V 274J 15S 5 ____
0.33	18	16	10	15-0.8	BDMPP 250V 334J 15S 5 ____
0.39	18	16	10	15-0.8	BDMPP 250V 394J 15S 5 ____
0.47	18	19	11	15-0.8	BDMPP 250V 474J 15S 5 ____
0.22	26.5	15	6	22.5-0.8	BDMPP 250V 224J 22.5S 5 ____
0.27	26.5	15	6	22.5-0.8	BDMPP 250V 274J 22.5S 5 ____
0.33	26.5	15	6	22.5-0.8	BDMPP 250V 334J 22.5S 5 ____
0.39	26.5	16	7	22.5-0.8	BDMPP 250V 394J 22.5S 5 ____
0.47	26.5	16	7	22.5-0.8	BDMPP 250V 474J 22.5S 5 ____
0.56	26.5	17	8.5	22.5-0.8	BDMPP 250V 564J 22.5S 5 ____
0.68	26.5	18.5	10	22.5-0.8	BDMPP 250V 684J 22.5S 5 ____
0.82	26.5	18.5	10	22.5-0.8	BDMPP 250V 824J 22.5S 5 ____
1.0	26.5	20	11	22.5-0.8	BDMPP 250V 105J 22.5S 5 ____
1.2	26.5	22	13	22.5-0.8	BDMPP 250V 125J 22.5S 5 ____
0.82	32	17	9	27.5-0.6-0.8	BDMPP 250V 824J 27.5S 5 ____
1.0	32	20	11	27.5-0.6-0.8	BDMPP 250V 105J 27.5S 5 ____
1.2	32	20	11	27.5-0.6-0.8	BDMPP 250V 125J 27.5S 5 ____
1.5	32	22	13	27.5-0.6-0.8	BDMPP 250V 155J 27.5S 5 ____
1.8	32	22	13	27.5-0.6-0.8	BDMPP 250V 185J 27.5S 5 ____
2.2	32	28	14	27.5-0.6-0.8	BDMPP 250V 225J 27.5S 5 ____
2.7	32	33	18	27.5-0.6-0.8	BDMPP 250V 275J 27.5S 5 ____
3.3	32	33	18	27.5-0.6-0.8	BDMPP 250V 335J 27.5S 5 ____
3.9	32	33	18	27.5-0.6-0.8	BDMPP 250V 395J 27.5S 5 ____
4.7	32	37	22	27.5-0.6-0.8	BDMPP 250V 475J 27.5S 5 ____
5.6	32	37	22	27.5-0.6-0.8	BDMPP 250V 565J 27.5S 5 ____

400Vdc(250Vac)

Cap. (μF)	Dimensions(mm) W (max.)	H (max.)	T (max.)	Pitch - d	PART NUMBER
0.027	13	11	5	10-0.6	BDMPP 400V 273J 10S 5 ____
0.033	13	11	5	10-0.6	BDMPP 400V 333J 10S 5 ____
0.039	13	12	6	10-0.6	BDMPP 400V 393J 10S 5 ____
0.047	13	12	6	10-0.6	BDMPP 400V 473J 10S 5 ____
0.033	18	11	5	15-0.8	BDMPP 400V 333J 15S 5 ____
0.039	18	11	5	15-0.8	BDMPP 400V 393J 15S 5 ____
0.047	18	11	5	15-0.8	BDMPP 400V 473J 15S 5 ____
0.056	18	11	5	15-0.8	BDMPP 400V 563J 15S 5 ____
0.068	18	12	6	15-0.8	BDMPP 400V 683J 15S 5 ____
0.082	18	12	6	15-0.8	BDMPP 400V 823J 15S 5 ____
0.1	18	13.5	7.5	15-0.8	BDMPP 400V 104J 15S 5 ____
0.12	18	13.5	7.5	15-0.8	BDMPP 400V 124J 15S 5 ____
0.15	18	14.5	8.5	15-0.8	BDMPP 400V 154J 15S 5 ____
0.18	18	16	10	15-0.8	BDMPP 400V 184J 15S 5 ____
0.18	18	12	13	15-0.8	BDMPP 400V 184J 15S 5 ____
0.22	18	16	10	15-0.8	BDMPP 400V 224J 15S 5 ____
0.27	18	19	11	15-0.8	BDMPP 400V 274J 15S 5 ____
0.12	26.5	15	6	22.5-0.8	BDMPP 400V 124J 22.5S 5 ____
0.15	26.5	15	6	22.5-0.8	BDMPP 400V 154J 22.5S 5 ____
0.18	26.5	15	6	22.5-0.8	BDMPP 400V 184J 22.5S 5 ____
0.22	26.5	16	7	22.5-0.8	BDMPP 400V 224J 22.5S 5 ____
0.27	26.5	17	8.5	22.5-0.8	BDMPP 400V 274J 22.5S 5 ____
0.33	26.5	17	8.5	22.5-0.8	BDMPP 400V 334J 22.5S 5 ____
0.39	26.5	18.5	10	22.5-0.8	BDMPP 400V 394J 22.5S 5 ____

0.47	26.5	18.5	10	22.5-0.8	BDMPP 400V 474J 22.5S 5 ____
0.56	26.5	20	11	22.5-0.8	BDMPP 400V 564J 22.5S 5 ____
0.68	26.5	22	13	22.5-0.8	BDMPP 400V 684J 22.5S 5 ____
0.39	32	17	9	27.5-0.6-0.8	BDMPP 400V 394J 27.5S 5 ____
0.47	32	17	9	27.5-0.6-0.8	BDMPP 400V 474J 27.5S 5 ____
0.56	32	20	11	27.5-0.6-0.8	BDMPP 400V 564J 27.5S 5 ____
0.68	32	20	11	27.5-0.6-0.8	BDMPP 400V 684J 27.5S 5 ____
0.82	32	22	13	27.5-0.6-0.8	BDMPP 400V 824J 27.5S 5 ____
1.0	32	22	13	27.5-0.6-0.8	BDMPP 400V 105J 27.5S 5 ____
1.2	32	28	14	27.5-0.6-0.8	BDMPP 400V 125J 27.5S 5 ____
1.5	32	33	18	27.5-0.6-0.8	BDMPP 400V 155J 27.5S 5 ____
1.8	32	33	18	27.5-0.6-0.8	BDMPP 400V 185J 27.5S 5 ____
2.2	32	37	22	27.5-0.6-0.8	BDMPP 400V 225J 27.5S 5 ____
2.7	32	37	22	27.5-0.6-0.8	BDMPP 400V 275J 27.5S 5 ____

630Vdc(400Vac)

Cap. (μF)	Dimensions(mm)			Pitch - d	PART NUMBER
	W (max.)	H (max.)	T (max.)		
0.01	13.0	10.0	5.0	10-0.6	BDMPP 630V103J 10S 5 ____
0.012	13.0	11.0	5.0	10-0.6	BDMPP 630V123J 10S 5 ____
0.015	13.0	12.0	6.0	10-0.6	BDMPP 630V153J 10S 5 ____
0.018	13.0	13.0	7.0	10-0.6	BDMPP 630V183J 10S 5 ____
0.022	13.0	13.0	7.0	10-0.6	BDMPP 630V223J 10S 5 ____
0.027	18.0	12.0	6.0	15-0.8	BDMPP 630V273J 15S 5 ____
0.033	18.0	12.0	6.0	15-0.8	BDMPP 630V333J 15S 5 ____
0.039	18.0	13.0	7.0	15-0.8	BDMPP 630V393J 15S 5 ____
0.047	18.0	13.0	7.0	15-0.8	BDMPP 630V473J 15S 5 ____
0.056	18.0	14.0	8.0	15-0.8	BDMPP 630V563J 15S 5 ____
0.068	18.0	14.5	8.5	15-0.8	BDMPP 630V683J 15S 5 ____
0.082	18.0	14.5	8.5	15-0.8	BDMPP 630V823J 15S 5 ____
0.1	18.0	16.0	10.0	15-0.8	BDMPP 630V104J 15S 5 ____
0.12	18.0	18.0	10.0	15-0.8	BDMPP 630V124J 15S 5 ____
0.15	26.0	17.0	8.0	22.5-0.8	BDMPP 630V154J 22.5S 5 ____
0.18	26.0	19.0	10.0	22.5-0.8	BDMPP 630V184J 22.5S 5 ____
0.22	26.0	20.0	10.0	22.5-0.8	BDMPP 630V224J 22.5S 5 ____
0.27	26.0	22.0	12.0	22.5-0.8	BDMPP 630V274J 22.5S 5 ____
0.33	26.0	23.0	12.5	22.5-0.8	BDMPP 630V334J 22.5S 5 ____
0.39	26.0	24.0	14.0	22.5-0.8	BDMPP 630V394J 22.5S 5 ____
0.47	31.0	22.0	13.0	27.5-0.8	BDMPP 630V474J 22.5S 5 ____
0.68	31.0	27.0	16.0	27.5	BDMPP 630V684J 27.5S 5 ____
1	31.0	32.0	19.0	27.5	BDMPP 630V105J 27.5S 5 ____

1000Vdc(600Vac)

Cap. (μF)	Dimensions(mm)			Pitch - d	PART NUMBER
	W (max.)	H (max.)	T (max.)		
0.01	18.0	11.0	5.0	15-0.8	BDMPP 1000V103J 15S 5 ____
0.012	18.0	11.0	5.0	15-0.8	BDMPP 1000V123J 15S 5 ____
0.015	18.0	11.0	5.0	15-0.8	BDMPP 1000V153J 15S 5 ____
0.018	18.0	11.0	5.0	15-0.8	BDMPP 1000V183J 15S 5 ____
0.022	18.0	11.0	5.0	15-0.8	BDMPP 1000V223J 15S 5 ____
0.027	18.0	12.0	6.0	15-0.8	BDMPP 1000V273J 15S 5 ____
0.033	18.0	12.0	6.0	15-0.8	BDMPP 1000V333J 15S 5 ____
0.039	18.0	13.5	7.5	15-0.8	BDMPP 1000V393J 15S 5 ____
0.047	18.0	14.0	8.0	15-0.8	BDMPP 1000V473J 15S 5 ____
0.056	18.0	14.0	8.0	15-0.8	BDMPP 1000V563J 15S 5 ____
0.068	18.0	15.0	8.5	15-0.8	BDMPP 1000V683J 15S 5 ____
0.082	18.0	15.0	9.0	15-0.8	BDMPP 1000V823J 15S 5 ____
0.1	18.0	16.0	10.0	15-0.8	BDMPP 1000V104J 15S 5 ____

1600Vdc(650Vac)

Cap. (μF)	Dimensions(mm)			Pitch - d	PART NUMBER
	W (max.)	H (max.)	T (max.)		
0.0068	18	11	5	15-0.8	BDMPP 1600V 682J 15S 5 ____
0.0082	18	11	5	15-0.8	BDMPP 1600V 822J 15S 5 ____
0.01	18	11	5	15-0.8	BDMPP 1600V 103J 15S 5 ____
0.012	18	12	6	15-0.8	BDMPP 1600V 123J 15S 5 ____
0.015	18	12	6	15-0.8	BDMPP 1600V 153J 15S 5 ____
0.018	18	13.5	7.5	15-0.8	BDMPP 1600V 183J 15S 5 ____
0.022	18	13.5	7.5	15-0.8	BDMPP 1600V 223J 15S 5 ____
0.027	18	14.5	8.5	15-0.8	BDMPP 1600V 273J 15S 5 ____
0.033	18	14.5	8.5	15-0.8	BDMPP 1600V 333J 15S 5 ____
0.015	26.5	15	6	22.5-0.8	BDMPP 1600V 153J 22.5S 5 ____
0.018	26.5	15	6	22.5-0.8	BDMPP 1600V 183J 22.5S 5 ____
0.022	26.5	15	6	22.5-0.8	BDMPP 1600V 223J 22.5S 5 ____

0.027	26.5	15	6	22.5-0.8	BDMPP 1600V 273J 22.5S 5 ____
0.033	26.5	15	6	22.5-0.8	BDMPP 1600V 333J 22.5S 5 ____
0.039	26.5	16	7	22.5-0.8	BDMPP 1600V 393J 22.5S 5 ____
0.047	26.5	16	7	22.5-0.8	BDMPP 1600V 473J 22.5S 5 ____
0.056	26.5	17	8.5	22.5-0.8	BDMPP 1600V 563J 22.5S 5 ____
0.068	26.5	18.5	10	22.5-0.8	BDMPP 1600V 683J 22.5S 5 ____
0.082	26.5	18.5	10	22.5-0.8	BDMPP 1600V 823J 22.5S 5 ____
0.1	26.5	20	11	22.5-0.8	BDMPP 1600V 104J 22.5S 5 ____
0.039	32	17	9	27.5-0.8	BDMPP 1600V 393J 27.5S 5 ____
0.047	32	17	9	27.5-0.8	BDMPP 1600V 473J 27.5S 5 ____
0.056	32	17	9	27.5-0.8	BDMPP 1600V 563J 27.5S 5 ____
0.068	32	17	9	27.5-0.8	BDMPP 1600V 683J 27.5S 5 ____
0.082	32	20	11	27.5-0.8	BDMPP 1600V 823J 27.5S 5 ____
0.1	32	20	11	27.5-0.8	BDMPP 1600V 104J 27.5S 5 ____
0.12	32	22	13	27.5-0.8	BDMPP 1600V 124J 27.5S 5 ____
0.15	32	25	13	27.5-0.8	BDMPP 1600V 154J 27.5S 5 ____
0.18	32	28	14	27.5-0.8	BDMPP 1600V 184J 27.5S 5 ____
0.22	32	33	18	27.5-0.8	BDMPP 1600V 224J 27.5S 5 ____
0.27	32	33	18	27.5-0.8	BDMPP 1600V 274J 27.5S 5 ____
0.33	32	33	18	27.5-0.8	BDMPP 1600V 334J 27.5S 5 ____
0.39	32	37	22	27.5-0.8	BDMPP 1600V 394J 27.5S 5 ____
0.47	32	37	22	27.5-0.8	BDMPP 1600V 474J 27.5S 5 ____

2000Vdc(700Vac)

Cap. (μF)	Dimensions(mm)			Pitch - d	PART NUMBER
	W (max.)	H (max.)	T (max.)		
0.0022	18	11	5	15-0.8	BDMPP 2000V 222J 15S 5 ____
0.0027	18	11	5	15-0.8	BDMPP 2000V 272J 15S 5 ____
0.0033	18	11	5	15-0.8	BDMPP 2000V 332J 15S 5 ____
0.0039	18	11	5	15-0.8	BDMPP 2000V 392J 15S 5 ____
0.0047	18	11	5	15-0.8	BDMPP 2000V 472J 15S 5 ____
0.0056	18	12	6	15-0.8	BDMPP 2000V 562J 15S 5 ____
0.0068	18	12	6	15-0.8	BDMPP 2000V 682J 15S 5 ____
0.0082	18	12	6	15-0.8	BDMPP 2000V 822J 15S 5 ____
0.01	18	13.5	7.5	15-0.8	BDMPP 2000V 103J 15S 5 ____
0.012	18	14.5	8.5	15-0.8	BDMPP 2000V 123J 15S 5 ____
0.015	18	14.5	8.5	15-0.8	BDMPP 2000V 153J 15S 5 ____
0.001	26.5	15	6	22.5-0.8	BDMPP 2000V 102J 22.5S 5 ____
0.0012	26.5	15	6	22.5-0.8	BDMPP 2000V 122J 22.5S 5 ____
0.0015	26.5	15	6	22.5-0.8	BDMPP 2000V 152J 22.5S 5 ____
0.0018	26.5	15	6	22.5-0.8	BDMPP 2000V 182J 22.5S 5 ____
0.0022	26.5	15	6	22.5-0.8	BDMPP 2000V 222J 22.5S 5 ____
0.0027	26.5	15	6	22.5-0.8	BDMPP 2000V 272J 22.5S 5 ____
0.0033	26.5	15	6	22.5-0.8	BDMPP 2000V 332J 22.5S 5 ____
0.0039	26.5	15	6	22.5-0.8	BDMPP 2000V 392J 22.5S 5 ____
0.0047	26.5	15	6	22.5-0.8	BDMPP 2000V 472J 22.5S 5 ____
0.0056	26.5	15	6	22.5-0.8	BDMPP 2000V 562J 22.5S 5 ____
0.0068	26.5	15	6	22.5-0.8	BDMPP 2000V 682J 22.5S 5 ____
0.0082	26.5	15	6	22.5-0.8	BDMPP 2000V 822J 22.5S 5 ____
0.01	26.5	15	6	22.5-0.8	BDMPP 2000V 103J 22.5S 5 ____
0.012	26.5	15	6	22.5-0.8	BDMPP 2000V 123J 22.5S 5 ____
0.015	26.5	15	6	22.5-0.8	BDMPP 2000V 153J 22.5S 5 ____
0.018	26.5	15	6	22.5-0.8	BDMPP 2000V 183J 22.5S 5 ____
0.022	26.5	16	7	22.5-0.8	BDMPP 2000V 223J 22.5S 5 ____
0.027	26.5	16	7	22.5-0.8	BDMPP 2000V 273J 22.5S 5 ____
0.033	26.5	17	8.5	22.5-0.8	BDMPP 2000V 333J 22.5S 5 ____
0.039	26.5	18.5	10	22.5-0.8	BDMPP 2000V 393J 22.5S 5 ____
0.047	26.5	18.5	10	22.5-0.8	BDMPP 2000V 473J 22.5S 5 ____
0.056	26.5	20	11	22.5-0.8	BDMPP 2000V 563J 22.5S 5 ____
0.022	32	17	9	27.5-0.8	BDMPP 2000V 223J 27.5S 5 ____
0.027	32	17	9	27.5-0.8	BDMPP 2000V 273J 27.5S 5 ____
0.033	32	17	9	27.5-0.8	BDMPP 2000V 333J 27.5S 5 ____
0.039	32	17	9	27.5-0.8	BDMPP 2000V 393J 27.5S 5 ____
0.047	32	20	11	27.5-0.8	BDMPP 2000V 473J 27.5S 5 ____
0.056	32	22	13	27.5-0.8	BDMPP 2000V 563J 27.5S 5 ____
0.068	32	22	13	27.5-0.8	BDMPP 2000V 683J 27.5S 5 ____
0.082	32	25	13	27.5-0.8	BDMPP 2000V 823J 27.5S 5 ____
0.1	32	28	14	27.5-0.8	BDMPP 2000V 104J 27.5S 5 ____
0.12	32	33	18	27.5-0.8	BDMPP 2000V 124J 27.5S 5 ____

2000Vdc(750Vac)

Cap. (μF)	Dimensions(mm)			Pitch - d	PART NUMBER
	W (max.)	H (max.)	T (max.)		
0.001	18	11	5	15.0-0.8	BDMPP 2500V 102J 15 S 5 ____
0.0012	18	11	5	15.0-0.8	BDMPP 2500V 122J 15 S 5 ____
0.0015	18	12	6	15.0-0.8	BDMPP 2500V 152J 15 S 5 ____

0.0018	18	12	6	15.0-0.8	BDMPP 2500V 182J 15 S 5 ____
0.0022	18	13	7	15.0-0.8	BDMPP 2500V 222J 15 S 5 ____
0.0027	18	13.5	7.5	15.0-0.8	BDMPP 2500V 272J 15 S 5 ____
0.0033	18	14.5	8.5	15.0-0.8	BDMPP 2500V 332J 15 S 5 ____
0.0039	18	17.5	8.5	15.0-0.8	BDMPP 2500V 392J 15 S 5 ____
0.0047	18	16	10	15.0-0.8	BDMPP 2500V 472J 15 S 5 ____
0.0056	18	18	10	15.0-0.8	BDMPP 2500V 562J 15 S 5 ____
0.0068	18	19	11	15.0-0.8	BDMPP 2500V 682J 15 S 5 ____
0.0082	18	21	12	15.0-0.8	BDMPP 2500V 822J 15 S 5 ____
0.0047	26	15	6	22.5-0.8	BDMPP 2500V 472J 22.5 S 5 ____
0.0056	26	15	6	22.5-0.8	BDMPP 2500V 562J 22.5 S 5 ____
0.0068	26	15	6	22.5-0.8	BDMPP 2500V 682J 22.5 S 5 ____
0.0082	26	16.5	7	22.5-0.8	BDMPP 2500V 822J 22.5 S 5 ____
0.01	26	17	8.5	22.5-0.8	BDMPP 2500V 103J 22.5 S 5 ____
0.012	26	18	9	22.5-0.8	BDMPP 2500V 123J 22.5 S 5 ____
0.015	26	19	10	22.5-0.8	BDMPP 2500V 153J 22.5 S 5 ____
0.018	26	20	11	22.5-0.8	BDMPP 2500V 183J 22.5 S 5 ____
0.022	26	22	12	22.5-0.8	BDMPP 2500V 223J 22.5 S 5 ____
0.027	26	25	15	22.5-0.8	BDMPP 2500V 273J 22.5 S 5 ____
0.033	26	25	15	22.5-0.8	BDMPP 2500V 333J 22.5 S 5 ____
0.0068	31	18	9	27.5-0.8	BDMPP 2500V 682J 27.5 S 5 ____
0.0082	31	18	9	27.5-0.8	BDMPP 2500V 822J 27.5 S 5 ____
0.01	31	18	9	27.5-0.8	BDMPP 2500V 103J 27.5 S 5 ____
0.012	31	18	9	27.5-0.8	BDMPP 2500V 123J 27.5 S 5 ____
0.015	31	18	9	27.5-0.8	BDMPP 2500V 153J 27.5 S 5 ____
0.018	31	20	11	27.5-0.8	BDMPP 2500V 183J 27.5 S 5 ____
0.022	31	20	11	27.5-0.8	BDMPP 2500V 223J 27.5 S 5 ____
0.027	31	22	13	27.5-0.8	BDMPP 2500V 273J 27.5 S 5 ____
0.033	31	22	13	27.5-0.8	BDMPP 2500V 333J 27.5 S 5 ____
0.039	31	25.5	16	27.5-0.8	BDMPP 2500V 393J 27.5 S 5 ____
0.047	31	25.5	16	27.5-0.8	BDMPP 2500V 473J 27.5 S 5 ____
0.056	31	30	20	27.5-0.8	BDMPP 2500V 563J 27.5 S 5 ____
0.068	31	30	20	27.5-0.8	BDMPP 2500V 683J 27.5 S 5 ____
0.082	31	37	22	27.5-0.8	BDMPP 2500V 823J 27.5 S 5 ____
0.1	31	37	22	27.5-0.8	BDMPP 2500V 104J 27.5 S 5 ____

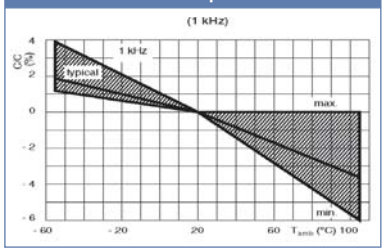
2000Vdc(800Vac)

Cap. (μF)	Dimensions(mm)			Pitch - d	PART NUMBER
	W (max.)	H (max.)	T (max.)		
0.00047	18	11	5	15.0-0.8	BDMPP 3000V 471J 15 S 5 ____
0.00056	18	11	5	15.0-0.8	BDMPP 3000V 561J 15 S 5 ____
0.00068	18	11	5	15.0-0.8	BDMPP 3000V 681J 15 S 5 ____
0.00082	18	12	6	15.0-0.8	BDMPP 3000V 821J 15 S 5 ____
0.001	18	12	6	15.0-0.8	BDMPP 3000V 102J 15 S 5 ____
0.0012	18	13.5	7.5	15.0-0.8	BDMPP 3000V 122J 15 S 5 ____
0.0015	18	13.5	7.5	15.0-0.8	BDMPP 3000V 152J 15 S 5 ____
0.0018	18	14.5	8.5	15.0-0.8	BDMPP 3000V 182J 15 S 5 ____
0.0022	18	17.5	8.5	15.0-0.8	BDMPP 3000V 222J 15 S 5 ____
0.0027	18	16	10	15.0-0.8	BDMPP 3000V 272J 15 S 5 ____
0.0033	18	19	11	15.0-0.8	BDMPP 3000V 332J 15 S 5 ____
0.0039	18	19	11	15.0-0.8	BDMPP 3000V 392J 15 S 5 ____
0.0047	18	21	12	15.0-0.8	BDMPP 3000V 472J 15 S 5 ____
0.0022	26	15	6	22.5-0.8	BDMPP 3000V 222J 22.5 S 5 ____
0.0027	26	15	6	22.5-0.8	BDMPP 3000V 272J 22.5 S 5 ____
0.0033	26	15	6	22.5-0.8	BDMPP 3000V 332J 22.5 S 5 ____
0.0039	26	16.5	7	22.5-0.8	BDMPP 3000V 392J 22.5 S 5 ____
0.0047	26	16.5	7	22.5-0.8	BDMPP 3000V 472J 22.5 S 5 ____
0.0056	26	17	8.5	22.5-0.8	BDMPP 3000V 562J 22.5 S 5 ____
0.0068	26	18	9	22.5-0.8	BDMPP 3000V 682J 22.5 S 5 ____
0.0082	26	19	10	22.5-0.8	BDMPP 3000V 822J 22.5 S 5 ____
0.01	26	20	11	22.5-0.8	BDMPP 3000V 103J 22.5 S 5 ____
0.012	26	22	12	22.5-0.8	BDMPP 3000V 123J 22.5 S 5 ____
0.015	26	25	15	22.5-0.8	BDMPP 3000V 153J 22.5 S 5 ____
0.018	26	25	15	22.5-0.8	BDMPP 3000V 183J 22.5 S 5 ____
0.022	26	25	15	22.5-0.8	BDMPP 3000V 223J 22.5 S 5 ____
0.0047	31	18	9	27.5-0.8	BDMPP 3000V 472J 27.5 S 5 ____
0.0056	31	18	9	27.5-0.8	BDMPP 3000V 562J 27.5 S 5 ____
0.0068	31	18	9	27.5-0.8	BDMPP 3000V 682J 27.5 S 5 ____
0.0082	31	18	9	27.5-0.8	BDMPP 3000V 822J 27.5 S 5 ____
0.01	31	18	9	27.5-0.8	BDMPP 3000V 103J 27.5 S 5 ____

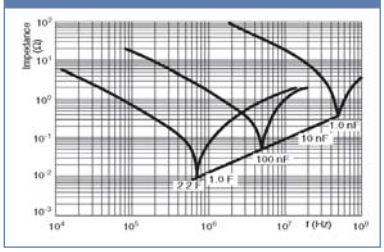
0.012	31	20	11	27.5-0.8	BDMPP 3000V 123J 27.5 S 5 ____
0.015	31	20	11	27.5-0.8	BDMPP 3000V 153J 27.5 S 5 ____
0.018	31	22	13	27.5-0.8	BDMPP 3000V 183J 27.5 S 5 ____
0.022	31	24.5	15	27.5-0.8	BDMPP 3000V 223J 27.5 S 5 ____
0.027	31	24.5	15	27.5-0.8	BDMPP 3000V 273J 27.5 S 5 ____
0.033	31	30	20	27.5-0.8	BDMPP 3000V 333J 27.5 S 5 ____
0.039	31	30	20	27.5-0.8	BDMPP 3000V 393J 27.5 S 5 ____
0.047	31	37	22	27.5-0.8	BDMPP 3000V 473J 27.5 S 5 ____
0.056	31	37	22	27.5-0.8	BDMPP 3000V 563J 27.5 S 5 ____

Electrical Characteristics (Typical Data)

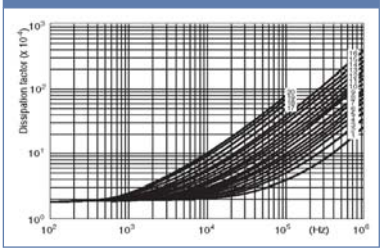
Capacitance as a function of ambient temperature



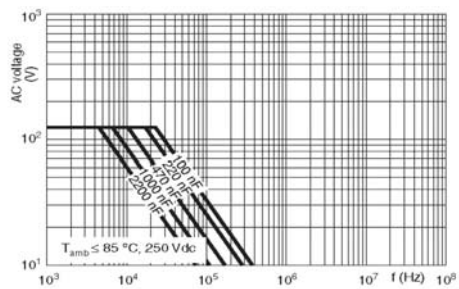
Impedance as a function of frequency

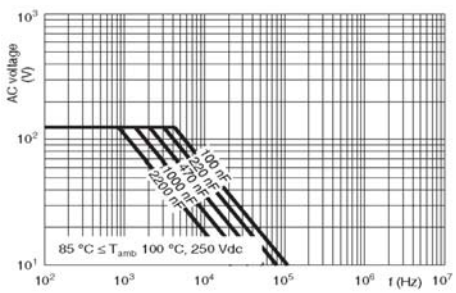


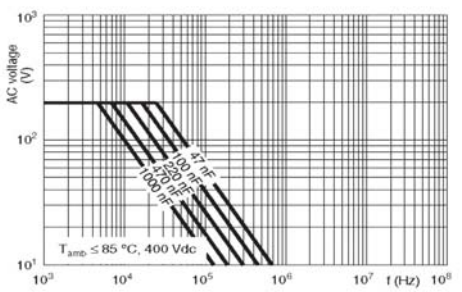
Tangent of loss angle as a function of frequency

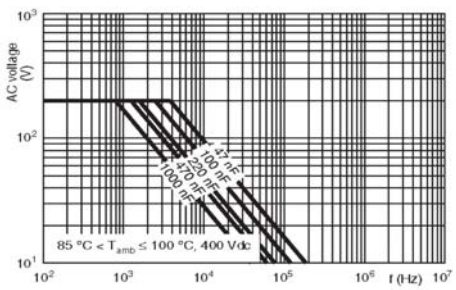


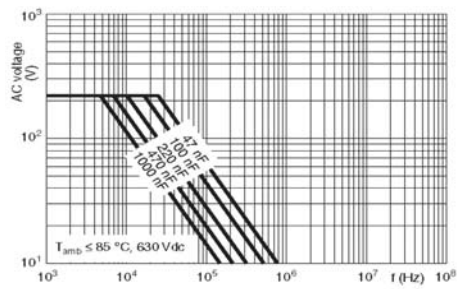
Max. RMS voltage as a function of frequency

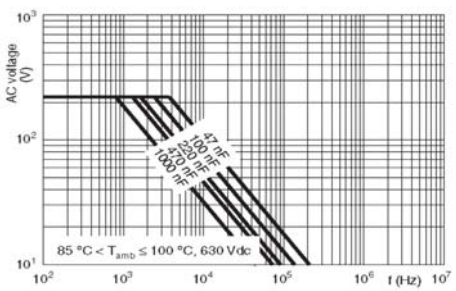






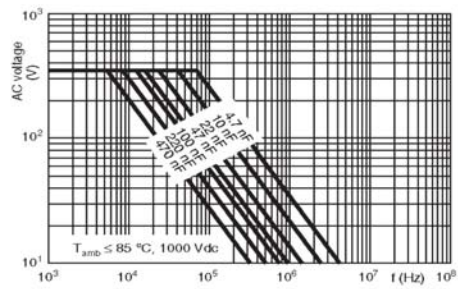


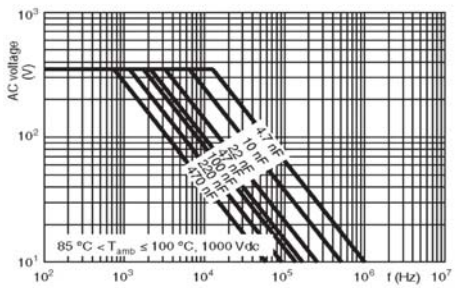


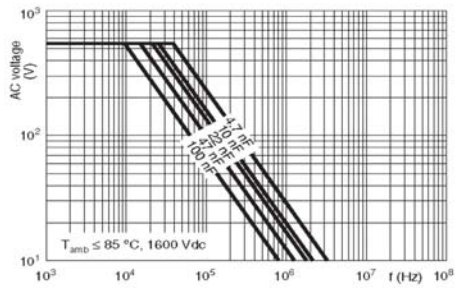


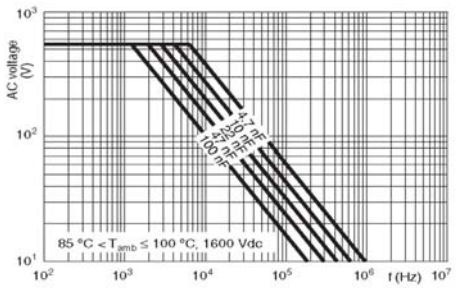
■ Electrical Characteristics (Typical Data)

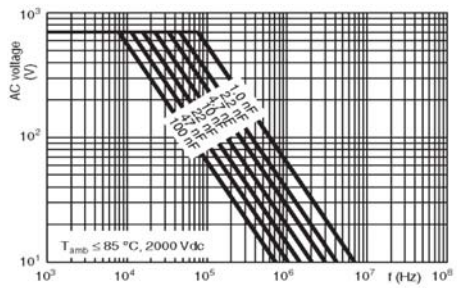
Max. RMS voltage as a function of frequency

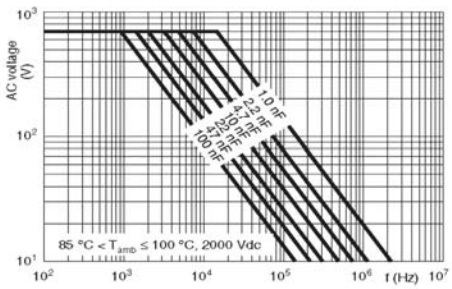


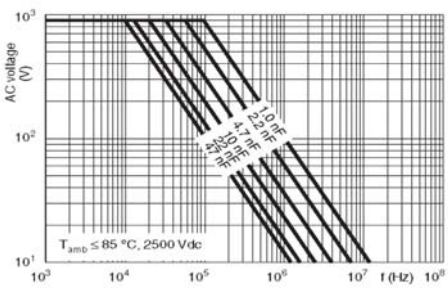


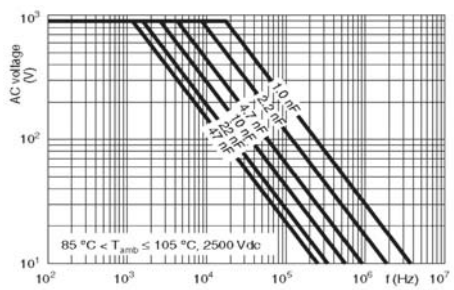












BDMPP(P=7.5)

This standard specifies Double sided-Metallized polypropylene film capacitors for electronic equipment.

■ Features

- pulse duty construction
- self-healing
- Very low Dissipation Factor
- Negative capacitance change versus temperature
- miniature size of NPPS.
- Plastic case(UL94 V-0), Epoxy resin sealing.
- RoHS directive compliant

■ Applications

- for pulse applications e.g.
- Switch mode power supplies
- TV and monitor sets
- electronic ballasts and compact lamps
- snubber and silicon-controlled rectifier(SCR) commutation circuits

■ Specifications

Reference Standard	IEC 60384-17 / IEC 60384-16
Climatic Category	40 / 105 / 21
Rated Temperature	85℃ for V_R(dc) ; 75℃ for V_R(ac) ;
Operation Temperature Range	-40℃~105℃ +85℃ ~ +105℃ decreasing factor 1.25% / ℃ for V_R(dc) +75℃ ~ +105℃ decreasing factor 1.35% / ℃ for V_R(ac)
Rated Voltage	250Vdc, 400Vdc, 630Vdc 125Vac, 160Vac, 200Vac
Capacitance Range	0.001μF~0.01μF
Capacitance Tolerance	G : ±2% H : ±3% J : ±5% K : ±10% M : ±20% ※Standard : J : ±5%, Other Tolerance Grade : available on request.
Voltage Proof	1.75U_R(dc) / 3sec
Dissipation Factor	≤0.1%(at 1kHz 20℃)
Insulation Resistance	≥30,000MΩ C_R≤0.33μF 500Vdc 60sec 20℃
	≥10,000Ω·F C_R〉0.33μF 500Vdc 60sec 20℃

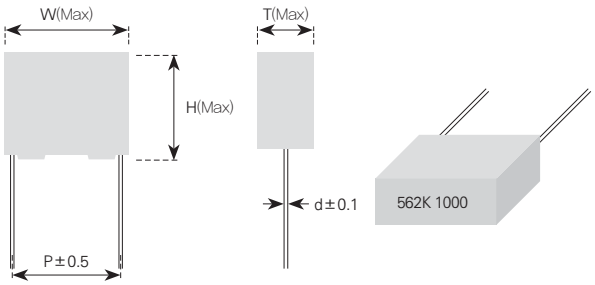
■ Part Number System

BDMPP	250V	682	K	7.5	S	5	
Part-1	Part-2	Part-3	Part-4	Part-5	Part-6	Part-7	Part-8

Part-1 : Series Code(Series Name) - BDMPP
Part-2 : Rated Voltage(DC:250V~630V / 125Vac~200Vac(Only for AC applications))
Part-3 : Rated Capacitance Value(0.001μF~0.01μF / 102~103)
Part-4 : Capacitance Tolerance(G : ±2% H : ±3% J : ±5% K : ±10% M : ±20%)
Part-5 : Lead Spacing(7.5mm)
Part-6 : Forming-Type and Packing Code →
Part-7 : Size Number(1~4 : Min-Type / 5 : Standard-Type / 6~9 : Large-Type)
Part-8 : Internal Use

CODE	STYLE
B	Bending Forming
C	Straight Cutting
D	D-Type Forming
L	B-Type long Forming
M	C-Type long Forming
S	Straight
X	B-Type Forming
Y	C-Type Forming
Z	Z-Type Forming
T	A-Type Tapping
U	B-Type Tapping
V	C-Type Tapping

■ Dimensions



250VDC(125VAC)

Cap. (μF)	Dimensions(mm)			Pitch - d	PART NUMBER
	W (max.)	H (max.)	T (max.)		
0.0068	10.5	9	4	7.5-0.6	BDMPP 250V 682K 7.5S 5 ____
0.0082	10.5	9	4	7.5-0.6	BDMPP 250V 822K 7.5S 5 ____
0.01	10.5	9	4	7.5-0.6	BDMPP 250V 103K 7.5S 5 ____

400VDC(160VAC)

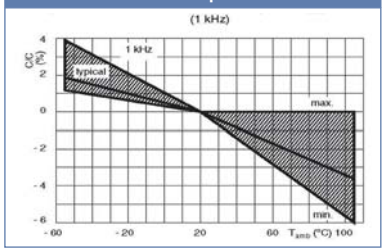
Cap. (μF)	Dimensions(mm)			Pitch - d	PART NUMBER
	W (max.)	H (max.)	T (max.)		
0.0039	10.5	9	4	7.5-0.6	BDMPP 400V 392K 7.5S 5 ____
0.0047	10.5	9	4	7.5-0.6	BDMPP 400V 472K 7.5S 5 ____
0.0056	10.5	9	4	7.5-0.6	BDMPP 400V 562K 7.5S 5 ____
0.0068	10.5	11	5	7.5-0.6	BDMPP 400V 682K 7.5S 5 ____
0.0082	10.5	11	5	7.5-0.6	BDMPP 400V 822K 7.5S 5 ____
0.01	10.5	11	5	7.5-0.6	BDMPP 400V 103K 7.5S 5 ____

630dc(200Vac)

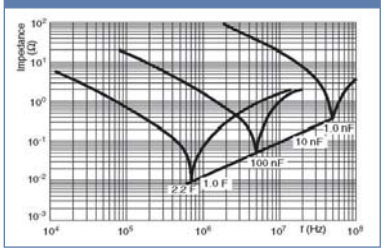
Cap. (μF)	Dimensions(mm)			Pitch - d	PART NUMBER
	W (max.)	H (max.)	T (max.)		
0.001	10.5	9	4	7.5-0.6	BDMPP 630V 102K 7.5S 5 ____
0.0033	10.5	9	4	7.5-0.6	BDMPP 630V 332K 7.5S 5 ____
0.0039	10.5	11	5	7.5-0.6	BDMPP 630V 392K 7.5S 5 ____
0.0047	10.5	11	5	7.5-0.6	BDMPP 630V 472K 7.5S 5 ____
0.0056	10.5	11	5	7.5-0.6	BDMPP 630V 562K 7.5S 5 ____
0.0068	10.5	11	5	7.5-0.6	BDMPP 630V 682K 7.5S 5 ____

Electrical Characteristics (Typical Data)

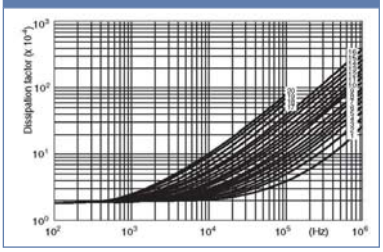
Capacitance as a function of ambient temperature



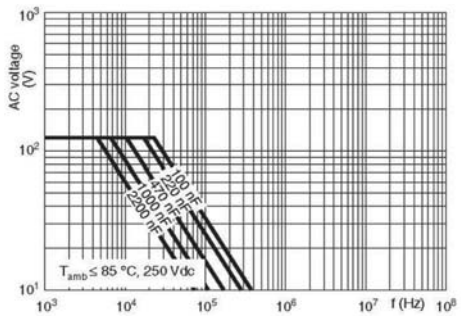
Impedance as a function of frequency

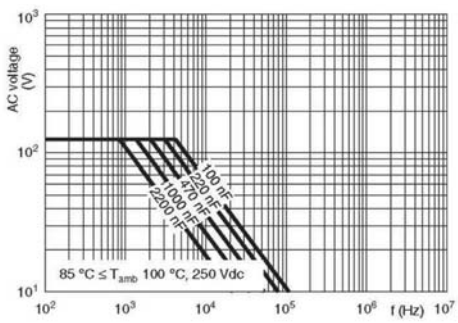


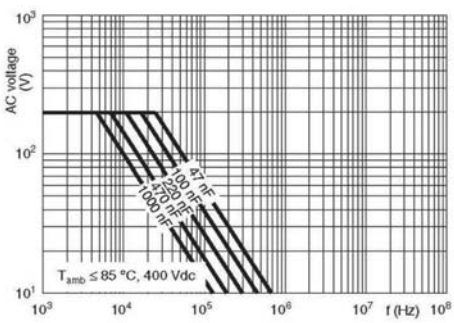
Tangent of loss angle as a function of frequency

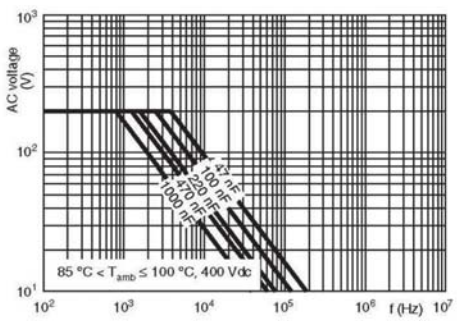


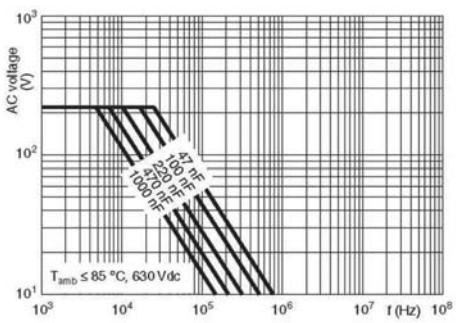
Max. RMS voltage as a function of frequency

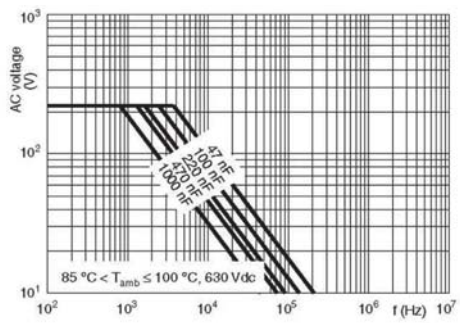












BDMPP(P=7.5)

CMPP

class X2

■ Features

- miniaturized.
- Plastic case(UL94 V-0), Epoxy resin sealing.
- RoHS directive compliant

■ Applications

- Interference suppressors

■ Applicable Standard

SAFTY	FILE NO
UL60384-14 / CAN/CSA-E60384-14 Fixed Capacitor - X2	E327138
ENEC/CB(VDE)(IEC60384-14)	40026078
KC(KTL)	SU03030-7001A~7004A SU03030-13001,13002 / SU03064-13001~13006
CQC	CQC13001095123 CQC13001095638 / CQC13001098793~4

■ Specifications

Reference Standard	IEC 60384-14
Climatic Category Passive Flammability Class	40 / 105 / 56 / B
Class	X2
Rated Temperature	105℃ +85℃~+105℃ decreasing factor 1.0% / ℃ for V_R(dc)
Operation Temperature Range	-40℃~+105℃
Rated Voltage	275Vac, 310Vac
Capacitance Range	0.0047μF~10.0μF
Capacitance Tolerance	K : ±10%
Voltage Proof	AC 1333V / 1min
Dissipation Factor	≤0.1%(at 1kHz 20℃)
Insulation Resistance	≥30,000MΩ C_R≤0.33μF 100Vdc 60sec 20℃
	≥10,000Ω·F C_R〉0.33μF 100Vdc 60sec 20℃

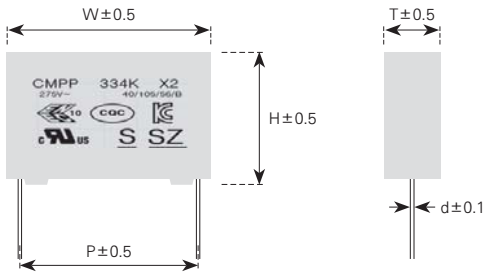
■ Part Number System

CMPP	AC275V	472	K	7.5	S	5	
Part-1	Part-2	Part-3	Part-4	Part-5	Part-6	Part-7	Part-8

Part-1 : Series Code(Series Name)-CMPP
Part-2 : Rated Voltage(275Vac / 310Vac)
Part-3 : Rated Capacitance Value(0.0047μF~10.0μF / 472~106)
Part-4 : Capacitance Tolerance(K : ±10%)
Part-5 : Lead Spacing(7.5mm / 10mm / 15mm / 22.5mm / 27.5mm / 37.5mm)
Part-6 : Forming-Type and Packing Code
Part-7 : Size Number(5~6 : Min-Type / 7 : Standard-Type / 8~15 : Large-Type)
Part-8 : Internal Use

CODE	STYLE
B	Bending Forming
C	Straight Cutting
D	D-Type Forming
L	B-Type long Forming
M	C-Type long Forming
S	Straight
X	B-Type Forming
Y	C-Type Forming
Z	Z-Type Forming
T	A-Type Tapping
U	B-Type Tapping
V	C-Type Tapping

■ Dimensions



275Vac					
Cap. (μF)	Dimensions(Max) W (±0.5)	H (±0.5)	T (±0.5)	Pitch - d	PART NUMBER
0.0047	11	10	6	7.5-0.6	CMPP AC275V472K7.5S5
0.0047	13	9	5	10-0.6	CMPP AC275V472K10S5
0.0056	10	9	5	7.5-0.6	CMPP AC275V562K7.5S5
0.0056	13	10	5	10-0.6	CMPP AC275V562K10S5
0.0068	10	9	5	7.5-0.6	CMPP AC275V682K7.5S5
0.0068	13	10	5	10-0.6	CMPP AC275V682K10S5
0.0082	10	9	5	7.5-0.6	CMPP AC275V822K7.5S5
0.0082	13	10	5	10-0.6	CMPP AC275V822K10S5
0.01	10	9	5	7.5-0.6	CMPP AC275V103K7.5S5
0.01	11	13	9	7.5-0.6	CMPP AC275V103K7.5S6
0.01	13	9	5	10-0.6	CMPP AC275V103K10S5
0.01	13	11	5	10-0.6	CMPP AC275V103K10S6
0.01	18	9	4.5	15-0.8	CMPP AC275V103K15S5
0.012	13	11	5	10-0.6	CMPP AC275V123K10S5
0.015	11	10	6	7.5-0.6	CMPP AC275V153K7.5S5
0.015	11	13	9	7.5-0.6	CMPP AC275V153K7.5S6
0.015	13	9.5	4.5	10-0.6	CMPP AC275V153K10S5
0.015	13	11	5	10-0.6	CMPP AC275V153K10S6
0.015	18	8.5	4.5	15-0.8	CMPP AC275V153K15S5
0.018	11	13	9	7.5-0.6	CMPP AC275V183K7.5S5
0.018	13	11	5	10-0.6	CMPP AC275V183K10S5
0.022	10	9	5	7.5-0.6	CMPP AC275V223K7.5S5
0.022	11	13	9	7.5-0.6	CMPP AC275V223K7.5S6
0.022	13	9.5	4.5	10-0.6	CMPP AC275V223K10S5
0.022	13	12	6	10-0.6	CMPP AC275V223K10S6
0.022	18	10	4.5	15-0.8	CMPP AC275V223K15S5
0.027	18	11	5	15-0.8	CMPP AC275V273K15S5
0.033	10	10.5	5.5	7.5-0.6	CMPP AC275V333K7.5S5
0.033	11	13	9	7.5-0.6	CMPP AC275V333K7.5S6
0.033	13	10	4.5	10-0.6	CMPP AC275V333K10S5
0.033	13	11.5	5	10-0.6	CMPP AC275V333K10S6
0.033	18	10	4.5	15-0.8	CMPP AC275V333K15S5
0.033	18	11	5	15-0.8	CMPP AC275V333K15S6
0.039	11	13	9	7.5-0.6	CMPP AC275V393K7.5S5
0.039	18	11	5	15-0.8	CMPP AC275V393K15S5
0.047	10	10.5	5.5	7.5-0.6	CMPP AC275V473K7.5S5
0.047	13	9.5	4.5	10-0.6	CMPP AC275V473K10S5
0.047	13	13	7	10-0.6	CMPP AC275V473K10S6
0.047	18	9.5	4.5	15-0.8	CMPP AC275V473K15S5
0.047	18	11	5	15-0.8	CMPP AC275V473K15S6
0.056	10	11.5	5.5	7.5-0.6	CMPP AC275V563K7.5S5
0.056	13	10	5	10-0.6	CMPP AC275V563K10S5
0.056	18	9.5	4.5	15-0.8	CMPP AC275V563K15S5
0.056	18	11	5	15-0.8	CMPP AC275V563K15S6
0.068	10	12	6	7.5-0.6	CMPP AC275V683K7.5S5
0.068	13	10.5	5.5	10-0.6	CMPP AC275V683K10S5
0.068	13	13	7	10-0.6	CMPP AC275V683K10S6
0.068	18	10	4.5	15-0.8	CMPP AC275V683K15S5
0.068	18	12	6	15-0.8	CMPP AC275V683K15S6
0.082	10	12.5	6.5	7.5-0.6	CMPP AC275V823K7.5S5
0.082	13	11.5	6	10-0.6	CMPP AC275V823K10S5
0.082	13	13	7	10-0.6	CMPP AC275V823K10S6
0.082	18	10.5	5.5	15-0.8	CMPP AC275V823K15S5
0.082	18	12	6	15-0.8	CMPP AC275V823K15S6
0.1	10	13.5	7.5	7.5-0.6	CMPP AC275V104K7.5S5
0.1	13	11.5	5.5	10-0.6	CMPP AC275V104K10S5
0.1	13	13	7	10-0.6	CMPP AC275V104K10S6
0.1	18	10	5	15-0.8	CMPP AC275V104K15S5
0.1	18	12	6	15-0.8	CMPP AC275V104K15S6
0.1	18	8.5	10	15-0.8	CMPP AC275V104K15S7
0.12	13	13	7	10-0.6	CMPP AC275V124K10S5
0.12	18	10	5	15-0.8	CMPP AC275V124K15S5
0.12	18	13.5	7.5	15-0.8	CMPP AC275V124K15S6
0.15	13	12	7	10-0.6	CMPP AC275V154K10S5
0.15	13	14	8	10-0.6	CMPP AC275V154K10S6
0.15	15	11.5	6	12.5-0.6	CMPP AC275V154K12.5S5

0.15	18	10.5	5	15-0.8	CMPP AC275V154K15S5
0.15	18	12	6	15-0.8	CMPP AC275V154K15S6
0.15	18	13.5	7.5	15-0.8	CMPP AC275V154K15S7
0.15	18	8.5	12	15-0.8	CMPP AC275V154K15S8
0.15	26	11	5	22.5-0.8	CMPP AC275V154K22.5S5
0.18	18	12	6	15-0.8	CMPP AC275V184K15S5
0.18	18	14.5	8.5	15-0.8	CMPP AC275V184K15S6
0.22	12.5	16	6.5	10-0.6	CMPP AC275V224K10S5
0.22	13	14	8	10-0.6	CMPP AC275V224K10S6
0.22	15	12.5	7	12.5-0.6	CMPP AC275V224K12.5S5
0.22	18	11.5	6	15-0.8	CMPP AC275V224K15S5
0.22	18	14	7	15-0.8	CMPP AC275V224K15S6
0.22	18	14.5	8.5	15-0.8	CMPP AC275V224K15S7
0.22	18	17.5	9.5	15-0.8	CMPP AC275V224K15S8
0.22	26	11	5	22.5-0.8	CMPP AC275V224K22.5S5
0.22	26	15	6	22.5-0.8	CMPP AC275V224K22.5S6
0.22	26	8.5	11.5	22.5-0.8	CMPP AC275V224K22.5S7
0.22	26.5	16	7	22.5-0.8	CMPP AC275V224K22.5S8
0.27	18	14.5	7.5	15-0.8	CMPP AC275V274K15S5
0.27	18	15.5	8.5	15-0.8	CMPP AC275V274K15S6
0.27	26.5	17	8.5	22.5-0.8	CMPP AC275V274K22.5S5
0.33	12.5	19	8	10-0.6	CMPP AC275V334K10S5
0.33	15	14	8.5	12.5-0.6	CMPP AC275V334K12.5S5
0.33	18	13.5	6.5	15-0.8	CMPP AC275V334K15S5
0.33	18	14.5	8.5	15-0.8	CMPP AC275V334K15S6
0.33	18	15.5	8	15-0.8	CMPP AC275V334K15S7
0.33	18	17.5	10	15-0.8	CMPP AC275V334K15S8
0.33	26	12	6	22.5-0.8	CMPP AC275V334K22.5S5
0.33	26	17	7	22.5-0.8	CMPP AC275V334K22.5S6
0.33	26	17	7	22.5-0.8	CMPP AC275V334K22.5S7
0.33	26	8.5	14.5	22.5-0.8	CMPP AC275V334K22.5S8
0.33	26.5	17	8.5	22.5-0.8	CMPP AC275V334K22.5S9
0.39	15	15	9	12.5-0.6	CMPP AC275V394K12.5S5
0.39	18	13.5	7.5	15-0.8	CMPP AC275V394K15S5
0.39	18	17	8	15-0.8	CMPP AC275V394K15S6
0.39	26	12	6	22.5-0.8	CMPP AC275V394K22.5S5
0.39	26.5	19	10	22.5-0.8	CMPP AC275V394K22.5S6
0.47	12.5	20	10	10-0.6	CMPP AC275V474K10S5
0.47	15	16	10	12.5-0.6	CMPP AC275V474K12.5S5
0.47	18	17.5	6	15-0.8	CMPP AC275V474K15S5

0.47	18	14	8	15-0.8	CMPP AC275V474K15S6
0.47	18	12.8	9	15-0.8	CMPP AC275V474K15S7
0.47	18	16	10	15-0.8	CMPP AC275V474K15S8
0.47	18	18	9	15-0.8	CMPP AC275V474K15S9
0.47	26	14.5	6.5	22.5-0.8	CMPP AC275V474K22.5S5
0.47	26	17	8.5	22.5-0.8	CMPP AC275V474K22.5S6
0.47	26.5	19	10	22.5-0.8	CMPP AC275V474K22.5S7
0.47	31	13.5	6	27.5-0.8	CMPP AC275V474K27.5S8
0.47	32	18	9	27.5-0.8	CMPP AC275V474K27.5S9
0.56	15	17	11	12.5-0.6	CMPP AC275V564K12.5S5
0.56	18	15	9	15-0.8	CMPP AC275V564K15S5
0.56	18	19	10	15-0.8	CMPP AC275V564K15S6
0.56	26	14	7	22.5-0.8	CMPP AC275V564K22.5S5
0.56	26	16.5	7.5	22.5-0.8	CMPP AC275V564K22.5S6
0.56	26	17	9.5	22.5-0.8	CMPP AC275V564K22.5S7
0.56	31	14	6.5	27.5-0.8	CMPP AC275V564K27.5S5
0.56	32	20	11	27.5-0.8	CMPP AC275V564K27.5S6
0.68	18	16	10	15-0.8	CMPP AC275V684K15S5
0.68	18	18.5	11	15-0.8	CMPP AC275V684K15S6
0.68	26	15	7.5	22.5-0.8	CMPP AC275V684K22.5S5
0.68	26	17	8	22.5-0.8	CMPP AC275V684K22.5S6
0.68	26	19	10	22.5-0.8	CMPP AC275V684K22.5S7
0.68	31	15.5	6.5	27.5-0.8	CMPP AC275V684K27.5S5
0.68	32	20	10.5	27.5-0.8	CMPP AC275V684K27.5S6
0.82	18	17.5	10	15-0.8	CMPP AC275V824K15S5
0.82	26	16	8	22.5-0.8	CMPP AC275V824K22.5S5
0.82	26	18	9	22.5-0.8	CMPP AC275V824K22.5S6
0.82	26	20	11	22.5-0.8	CMPP AC275V824K22.5S7
0.82	31	16	8	27.5-0.8	CMPP AC275V824K27.5S5
0.82	32	22	13	27.5-0.8	CMPP AC275V824K27.5S6
1	18	19	11.5	15-0.8	CMPP AC275V105K15S5
1	18	21	10.5	15-0.8	CMPP AC275V105K15S6
1	26	17	9	22.5-0.8	CMPP AC275V105K22.5S5
1	26	20	11	22.5-0.8	CMPP AC275V105K22.5S6
1	26	22	12	22.5-0.8	CMPP AC275V105K22.5S7
1	31	17	8	27.5-0.8	CMPP AC275V105K27.5S5
1	32	22	13	27.5-0.8	CMPP AC275V105K27.5S6
1.2	26	19	9	22.5-0.8	CMPP AC275V125K22.5S5
1.2	31	17.5	8	27.5-0.8	CMPP AC275V125K27.5S5
1.2	31	22	13	27.5-0.8	CMPP AC275V125K27.5S6

1.2	32	24	15	27.5-0.8	CMPP AC275V125K27.5S7
1.5	26	21	10	22.5-0.8	CMPP AC275V155K22.5S5
1.5	26	22	12	22.5-0.8	CMPP AC275V155K22.5S6
1.5	26	24	15.5	22.5-0.8	CMPP AC275V155K22.5S7
1.5	31	18.5	9	27.5-0.8	CMPP AC275V155K27.5S5
1.5	32	24	14	27.5-0.8	CMPP AC275V155K27.5S6
1.5	32	24	15	27.5-0.8	CMPP AC275V155K27.5S7
1.5	31	25	15	27.5-0.8	CMPP AC275V155K27.5S8
1.5	32	27	17.5	27.5-0.8	CMPP AC275V155K27.5S9
1.8	26	21	12.5	22.5-0.8	CMPP AC275V185K22.5S5
1.8	31	20.5	11	27.5-0.8	CMPP AC275V185K27.5S5
1.8	32	27	16.5	27.5-0.8	CMPP AC275V185K27.5S6
2	31	30	18	27.5-0.8	CMPP AC275V205K27.5S5
2.2	26	22	13.5	22.5-0.8	CMPP AC275V225K22.5S5
2.2	26	25	15	22.5-0.8	CMPP AC275V225K22.5S6
2.2	31	21	12.5	27.5-0.8	CMPP AC275V225K27.5S5
2.2	31	26	16.5	27.5-0.8	CMPP AC275V225K27.5S6
2.2	31	30	18	27.5-0.8	CMPP AC275V225K27.5S7
2.2	32	33	18.5	27.5-0.8	CMPP AC275V225K27.5S8
3.3	31	29	15.5	27.5-0.8	CMPP AC275V335K27.5S5
3.3	31	26	17.5	27.5-0.8	CMPP AC275V335K27.5S6
3.3	31	31	20	27.5-0.8	CMPP AC275V335K27.5S7
3.3	41.5	26	14.5	37.5-0.8	CMPP AC275V335K37.5S5
3.3	41.5	28	17	37.5-0.8	CMPP AC275V335K37.5S6
3.9	31	28	19	27.5-0.8	CMPP AC275V395K27.5S5
3.9	41.5	25	16	37.5-0.8	CMPP AC275V395K37.5S5
4.7	31	30.5	20	27.5-1	CMPP AC275V475K27.5S5
4.7	31	32.5	19	27.5-1	CMPP AC275V475K27.5S6
4.7	41.5	29	15.5	37.5-1	CMPP AC275V475K37.5S5
4.7	42	32	21	37.5-1	CMPP AC275V475K37.5S6
5.6	31	34.5	21	27.5-1	CMPP AC275V565K27.5S5
5.6	41.5	31.5	18.5	37.5-1	CMPP AC275V565K37.5S5
5.6	41.5	36.5	22.5	37.5-1	CMPP AC275V565K37.5S6
6.8	41.5	35.5	22.5	37.5-1	CMPP AC275V685K37.5S5
6.8	41.5	35.5	25	37.5-1	CMPP AC275V685K37.5S6
8.2	41.5	38	25	37.5-1	CMPP AC275V825K37.5S5
8.2	41.5	38	27.5	37.5-1	CMPP AC275V825K37.5S6
10	41.5	41.5	28	37.5-1	CMPP AC275V106K37.5S5
10	42	43	31	37.5-1	CMPP AC275V106K37.5S6

310Vac

Cap. (μF)	Dimensions(mm)			Pitch - d	PART NUMBER
	W (±0.5)	H (±0.5)	T (±0.5)		
0.0047	11	10	6	7.5-0.6	CMPP AC310V472K7.5S5
0.0047	13	9	5	10-0.6	CMPP AC310V472K10S5
0.0056	10	9	5	7.5-0.6	CMPP AC310V562K7.5S5
0.0056	13	10	5	10-0.6	CMPP AC310V562K10S5
0.0068	10	9	5	7.5-0.6	CMPP AC310V682K7.5S5
0.0068	13	10	5	10-0.6	CMPP AC310V682K10S5
0.0082	10	9	5	7.5-0.6	CMPP AC310V822K7.5S5
0.0082	13	10	5	10-0.6	CMPP AC310V822K10S5
0.01	10	9	5	7.5-0.6	CMPP AC310V103K7.5S5
0.01	11	13	9	7.5-0.6	CMPP AC310V103K7.5S6
0.01	13	9	5	10-0.6	CMPP AC310V103K10S5
0.01	13	11	5	10-0.6	CMPP AC310V103K10S6
0.01	18	9	4.5	15-0.8	CMPP AC310V103K15S5
0.012	13	11	5	10-0.6	CMPP AC310V123K10S5
0.015	11	10	6	7.5-0.6	CMPP AC310V153K7.5S5
0.015	11	13	9	7.5-0.6	CMPP AC310V153K7.5S6
0.015	13	9.5	4.5	10-0.6	CMPP AC310V153K10S5
0.015	13	11	5	10-0.6	CMPP AC310V153K10S6
0.015	18	8.5	4.5	15-0.8	CMPP AC310V153K15S5
0.018	11	13	9	7.5-0.6	CMPP AC310V183K7.5S5
0.018	13	11	5	10-0.6	CMPP AC310V183K10S5
0.022	10	9	5	7.5-0.6	CMPP AC310V223K7.5S5
0.022	11	13	9	7.5-0.6	CMPP AC310V223K7.5S6
0.022	13	9.5	4.5	10-0.6	CMPP AC310V223K10S5
0.022	13	12	6	10-0.6	CMPP AC310V223K10S6
0.022	18	10	4.5	15-0.8	CMPP AC310V223K15S5
0.027	18	11	5	15-0.8	CMPP AC310V273K15S5
0.033	10	10.5	5.5	7.5-0.6	CMPP AC310V333K7.5S5
0.033	11	13	9	7.5-0.6	CMPP AC310V333K7.5S6
0.033	13	10	4.5	10-0.6	CMPP AC310V333K10S5
0.033	13	11.5	5	10-0.6	CMPP AC310V333K10S6
0.033	18	10	4.5	15-0.8	CMPP AC310V333K15S5
0.033	18	11	5	15-0.8	CMPP AC310V333K15S6
0.039	11	13	9	7.5-0.6	CMPP AC310V393K7.5S5
0.039	18	11	5	15-0.8	CMPP AC310V393K15S5
0.047	10	10.5	5.5	7.5-0.6	CMPP AC310V473K7.5S5

0.047	13	9.5	4.5	10-0.6	CMPP AC310V473K10S5
0.047	13	13	7	10-0.6	CMPP AC310V473K10S6
0.047	18	9.5	4.5	15-0.8	CMPP AC310V473K15S5
0.047	18	11	5	15-0.8	CMPP AC310V473K15S6
0.056	10	11.5	5.5	7.5-0.6	CMPP AC310V563K7.5S5
0.056	13	10	5	10-0.6	CMPP AC310V563K10S5
0.056	18	9.5	4.5	15-0.8	CMPP AC310V563K15S5
0.056	18	11	5	15-0.8	CMPP AC310V563K15S6
0.068	10	12	6	7.5-0.6	CMPP AC310V683K7.5S5
0.068	13	10.5	5.5	10-0.6	CMPP AC310V683K10S5
0.068	13	13	7	10-0.6	CMPP AC310V683K10S6
0.068	18	10	4.5	15-0.8	CMPP AC310V683K15S5
0.068	18	12	6	15-0.8	CMPP AC310V683K15S6
0.082	10	12.5	6.5	7.5-0.6	CMPP AC310V823K7.5S5
0.082	13	11.5	6	10-0.6	CMPP AC310V823K10S5
0.082	13	13	7	10-0.6	CMPP AC310V823K10S6
0.082	18	10.5	5.5	15-0.8	CMPP AC310V823K15S5
0.082	18	12	6	15-0.8	CMPP AC310V823K15S6
0.1	10	13.5	7.5	7.5-0.6	CMPP AC310V104K7.5S5
0.1	13	11.5	5.5	10-0.6	CMPP AC310V104K10S5
0.1	13	13	7	10-0.6	CMPP AC310V104K10S6
0.1	18	10	5	15-0.8	CMPP AC310V104K15S5
0.1	18	12	6	15-0.8	CMPP AC310V104K15S6
0.1	18	8.5	10	15-0.8	CMPP AC310V104K15S7
0.12	13	13	7	10-0.6	CMPP AC310V124K10S5
0.12	18	10	5	15-0.8	CMPP AC310V124K15S5
0.12	18	13.5	7.5	15-0.8	CMPP AC310V124K15S6
0.15	13	12	7	10-0.6	CMPP AC310V154K10S5
0.15	13	14	8	10-0.6	CMPP AC310V154K10S6
0.15	15	11.5	6	12.5-0.6	CMPP AC310V154K12.5S5
0.15	18	10.5	5	15-0.8	CMPP AC310V154K15S5
0.15	18	12	6	15-0.8	CMPP AC310V154K15S6
0.15	18	13.5	7.5	15-0.8	CMPP AC310V154K15S7
0.15	18	8.5	12	15-0.8	CMPP AC310V154K15S8
0.15	26	11	5	22.5-0.8	CMPP AC310V154K22.5S5
0.18	18	12	6	15-0.8	CMPP AC310V184K15S5
0.18	18	14.5	8.5	15-0.8	CMPP AC310V184K15S6
0.22	12.5	16	6.5	10-0.6	CMPP AC310V224K10S5
0.22	13	14	8	10-0.6	CMPP AC310V224K10S6

0.22	15	12.5	7	12.5-0.6	CMPP AC310V224K12.5S5
0.22	18	11.5	6	15-0.8	CMPP AC310V224K15S5
0.22	18	14	7	15-0.8	CMPP AC310V224K15S6
0.22	18	14.5	8.5	15-0.8	CMPP AC310V224K15S7
0.22	18	17.5	9.5	15-0.8	CMPP AC310V224K15S8
0.22	26	11	5	22.5-0.8	CMPP AC310V224K22.5S5
0.22	26	15	6	22.5-0.8	CMPP AC310V224K22.5S6
0.22	26	8.5	11.5	22.5-0.8	CMPP AC310V224K22.5S7
0.22	26.5	16	7	22.5-0.8	CMPP AC310V224K22.5S8
0.27	18	14.5	7.5	15-0.8	CMPP AC310V274K15S5
0.27	18	15.5	8.5	15-0.8	CMPP AC310V274K15S6
0.27	26.5	17	8.5	22.5-0.8	CMPP AC310V274K22.5S5
0.33	12.5	19	8	10-0.6	CMPP AC310V334K10S5
0.33	15	14	8.5	12.5-0.6	CMPP AC310V334K12.5S5
0.33	18	13.5	6.5	15-0.8	CMPP AC310V334K15S5
0.33	18	14.5	8.5	15-0.8	CMPP AC310V334K15S6
0.33	18	15.5	8	15-0.8	CMPP AC310V334K15S7
0.33	18	17.5	10	15-0.8	CMPP AC310V334K15S8
0.33	26	12	6	22.5-0.8	CMPP AC310V334K22.5S5
0.33	26	17	7	22.5-0.8	CMPP AC310V334K22.5S6
0.33	26	17	7	22.5-0.8	CMPP AC310V334K22.5S7
0.33	26	8.5	14.5	22.5-0.8	CMPP AC310V334K22.5S8
0.33	26.5	17	8.5	22.5-0.8	CMPP AC310V334K22.5S9
0.39	15	15	9	12.5-0.6	CMPP AC310V394K12.5S5
0.39	18	13.5	7.5	15-0.8	CMPP AC310V394K15S5
0.39	18	17	8	15-0.8	CMPP AC310V394K15S6
0.39	26	12	6	22.5-0.8	CMPP AC310V394K22.5S5
0.39	26.5	19	10	22.5-0.8	CMPP AC310V394K22.5S6
0.47	12.5	20	10	10-0.6	CMPP AC310V474K10S5
0.47	15	16	10	12.5-0.6	CMPP AC310V474K12.5S5
0.47	18	17.5	6	15-0.8	CMPP AC310V474K15S5
0.47	18	14	8	15-0.8	CMPP AC310V474K15S6
0.47	18	12.8	9	15-0.8	CMPP AC310V474K15S7
0.47	18	16	10	15-0.8	CMPP AC310V474K15S8
0.47	18	18	9	15-0.8	CMPP AC310V474K15S9
0.47	26	14.5	6.5	22.5-0.8	CMPP AC310V474K22.5S5
0.47	26	17	8.5	22.5-0.8	CMPP AC310V474K22.5S6
0.47	26.5	19	10	22.5-0.8	CMPP AC310V474K22.5S7
0.47	31	13.5	6	27.5-0.8	CMPP AC310V474K27.5S8

0.47	32	18	9	27.5-0.8	CMPP AC310V474K27.5S9
0.56	15	17	11	12.5-0.6	CMPP AC310V564K12.5S5
0.56	18	15	9	15-0.8	CMPP AC310V564K15S5
0.56	18	19	10	15-0.8	CMPP AC310V564K15S6
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0.56	26	16.5	7.5	22.5-0.8	CMPP AC310V564K22.5S6
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0.68	26	17	8	22.5-0.8	CMPP AC310V684K22.5S6
0.68	26	19	10	22.5-0.8	CMPP AC310V684K22.5S7
0.68	31	15.5	6.5	27.5-0.8	CMPP AC310V684K27.5S5
0.68	32	20	10.5	27.5-0.8	CMPP AC310V684K27.5S6
0.82	18	17.5	10	15-0.8	CMPP AC310V824K15S5
0.82	26	16	8	22.5-0.8	CMPP AC310V824K22.5S5
0.82	26	18	9	22.5-0.8	CMPP AC310V824K22.5S6
0.82	26	20	11	22.5-0.8	CMPP AC310V824K22.5S7
0.82	31	16	8	27.5-0.8	CMPP AC310V824K27.5S5
0.82	32	22	13	27.5-0.8	CMPP AC310V824K27.5S6
1	18	19	11.5	15-0.8	CMPP AC310V105K15S5
1	18	21	10.5	15-0.8	CMPP AC310V105K15S6
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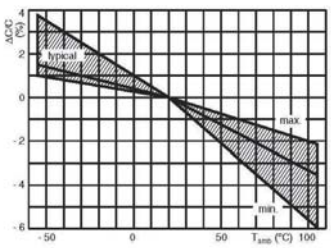
1.2	26	19	9	22.5-0.8	CMPP AC310V125K22.5S5
1.2	31	17.5	8	27.5-0.8	CMPP AC310V125K27.5S5
1.2	31	22	13	27.5-0.8	CMPP AC310V125K27.5S6
1.2	32	24	15	27.5-0.8	CMPP AC310V125K27.5S7
1.5	26	21	10	22.5-0.8	CMPP AC310V155K22.5S5
1.5	26	22	12	22.5-0.8	CMPP AC310V155K22.5S6
1.5	26	24	15.5	22.5-0.8	CMPP AC310V155K22.5S7
1.5	31	18.5	9	27.5-0.8	CMPP AC310V155K27.5S5
1.5	32	24	14	27.5-0.8	CMPP AC310V155K27.5S6
1.5	32	24	15	27.5-0.8	CMPP AC310V155K27.5S7

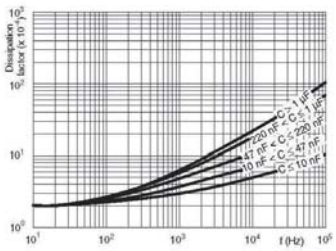
1.5	31	25	15	27.5-0.8	CMPP AC310V155K27.5S8
1.5	32	27	17.5	27.5-0.8	CMPP AC310V155K27.5S9
1.8	26	21	12.5	22.5-0.8	CMPP AC310V185K22.5S5
1.8	31	20.5	11	27.5-0.8	CMPP AC310V185K27.5S5
1.8	32	27	16.5	27.5-0.8	CMPP AC310V185K27.5S6
2	31	30	18	27.5-0.8	CMPP AC310V205K27.5S5
2.2	26	22	13.5	22.5-0.8	CMPP AC310V225K22.5S5
2.2	26	25	15	22.5-0.8	CMPP AC310V225K22.5S6
2.2	31	21	12.5	27.5-0.8	CMPP AC310V225K27.5S5
2.2	31	26	16.5	27.5-0.8	CMPP AC310V225K27.5S6
2.2	31	30	18	27.5-0.8	CMPP AC310V225K27.5S7
2.2	32	33	18.5	27.5-0.8	CMPP AC310V225K27.5S8
3.3	31	29	15.5	27.5-0.8	CMPP AC310V335K27.5S5
3.3	31	26	17.5	27.5-0.8	CMPP AC310V335K27.5S6
3.3	31	31	20	27.5-0.8	CMPP AC310V335K27.5S7
3.3	41.5	26	14.5	37.5-0.8	CMPP AC310V335K37.5S5
3.3	41.5	28	17	37.5-0.8	CMPP AC310V335K37.5S6
3.9	31	28	19	27.5-0.8	CMPP AC310V395K27.5S5
3.9	41.5	25	16	37.5-0.8	CMPP AC310V395K37.5S5
4.7	31	30.5	20	27.5-1	CMPP AC310V475K27.5S5
4.7	31	32.5	19	27.5-1	CMPP AC310V475K27.5S6
4.7	41.5	29	15.5	37.5-1	CMPP AC310V475K37.5S5
4.7	42	32	21	37.5-1	CMPP AC310V475K37.5S6
5.6	31	34.5	21	27.5-1	CMPP AC310V565K27.5S5
5.6	41.5	31.5	18.5	37.5-1	CMPP AC310V565K37.5S5
5.6	41.5	36.5	22.5	37.5-1	CMPP AC310V565K37.5S6
6.8	41.5	35.5	22.5	37.5-1	CMPP AC310V685K37.5S5
6.8	41.5	35.5	25	37.5-1	CMPP AC310V685K37.5S6
8.2	41.5	38	25	37.5-1	CMPP AC310V825K37.5S5
8.2	41.5	38	27.5	37.5-1	CMPP AC310V825K37.5S6
10	41.5	41.5	28	37.5-1	CMPP AC310V106K37.5S5
10	42	43	31	37.5-1	CMPP AC310V106K37.5S6

Electrical Characteristics (Typical Data)

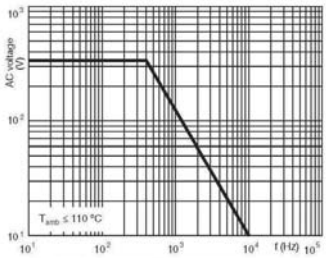
Characteristics



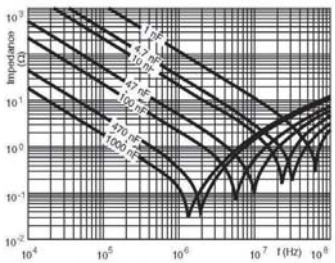
Capacitance as a function of ambient temperature
(typical curve)



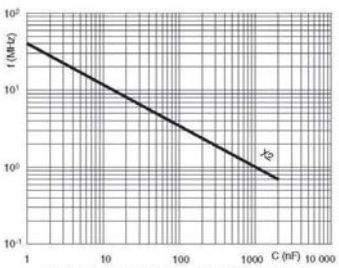
Tangent of loss angle as a function of frequency
(typical curve)



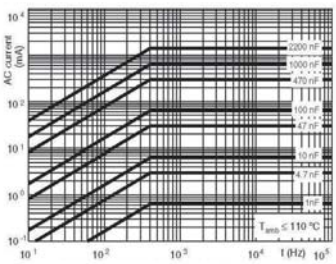
Max. RMS voltage as a function of frequency
(typical curve)



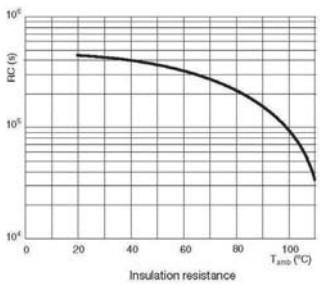
Impedance as a function of frequency
(typical curve)



Resonant frequency as a function of capacitance
(typical curve)



Max. RMS current as a function of frequency
(typical curve)



Insulation resistance

CMPS

class Y2

■ Features

- miniaturized.
- Plastic case(UL94 V-0), Epoxy resin sealing.
- RoHS directive compliant

■ Applications

- Interference suppressors

■ Applicable Standard

SAFTY	FILE NO
UL60384-14 / CAN/CSA-E60384-14 Fixed Capacitor - X2	E327138
ENEC/CB(VDE)(IEC60384-14)	40026078
KC(KTL)	SU03030-7001A~7004A SU03030-13001,13002 / SU03064-13001~13006
CQC	CQC13001095123 CQC13001095638 / CQC13001098793~4

■ Specifications

Reference Standard	IEC 60384-14
Climatic Category Passive Flammability Class	40 / 105 / 56 / B
Class	Y2
Rated Temperature	105℃ +85℃~+105℃ decreasing factor 1.0% / ℃ for V_R(dc)
Operation Temperature Range	-40℃~+105℃
Rated Voltage	300Vac
Capacitance Range	0.0010μF~1.00μF
Capacitance Tolerance	K : ±10% / M : ±20%
Voltage Proof	3400(Vdc) - 2~3 Sec
Dissipation Factor	≤0.3%(at 1kHz 20℃) ≤0.4%(at 10kHz 20℃)
Insulation Resistance	≥30,000MΩ C_R≤0.33μF 100Vdc 60sec 20℃
	≥10,000Ω·F C_R〉0.33μF 100Vdc 60sec 20℃

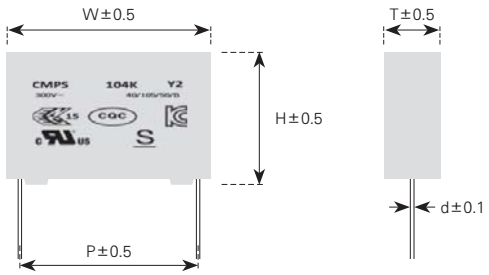
■ Part Number System

CMPS	AC300V	102	K	10	S	5	
Part-1	Part-2	Part-3	Part-4	Part-5	Part-6	Part-7	Part-8

Part-1 : Series Code(Series Name) - CMPR
Part-2 : Rated Voltage(250Vac / 300Vac)
Part-3 : Rated Capacitance Value and Tolerance(0.010μF~1.0μF / 103~105 K : ±10% / M : ±20%)
Part-4 : Rated Resistant Value and Tolerance(10~1000Ω / K : ±10% / M : ±20%)
Part-5 : Lead Spacing(15mm / 17.5mm / 22.5mm / 27.5mm)
Part-6 : Forming-Type and Packing Code(Specifically F–>Flexible Lead R–> Tinned Lead) →
Part-7 : Size Number(5~6 Min-Type / 7 Standard-Type / 8~15 Large-Type)
Part-8 : Internal Use

CODE	STYLE
B	Bending Forming
C	Straight Cutting
D	D-Type Forming
L	B-Type long Forming
M	C-Type long Forming
S	Straight
X	B-Type Forming
Y	C-Type Forming
Z	Z-Type Forming
T	A-Type Tapping
U	B-Type Tapping
V	C-Type Tapping

■ Dimensions



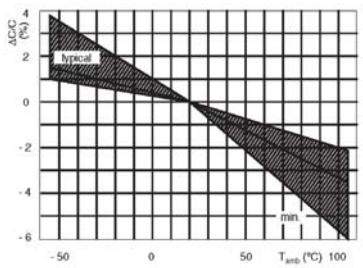
300Vac					
Cap. (μF)	Dimensions(mm)			Pitch - d	PART NUMBER
	W (±0.5)	H (±0.5)	T (±0.5)		
0.001	13.0	10.0	5.0	10.0-0.6	CMPS AC300V 102K 10S 5____
0.0012	13.0	10.0	5.0	10.0-0.6	CMPS AC300V 122K 10S 5____
0.0015	13.0	10.0	5.0	10.0-0.6	CMPS AC300V 152K 10 S 5____
0.0018	13.0	10.0	5.0	10.0-0.6	CMPS AC300V 182K 10 S 5____
0.0022	13.0	10.0	5.0	10.0-0.6	CMPS AC300V 222K 10 S 5____
0.0025	13.0	10.0	5.0	10.0-0.6	CMPS AC300V 252K 10 S 5____
0.0027	13.0	10.0	5.0	10.0-0.6	CMPS AC300V 272K 10 S 5____
0.0033	13.0	11.0	5.0	10.0-0.6	CMPS AC300V 332K 10 S 5____
0.0039	13.0	11.0	5.0	10.0-0.6	CMPS AC300V 392K 10 S 5____
0.0047	13.0	11.0	5.0	10.0-0.6	CMPS AC300V 472K 10 S 5____
0.0056	13.0	12.0	6.0	10.0-0.6	CMPS AC300V 562K 10 S 5____
0.0068	13.0	12.0	6.0	10.0-0.6	CMPS AC300V 682K 10 S 5____
0.0082	13.0	12.5	6.5	10.0-0.6	CMPS AC300V 822K 10 S 5____
0.01	13.0	13.0	7.0	10.0-0.6	CMPS AC300V 103K 10 S 5____
0.0022	18.0	9.0	4.5	15.0-0.8	CMPS AC300V 222K 15S 5____
0.0027	18.0	9.0	4.5	15.0-0.8	CMPS AC300V 272K 15S 5____
0.0033	18.0	9.0	4.5	15.0-0.8	CMPS AC300V 332K 15 S 5____
0.0039	18.0	9.0	4.5	15.0-0.8	CMPS AC300V 392K 15 S 5____
0.0047	18.0	9.0	4.5	15.0-0.8	CMPS AC300V 472K 15 S 5____
0.0056	18.0	9.0	4.5	15.0-0.8	CMPS AC300V 562K 15 S 5____
0.0068	18.0	11.0	5.0	15.0-0.8	CMPS AC300V 682K 15 S 5____
0.0082	18.0	11.0	5.0	15.0-0.8	CMPS AC300V 822K 15 S 5____
0.01	18.0	11.0	5.0	15.0-0.8	CMPS AC300V 103K 15 S 5____
0.012	18.0	11.0	5.0	15.0-0.8	CMPS AC300V 123K 15 S 5____
0.015	18.0	11.0	5.0	15.0-0.8	CMPS AC300V 153K 15 S 5____
0.018	18.0	12.0	6.0	15.0-0.8	CMPS AC300V 183K 15 S 5____
0.022	18.0	12.0	6.0	15.0-0.8	CMPS AC300V 223K 15 S 5____
0.025	18.0	13.0	7.0	15.0-0.8	CMPS AC300V 253K 15 S 5____
0.027	18.0	13.0	7.0	15.0-0.8	CMPS AC300V 273K 15 S 5____
0.033	18.0	13.5	7.5	15.0-0.8	CMPS AC300V 333K 15 S 5____
0.039	18.0	14.5	8.5	15.0-0.8	CMPS AC300V 393K 15 S 5____
0.047	18.0	14.5	8.5	15.0-0.8	CMPS AC300V 473K 15 S 5____
0.056	18.0	16.0	10.0	15.0-0.8	CMPS AC300V 563K 15 S 5____
0.068	18.0	16.0	10.0	15.0-0.8	CMPS AC300V 683K 15 S 5____
0.082	18.0	19.0	11.0	15.0-0.8	CMPS AC300V 823K 15 S 5____
0.01	26.0	15.0	6.0	22.5-0.8	CMPS AC300V 103K 22.5S 5____
0.012	26.0	15.0	6.0	22.5-0.8	CMPS AC300V 123K 22.5S 5____
0.015	26.0	15.0	6.0	22.5-0.8	CMPS AC300V 153K 22.5 S 5____
0.018	26.0	15.0	6.0	22.5-0.8	CMPS AC300V 183K 22.5 S 5____
0.022	26.0	15.0	6.0	22.5-0.8	CMPS AC300V 223K 22.5 S 5____
0.027	26.0	15.0	6.0	22.5-0.8	CMPS AC300V 273K 22.5 S 5____
0.033	26.0	15.0	6.0	22.5-0.8	CMPS AC300V 333K 22.5 S 5____
0.039	26.0	15.0	6.0	22.5-0.8	CMPS AC300V 393K 22.5 S 5____
0.047	26.0	15.0	6.0	22.5-0.8	CMPS AC300V 473K 22.5 S 5____
0.056	26.0	15.0	6.0	22.5-0.8	CMPS AC300V 563K 22.5 S 5____
0.068	26.0	16.5	7.0	22.5-0.8	CMPS AC300V 683K 22.5 S 5____
0.082	26.0	16.5	7.0	22.5-0.8	CMPS AC300V 823K 22.5 S 5____
0.1	26.0	17.0	8.5	22.5-0.8	CMPS AC300V 104K 22.5 S 5____
0.12	26.0	18.0	9.0	22.5-0.8	CMPS AC300V 124K 22.5 S 5____
0.15	26.0	19.0	10.0	22.5-0.8	CMPS AC300V 154K 22.5 S 5____
0.18	26.0	22.0	12.5	22.5-0.8	CMPS AC300V 184K 22.5 S 5____
0.22	26.0	22.0	12.5	22.5-0.8	CMPS AC300V 224K 22.5 S 5____
0.25	26.0	25.0	15.0	22.5-0.8	CMPS AC300V 254K 22.5 S 5____
0.27	26.0	25.0	15.0	22.5-0.8	CMPS AC300V 274K 22.5 S 5____
0.33	26.0	27.0	16.0	22.5-0.8	CMPS AC300V 334K 22.5 S 5____
0.1	32.0	18.0	9.0	27.5-0.8	CMPS AC300V 104K 27.5 S 5____
0.12	32.0	18.0	9.0	27.5-0.8	CMPS AC300V 124K 27.5 S 5____
0.15	32.0	18.0	9.0	27.5-0.8	CMPS AC300V 154K 27.5 S 5____
0.18	32.0	20.0	11.0	27.5-0.8	CMPS AC300V 184K 27.5 S 5____
0.22	32.0	20.0	11.0	27.5-0.8	CMPS AC300V 224K 27.5 S 5____
0.25	32.0	22.0	13.0	27.5-0.8	CMPS AC300V 254K 27.5 S 5____
0.27	32.0	22.0	13.0	27.5-0.8	CMPS AC300V 274K 27.5 S 5____
0.33	32.0	24.5	15.0	27.5-0.8	CMPS AC300V 334K 27.5 S 5____
0.39	32.0	24.5	15.0	27.5-0.8	CMPS AC300V 394K 27.5 S 5____
0.47	32.0	26.0	18.0	27.5-0.8	CMPS AC300V 474K 27.5 S 5____
0.56	32.0	30.0	20.0	27.5-0.8	CMPS AC300V 564K 27.5 S 5____

0.68	32.0	30.0	20.0	27.5-0.8	CMPS AC300V 684K 27.5 S 5____
0.82	32.0	34.0	22.0	27.5-0.8	CMPS AC300V 824K 27.5 S 5____
0.33	42.0	22.0	14.0	37.5-1.0	CMPS AC300V 334K 37.5 S 5____
0.39	42.0	22.0	14.0	37.5-1.0	CMPS AC300V 394K 37.5 S 5____
0.47	42.0	26.0	15.0	37.5-1.0	CMPS AC300V 474K 37.5 S 5____

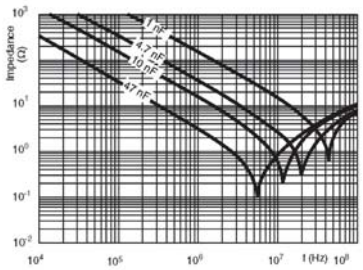
0.56	42.0	26.0	15.0	37.5-1.0	CMPS AC300V 564K 37.5 S 5____
0.68	42.0	30.0	18.0	37.5-1.0	CMPS AC300V 684K 37.5 S 5____
0.82	42.0	30.0	18.0	37.5-1.0	CMPS AC300V 824K 37.5 S 5____
1.0	42.0	32.0	21.0	37.5-1.0	CMPS AC300V 105K 37.5 S 5____

■ Electrical Characteristics (Typical Data)

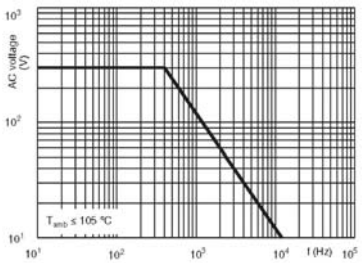
Characteristics



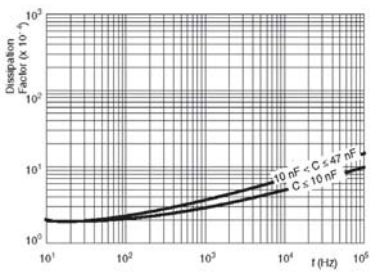
Capacitance as a function of ambient temperature
(typical curve)



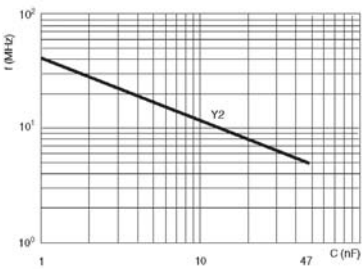
Impedance as a function of frequency
(typical curve)



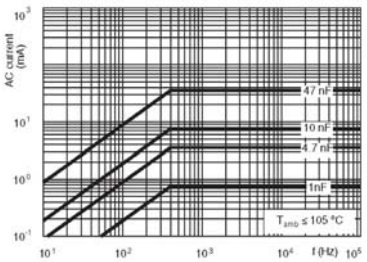
Max. RMS voltage as a function of frequency



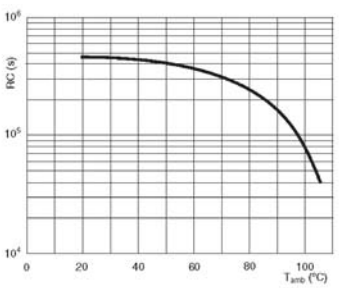
Tangent of loss angle as a function of frequency
(typical curve)



Resonant frequency as a function of capacitance
(typical curve)



Max. RMS current as a function of frequency



Insulation resistance as a function of ambient temperature
(typical curve)

Metallized Polypropylene Interference Suppression

CMPR

Features

- Non-inductive wound construction.
- Single resistor included.
- Withstanding overvoltage stressing.
- Excellent flame retardant.
- Plastic case(UL94 V-0), Epoxy resin sealing
- RoHS directive compliant

Applications

- For X2 – electromagnetic Interference suppression
- Spark quenching
- Noise suppression

Applicable Standard

SAFTY	FILE NO
UL60384-14 / CAN/CSA-E60384-14 Fixed Capacitor - X2	E327138
ENEC/CB(VDE)(IEC60384-14)	40026078
KC(KTL)	SU03030-7001A~7004A SU03030-13001,13002 / SU03064-13001~13006
CQC	CQC13001095123 CQC13001095638 / CQC13001098793~4

Specifications

Reference Standard	IEC 60384-14
Climatic Category Passive Flammability Class	40 / 85 / 56 / B
Class	X2
Rated Temperature	105℃ +85℃~+105℃ decreasing factor 1.0% / ℃ for V_R(dc)
Operation Temperature Range	-40℃~+105℃
Rated Voltage	250Vc / 300Vac[CQC]
Capacitance Range	0.0100μF~1.0μF
Capacitance Tolerance	K : ±10% / M : ±20% ※Standard : K : ±10%, Other Tolerance Grade : available on request.
Resistant Range	10~1000Ω
Resistant Tolerance	K : ±10% / M : ±20% ※Standard : M : 20% , Other Tolerance Grade : available on request.
Voltage Proof	2200(Vdc) - 2~3 Sec
Insulation Resistance	≥30,000MΩ C_R≤0.33μF 100Vdc 60sec 20℃
	≥10,000Ω·F C_R〉0.33μF 100Vdc 60sec 20℃

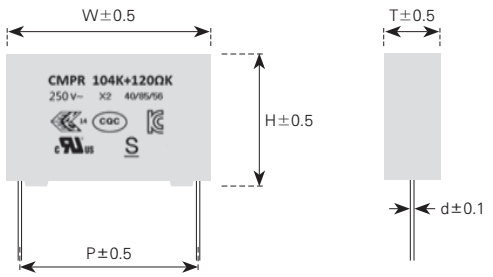
Part Number System

CMPR	AC300V	103K	Ω	15	R	5	
Part-1	Part-2	Part-3	Part-4	Part-5	Part-6	Part-7	Part-8

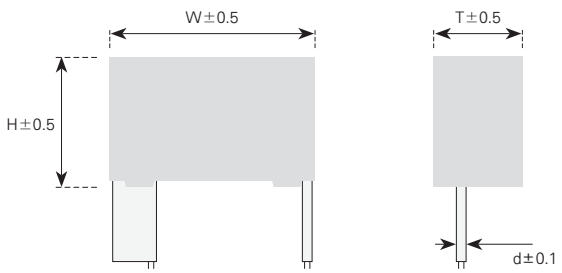
Part-1 : Series Code(Series Name) - CMPR
Part-2 : Rated Voltage(250/300Vac)
Part-3 : Rated Capacitance Value and Tolerance (0.010μF~1.0μF / 103~105 K : ±10% / M : ±20%)
Part-4 : Rated Resistant Value and Tolerance(10~1000Ω / K : ±10% / M : ±20%)
Part-5 : Lead Spacing(15mm / 17.5mm / 22.5mm / 27.5mm)
Part-6 : Forming-Type and Packing Code(Specifically : R : Rigid Lead / F : Flexible Lead)
Part-7 : Size Number(5~6 : Min-Type / 7 : Standard-Type / 8~15 : Large-Type)
Part-8 : Internal Use

■ Dimensions

Rigid Lead



Flexible Lead



250Vac※ Rigid Lead
(Resistor Rated Power : 0.5Watt 0.6✆ 1.0Watt 0.8✆)

Cap. (μF)	R	Dimensions(mm) W (±0.5)	H (±0.5)	T (±0.5)	Pitch - d	PART NUMBER
0.01	10~1000	18	15.5	6	15-0.6	CMPRAC250V103_ ___Ω15R5___
0.012	10~1000	18	15.5	6	15-0.6	CMPRAC250V123_ ___Ω15R5___
0.015	10~1000	18	15.5	6	15-0.6	CMPRAC250V153_ ___Ω15R5___
0.018	10~1000	18	15.5	6	15-0.6	CMPRAC250V183_ ___Ω15R5___
0.022	10~1000	18	15.5	6	15-0.6	CMPRAC250V223_ ___Ω15R5___
0.027	10~1000	18	15.5	6	15-0.6	CMPRAC250V273_ ___Ω15R5___
0.033	10~680	18	15.5	6	15-0.6	CMPRAC250V333_ ___Ω15R5___
0.039	10~680	18	15.5	6	15-0.6	CMPRAC250V393_ ___Ω15R5___
0.047	10~470	18	15.5	6	15-0.6	CMPRAC250V473_ ___Ω15R5___
0.056	10~470	18	15.5	6	15-0.6	CMPRAC250V563_ ___Ω15R5___
0.068	10~220	18	18	9	15-0.6	CMPRAC250V683_ ___Ω15R5___
0.082	10~220	18	18	9	15-0.6	CMPRAC250V823_ ___Ω15R5___
0.1	10~220	18	18	9	15-0.6	CMPRAC250V104_ ___Ω15R5___
0.068	10~220	22	18	8	17.5-0.6	CMPRAC250V683_ ___Ω17.5R5___
0.082	10~220	22	18	8	17.5-0.6	CMPRAC250V823_ ___Ω17.5R5___
0.1	10~220	22	18	8	17.5-0.6	CMPRAC250V104_ ___Ω17.5R5___
0.12	10~220	22	18	8	17.5-0.6	CMPRAC250V124_ ___Ω17.5R5___
0.15	10~120	22	18	8	17.5-0.6	CMPRAC250V154_ ___Ω17.5R5___
0.18	10~120	22	18	10	17.5-0.6	CMPRAC250V184_ ___Ω17.5R5___
0.22	10~120	22	18	10	17.5-0.6	CMPRAC250V224_ ___Ω17.5R5___
0.12	10~220	26	18.5	8.5	22.5-0.8	CMPRAC250V124_ ___Ω22.5R5___
0.15	10~120	26	18.5	8.5	22.5-0.8	CMPRAC250V154_ ___Ω22.5R5___
0.18	10~120	26	18.5	8.5	22.5-0.8	CMPRAC250V184_ ___Ω22.5R5___
0.22	10~120	26	18.5	8.5	22.5-0.8	CMPRAC250V224_ ___Ω22.5R5___
0.27	10~100	26	22	10	22.5-0.8	CMPRAC250V274_ ___Ω22.5R5___
0.33	10~68	26	22	10	22.5-0.8	CMPRAC250V334_ ___Ω22.5R5___
0.39	10~68	26	22	12	22.5-0.8	CMPRAC250V394_ ___Ω22.5R5___
0.47	10~47	26	22	12	22.5-0.8	CMPRAC250V474_ ___Ω22.5R5___
0.27	10~100	32	22	8.5	27.5-0.8	CMPRAC250V274_ ___Ω27.5R5___
0.33	10~68	32	22	8.5	27.5-0.8	CMPRAC250V334_ ___Ω27.5R5___
0.39	10~68	32	22	8.5	27.5-0.8	CMPRAC250V394_ ___Ω27.5R5___
0.47	10~47	32	22	10	27.5-0.8	CMPRAC250V474_ ___Ω27.5R5___
0.56	10~22	32	22	10	27.5-0.8	CMPRAC250V564_ ___Ω27.5R5___
0.68	10~22	32	22	13	27.5-0.8	CMPRAC250V684_ ___Ω27.5R5___
0.82	10~22	32	22	13	27.5-0.8	CMPRAC250V824_ ___Ω27.5R5___
1	10~22	32	26	18	27.5-0.8	CMPRAC250V105_ ___Ω27.5R5___

250Vac※ Flexible Wire
(UL 1015 105℃ 600V 20AWG 0.5mm²)

Cap. (μF)	R	Dimensions(mm) W (±0.5)	H (±0.5)	T (±0.5)	Pitch - d	PART NUMBER
0.01	10~1000	18	20	6	15-0.8	CMPRAC250V103_ ___Ω15F5___
0.012	10~1000	18	20	6	15-0.8	CMPRAC250V123_ ___Ω15F5___
0.015	10~1000	18	20	6	15-0.8	CMPRAC250V153_ ___Ω15F5___
0.018	10~1000	18	20	6	15-0.8	CMPRAC250V183_ ___Ω15F5___
0.022	10~1000	18	20	6	15-0.8	CMPRAC250V223_ ___Ω15F5___
0.027	10~1000	18	20	6	15-0.8	CMPRAC250V273_ ___Ω15F5___
0.033	10~680	18	20	6	15-0.8	CMPRAC250V333_ ___Ω15F5___
0.039	10~680	18	20	6	15-0.8	CMPRAC250V393_ ___Ω15F5___
0.047	10~470	18	20	6	15-0.8	CMPRAC250V473_ ___Ω15F5___
0.056	10~470	18	20	6	15-0.8	CMPRAC250V563_ ___Ω15F5___
0.068	10~220	18	25	9	15-0.8	CMPRAC250V683_ ___Ω15F5___
0.082	10~220	18	25	9	15-0.8	CMPRAC250V823_ ___Ω15F5___
0.1	10~220	18	25	9	15-0.8	CMPRAC250V104_ ___Ω15F5___
0.068	10~220	22	25	8	17.5-0.8	CMPRAC250V683_ ___Ω17.5F5___
0.082	10~220	22	25	8	17.5-0.8	CMPRAC250V823_ ___Ω17.5F5___

0.1	10~220	22	25	8	17.5-0.8	CMPRAC250V104_ ____Ω17.5F5____
0.12	10~220	22	25	8	17.5-0.8	CMPRAC250V124_ ____Ω17.5F5____
0.15	10~120	22	25	8	17.5-0.8	CMPRAC250V154_ ____Ω17.5F5____
0.18	10~120	22	25	10	17.5-0.8	CMPRAC250V184_ ____Ω17.5F5____
0.22	10~120	22	25	10	17.5-0.8	CMPRAC250V224_ ____Ω17.5F5____
0.12	10~220	26	25	8.5	22.5-0.8	CMPRAC250V124_ ____Ω22.5F5____
0.15	10~120	26	25	8.5	22.5-0.8	CMPRAC250V154_ ____Ω22.5F5____
0.18	10~120	26	25	8.5	22.5-0.8	CMPRAC250V184_ ____Ω22.5F5____
0.22	10~120	26	25	8.5	22.5-0.8	CMPRAC250V224_ ____Ω22.5F5____
0.27	10~100	26	30	10	22.5-0.8	CMPRAC250V274_ ____Ω22.5F5____
0.33	10~68	26	30	10	22.5-0.8	CMPRAC250V334_ ____Ω22.5F5____
0.39	10~68	26	30	12	22.5-0.8	CMPRAC250V394_ ____Ω22.5F5____
0.47	10~47	26	30	12	22.5-0.8	CMPRAC250V474_ ____Ω22.5F5____
0.27	10~100	32	30	8.5	27.5-0.8	CMPRAC250V274_ ____Ω27.5F5____
0.33	10~68	32	30	8.5	27.5-0.8	CMPRAC250V334_ ____Ω27.5F5____
0.39	10~68	32	30	8.5	27.5-0.8	CMPRAC250V394_ ____Ω27.5F5____
0.47	10~47	32	30	10	27.5-0.8	CMPRAC250V474_ ____Ω27.5F5____
0.56	10~22	32	30	10	27.5-0.8	CMPRAC250V564_ ____Ω27.5F5____
0.68	10~22	32	30	13	27.5-0.8	CMPRAC250V684_ ____Ω27.5F5____
0.82	10~22	32	30	13	27.5-0.8	CMPRAC250V824_ ____Ω27.5F5____
1	10~22	32	33	18	27.5-0.8	CMPRAC250V105_ ____Ω27.5F5____

0.1	10~220	22	18	8	17.5-0.6	CMPRAC300V104_ ____Ω17.5R5____
0.12	10~220	22	18	8	17.5-0.6	CMPRAC300V124_ ____Ω17.5R5____
0.15	10~120	22	18	8	17.5-0.6	CMPRAC300V154_ ____Ω17.5R5____
0.18	10~120	22	18	10	17.5-0.6	CMPRAC300V184_ ____Ω17.5R5____
0.22	10~120	22	18	10	17.5-0.6	CMPRAC300V224_ ____Ω17.5R5____
0.12	10~220	26	18.5	8.5	22.5-0.8	CMPRAC300V124_ ____Ω22.5R5____
0.15	10~120	26	18.5	8.5	22.5-0.8	CMPRAC300V154_ ____Ω22.5R5____
0.18	10~120	26	18.5	8.5	22.5-0.8	CMPRAC300V184_ ____Ω22.5R5____
0.22	10~120	26	18.5	8.5	22.5-0.8	CMPRAC300V224_ ____Ω22.5R5____
0.27	10~100	26	22	10	22.5-0.8	CMPRAC300V274_ ____Ω22.5R5____
0.33	10~68	26	22	10	22.5-0.8	CMPRAC300V334_ ____Ω22.5R5____
0.39	10~68	26	22	12	22.5-0.8	CMPRAC300V394_ ____Ω22.5R5____
0.47	10~47	26	22	12	22.5-0.8	CMPRAC300V474_ ____Ω22.5R5____
0.27	10~100	32	22	8.5	27.5-0.8	CMPRAC300V274_ ____Ω27.5R5____
0.33	10~68	32	22	8.5	27.5-0.8	CMPRAC300V334_ ____Ω27.5R5____
0.39	10~68	32	22	8.5	27.5-0.8	CMPRAC300V394_ ____Ω27.5R5____
0.47	10~47	32	22	10	27.5-0.8	CMPRAC300V474_ ____Ω27.5R5____
0.56	10~22	32	22	10	27.5-0.8	CMPRAC300V564_ ____Ω27.5R5____
0.68	10~22	32	22	13	27.5-0.8	CMPRAC300V684_ ____Ω27.5R5____
0.82	10~22	32	22	13	27.5-0.8	CMPRAC300V824_ ____Ω27.5R5____
1	10~22	32	26	18	27.5-0.8	CMPRAC300V105_ ____Ω27.5R5____

300Vac※ Rigid Lead
(Resistor Rated Power：0.5Watt 0.6∅ 1.0Watt 0.8∅)

Cap. (μF)	R	Dimensions(mm)			Pitch - d	PART NUMBER
		W (±0.5)	H (±0.5)	T (±0.5)		
0.01	10~1000	18	15.5	6	15-0.6	CMPRAC300V103_ ____Ω15R5____
0.012	10~1000	18	15.5	6	15-0.6	CMPRAC300V123_ ____Ω15R5____
0.015	10~1000	18	15.5	6	15-0.6	CMPRAC300V153_ ____Ω15R5____
0.018	10~1000	18	15.5	6	15-0.6	CMPRAC300V183_ ____Ω15R5____
0.022	10~1000	18	15.5	6	15-0.6	CMPRAC300V223_ ____Ω15R5____
0.027	10~1000	18	15.5	6	15-0.6	CMPRAC300V273_ ____Ω15R5____
0.033	10~680	18	15.5	6	15-0.6	CMPRAC300V333_ ____Ω15R5____
0.039	10~680	18	15.5	6	15-0.6	CMPRAC300V393_ ____Ω15R5____
0.047	10~470	18	15.5	6	15-0.6	CMPRAC300V473_ ____Ω15R5____
0.056	10~470	18	15.5	6	15-0.6	CMPRAC300V563_ ____Ω15R5____
0.068	10~220	18	18	9	15-0.6	CMPRAC300V683_ ____Ω15R5____
0.082	10~220	18	18	9	15-0.6	CMPRAC300V823_ ____Ω15R5____
0.1	10~220	18	18	9	15-0.6	CMPRAC300V104_ ____Ω15R5____
0.068	10~220	22	18	8	17.5-0.6	CMPRAC300V683_ ____Ω17.5R5____
0.082	10~220	22	18	8	17.5-0.6	CMPRAC300V823_ ____Ω17.5R5____

300Vac※ Flexible Wire
(UL 1015 105℃ 600V 20AWG 0.5mm²)

Cap. (μF)	R	Dimensions(mm)			Pitch - d	PART NUMBER
		W (±0.5)	H (±0.5)	T (±0.5)		
0.01	10~1000	18	20	6	15-0.8	CMPRAC300V103_ ____Ω15F5____
0.012	10~1000	18	20	6	15-0.8	CMPRAC300V123_ ____Ω15F5____
0.015	10~1000	18	20	6	15-0.8	CMPRAC300V153_ ____Ω15F5____
0.018	10~1000	18	20	6	15-0.8	CMPRAC300V183_ ____Ω15F5____
0.022	10~1000	18	20	6	15-0.8	CMPRAC300V223_ ____Ω15F5____
0.027	10~1000	18	20	6	15-0.8	CMPRAC300V273_ ____Ω15F5____
0.033	10~680	18	20	6	15-0.8	CMPRAC300V333_ ____Ω15F5____
0.039	10~680	18	20	6	15-0.8	CMPRAC300V393_ ____Ω15F5____
0.047	10~470	18	20	6	15-0.8	CMPRAC300V473_ ____Ω15F5____
0.056	10~470	18	20	6	15-0.8	CMPRAC300V563_ ____Ω15F5____
0.068	10~220	18	25	9	15-0.8	CMPRAC300V683_ ____Ω15F5____
0.082	10~220	18	25	9	15-0.8	CMPRAC300V823_ ____Ω15F5____
0.1	10~220	18	25	9	15-0.8	CMPRAC300V104_ ____Ω15F5____
0.068	10~220	22	25	8	17.5-0.8	CMPRAC300V683_ ____Ω17.5F5____
0.082	10~220	22	25	8	17.5-0.8	CMPRAC300V823_ ____Ω17.5F5____

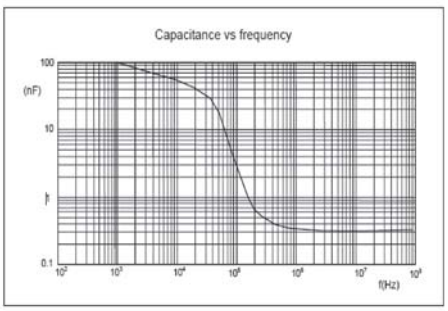
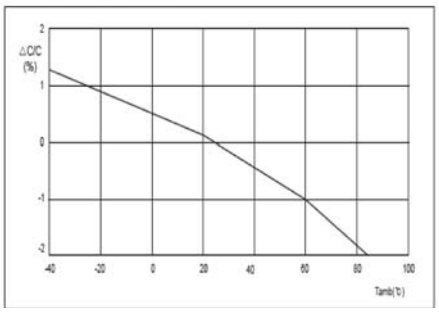
0.1	10~220	22	25	8	17.5-0.8	CMPRAC300V104_ ___Ω17.5F5___
0.12	10~220	22	25	8	17.5-0.8	CMPRAC300V124_ ___Ω17.5F5___
0.15	10~120	22	25	8	17.5-0.8	CMPRAC300V154_ ___Ω17.5F5___
0.18	10~120	22	25	10	17.5-0.8	CMPRAC300V184_ ___Ω17.5F5___
0.22	10~120	22	25	10	17.5-0.8	CMPRAC300V224_ ___Ω17.5F5___
0.12	10~220	26	25	8.5	22.5-0.8	CMPRAC300V124_ ___Ω22.5F5___
0.15	10~120	26	25	8.5	22.5-0.8	CMPRAC300V154_ ___Ω22.5F5___
0.18	10~120	26	25	8.5	22.5-0.8	CMPRAC300V184_ ___Ω22.5F5___
0.22	10~120	26	25	8.5	22.5-0.8	CMPRAC300V224_ ___Ω22.5F5___
0.27	10~100	26	30	10	22.5-0.8	CMPRAC300V274_ ___Ω22.5F5___
0.33	10~68	26	30	10	22.5-0.8	CMPRAC300V334_ ___Ω22.5F5___
0.39	10~68	26	30	12	22.5-0.8	CMPRAC300V394_ ___Ω22.5F5___
0.47	10~47	26	30	12	22.5-0.8	CMPRAC300V474_ ___Ω22.5F5___
0.27	10~100	32	30	8.5	27.5-0.8	CMPRAC300V274_ ___Ω27.5F5___
0.33	10~68	32	30	8.5	27.5-0.8	CMPRAC300V334_ ___Ω27.5F5___
0.39	10~68	32	30	8.5	27.5-0.8	CMPRAC300V394_ ___Ω27.5F5___
0.47	10~47	32	30	10	27.5-0.8	CMPRAC300V474_ ___Ω27.5F5___
0.56	10~22	32	30	10	27.5-0.8	CMPRAC300V564_ ___Ω27.5F5___
0.68	10~22	32	30	13	27.5-0.8	CMPRAC300V684_ ___Ω27.5F5___
0.82	10~22	32	30	13	27.5-0.8	CMPRAC300V824_ ___Ω27.5F5___
1	10~22	32	33	18	27.5-0.8	CMPRAC300V105_ ___Ω27.5F5___

※CQC Approved Only

■ Electrical Characteristics (Typical Data)

Characteristics

- All capacitance values are specified at 1 kHz. (Vs. Temperature)



- Capacitance at 25℃ (Vs. Frequency) , ex) 100nF+120Ω