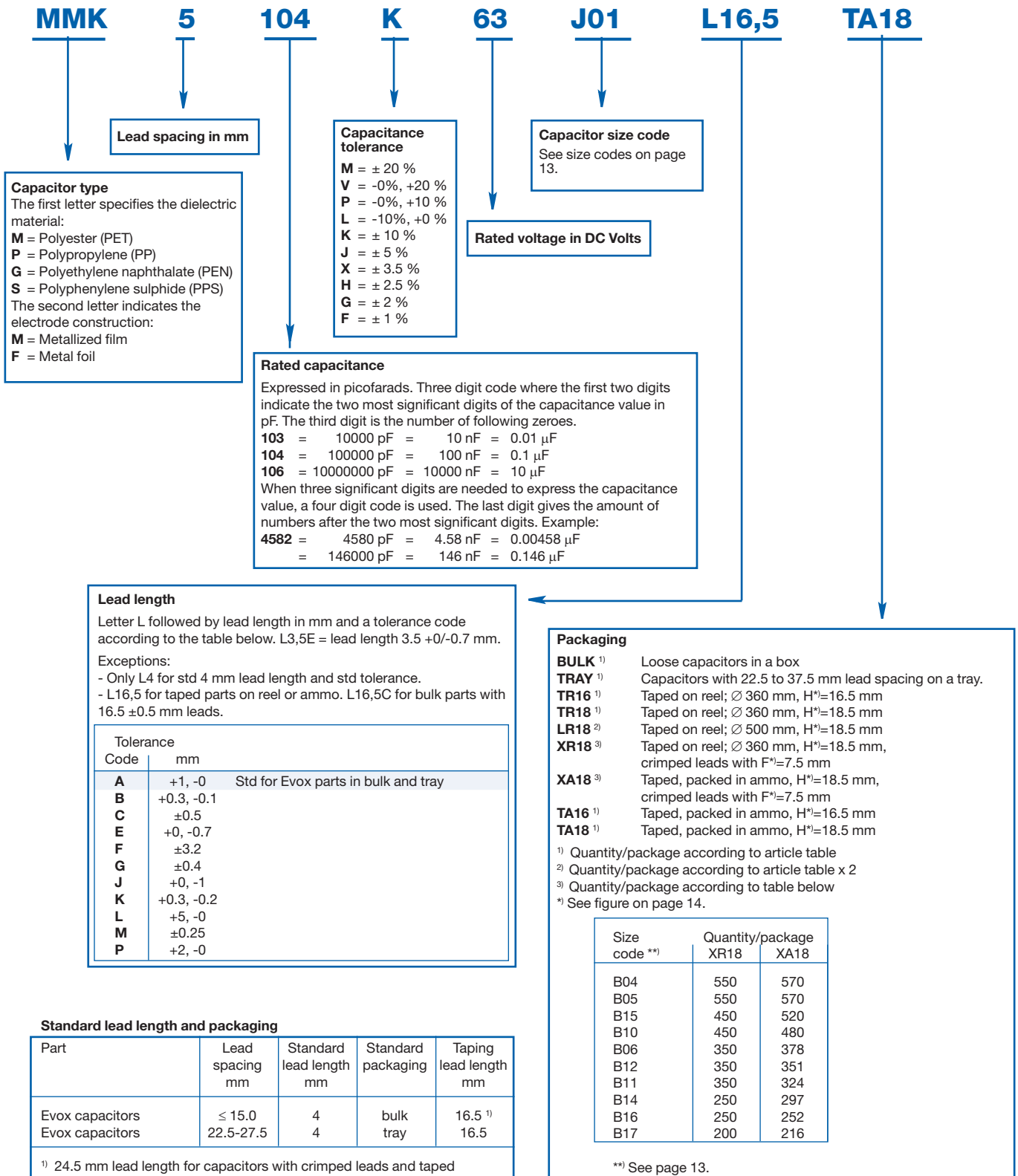


HOW TO ORDER EVOX CAPACITORS

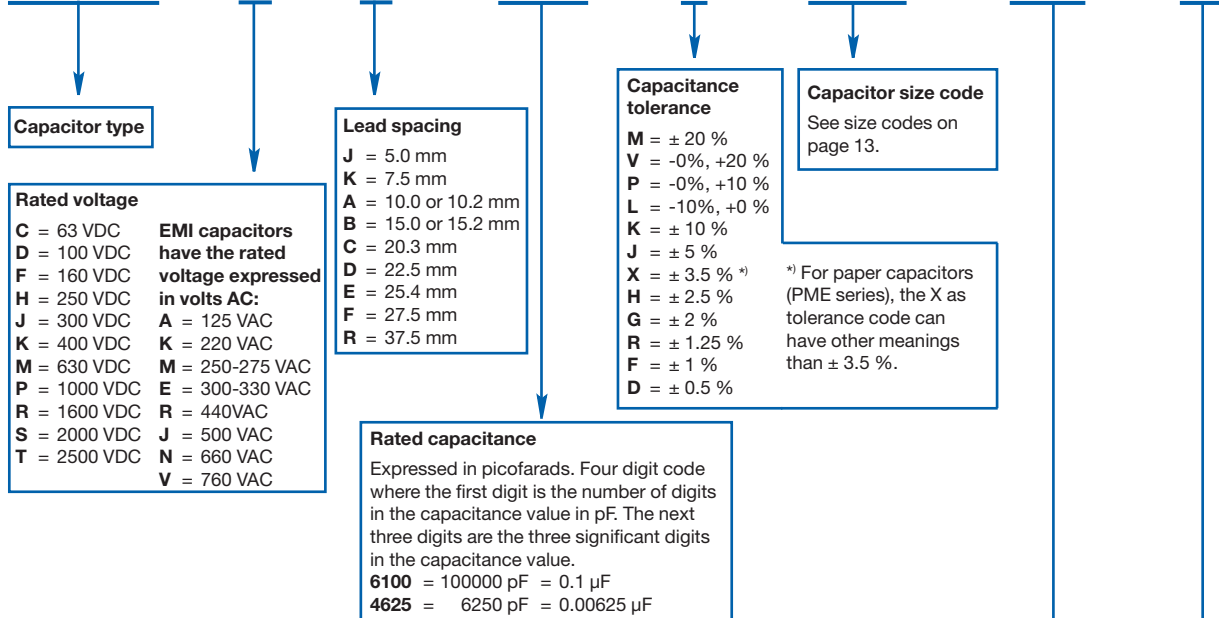
The **Evov** article code includes all the information needed to specify the product characteristics and type of packing. This article code construction applies for the following products in this catalogue: **MMK**, **SMR** and **PFR**. The following articles have the same article code system except for the size code: **CQ**.



HOW TO ORDER RIFA CAPACITORS

The **Rifa** article code includes all the information needed to specify the product characteristics and type of packing. This article code construction applies for the following products in this catalogue: **PHE820, PHE840E, PHE840M, PHE841, PHE844, PHE845, PHE846, PHE850, PME261, PME264, PME271, PME278, PME295, PZB300, PMZ2074, PHZ9004, PMR205, PMR209, PMR210, PMZ2035, PHE426, PHE448, PHE450.**

PHE450 **H** **B** **6470** **J** **(B14)** **R17** **TO**



Lead length

Letter R followed by a 3 digit integer, lead length in tenths of millimetres, and a tolerance code according to the table below. R035E = lead length 3.5 +0/-0.7 mm.

Exception:
- When std tolerance and the lead length is an integer in mm, only 2 digits for the length and no tolerance code. R05 = lead length 5 +0/-1 mm.

| Tolerance | |
|-----------|---|
| Code | mm |
| A | +1, -0 |
| B | +0.3, -0.1 |
| C | ±0.5 |
| E | +0, -0.7 |
| F | ±3.2 |
| G | ±0.4 |
| J | +0, -1 Std for Rifa parts with lead length < 30 mm |
| K | +0.3, -0.2 |
| L | +5, -0 Std for Rifa parts with lead length = 30 mm |
| M | ±0.25 |
| P | +2, -0 |

Packaging

No code ¹⁾ Bulk; loose parts in a box

L2 ¹⁾ PHE parts in 22.5 to 37.5 mm lead spacing on tray.

T0 ¹⁾ Taped on reel; ∅ 360 mm, H^{*)}=18.0 mm

T1 ²⁾ Taped on reel; ∅ 500 mm, H^{*)}=18.0 mm

TA ³⁾ Taped, packed in ammo

X2 ⁴⁾ Taped on reel; ∅ 360 mm, crimped leads with F^{*)}=7.5 mm

X3 ⁴⁾ As for code X2, but P₀^{*)}=12.7 mm

XA ⁴⁾ Taped, packed in ammo, crimped leads with F^{*)}=7.5 mm

¹⁾ Quantity/package according to article table
²⁾ Quantity/package according to article table x 2
³⁾ Quantity per package according to table on page 13.
⁴⁾ Quantity/package according to table below
^{*)} See figure on page 14

| Size code ^{**)} | Quantity/package | |
|--------------------------|------------------|-----|
| | X2, X3 | XA |
| B04 | 550 | 570 |
| B05 | 550 | 570 |
| B15 | 450 | 520 |
| B10 | 450 | 480 |
| B06 | 350 | 378 |
| B12 | 350 | 351 |
| B11 | 350 | 324 |
| B14 | 250 | 297 |
| B16 | 250 | 252 |
| B17 | 200 | 216 |

^{**) See page 13.}

Standard lead length and packaging

| Part | Lead spacing mm | Standard lead length mm | Standard packaging | Taping lead length mm ³⁾ |
|---------------|-----------------|-------------------------|--------------------|-------------------------------------|
| PME, PMR | ≤ 15.2 | 30 | bulk | 19 |
| PME, PMR | ≥ 20.3 | 30 | bulk ¹⁾ | 19 |
| PHE426-PHE450 | 5.0 to 10.0 | 5 | bulk | 17 |
| PHE426-PHE450 | 15.0 | 6 | bulk | 17 |
| PHE820-PHE845 | ≤ 15.0 | 17 | bulk | 17 |
| All PHE | ≥ 22.5 | 6 | tray ²⁾ | 17 |

¹⁾ packed on tray if lead length ≤ 6 mm
²⁾ max lead length 6 mm for tray packaging in 22.5 mm lead spacing, bulk for longer leads
³⁾ 25 mm lead length for capacitors with crimped leads and taped

SIZE CODES OF LEADED CAPACITORS

A size code has been added to the following leaded Evox Rifa capacitors: **MMK, SMR, PHE840E, PHE840M, PHE846, PHE850, PFR**. The size code determines the size of the component and the packing quantities. The size codes are as follows:

| Size code in Article Code | Box dimensions in mm | | | | Typical weight ¹⁾ g | Quantity per package | | | Tray | Reel Ø360 | Reel Ø500 | Ammo ⁴⁾ |
|---------------------------|----------------------|------------------|------------------|------|--------------------------------|----------------------|--------------------|--------------------|------|------------------|-----------|--------------------|
| | B _{max} | H _{max} | L _{max} | p | | Bulk ¹⁾ | Bulk ²⁾ | Bulk ³⁾ | | | | |
| A01 | 4.0 | 9.0 | 13.0 | 10.0 | 0.6 | 1000 | 1000 | | | 900 | 1800 | |
| A02 | 4.5 | 10.5 | 13.0 | 10.0 | 0.9 | 1000 | 1000 | | | 800 | 1600 | |
| A03 | 5.0 | 11.0 | 13.0 | 10.0 | 1.0 | 800 | 800 | | | 700 | 1400 | |
| A04 | 6.0 | 12.0 | 13.0 | 10.0 | 1.3 | 600 | 600 | | | 500 | 1000 | |
| A05 | 9.5 | 7.5 | 13.0 | 10.0 | 1.2 | 600 | 600 | | | 350 | 700 | |
| A06 | 4.0 | 8.0 | 13.0 | 10.0 | 0.5 | 1000 | 1000 | | | 900 | 1800 | |
| B01 | 5.5 | 10.5 | 18.0 | 15.0 | 1.7 ³⁾ | | | 500 | | | | |
| B02 | 5.5 | 14.0 | 18.0 | 15.0 | 1.9 ³⁾ | | | 500 | | | | |
| B03 | 6.5 | 12.5 | 18.0 | 15.0 | 2.2 ³⁾ | | | 250 | | | | |
| B04 | 5.5 | 10.5 | 18.0 | 15.0 | 1.5 | 1000 | 800 | | | 600 | 1200 | |
| B05 | 5.5 | 12.5 | 18.0 | 15.0 | 1.7 | 1000 | 800 | | | 600 | 1200 | |
| B06 | 7.5 | 14.5 | 18.0 | 15.0 | 2.7 | 800 | 400 | | | 400 | 800 | |
| B07 | 8.5 | 14.5 | 18.0 | 15.0 | 2.8 ³⁾ | | | 250 | | | | |
| B10 | 6.5 | 12.5 | 18.0 | 15.0 | 2.0 | 1000 | 600 | | | 500 | 1000 | |
| B11 | 8.5 | 16.0 | 18.0 | 15.0 | 3.4 | 600 | 400 | | | 400 | 800 | |
| B12 | 8.0 | 15.0 | 18.0 | 15.0 | 3.0 | 600 | 400 | | | 400 | 800 | |
| B14 | 9.5 | 17.5 | 18.0 | 15.0 | 4.2 | 500 | 300 | | | 350 | 700 | |
| B15 | 6.0 | 12.0 | 18.0 | 15.0 | 1.7 | 1000 | 800 | | | 500 | 1000 | |
| B16 | 11.0 | 19.0 | 18.0 | 15.0 | 4.4 | 450 | 250 | | | 300 | 600 | |
| B17 | 13.0 | 12.5 | 18.0 | 15.0 | 3.4 | 400 | 300 | | | 250 | 500 | |
| D01 | 7.5 | 15.5 | 26.5 | 22.5 | 3.6 ³⁾ | | | 250 | | | | |
| D02 | 8.5 | 16.5 | 26.5 | 22.5 | 4.2 ³⁾ | | | 200 | | | | |
| D03 | 10.5 | 18.5 | 26.5 | 22.5 | 6.2 ³⁾ | | | 200 | | | | |
| D13 | 6.5 | 14.5 | 26.0 | 22.5 | 2.7 | | | | 234 | 300 | 600 | |
| D14 | 8.0 | 16.0 | 26.0 | 22.5 | 3.8 | | | | 186 | 250 | 500 | |
| D15 | 9.0 | 18.5 | 26.0 | 22.5 | 5.0 | | | | 308 | 250 | 500 | |
| D16 | 11.0 | 21.5 | 26.0 | 22.5 | 6.6 | | | | 253 | | | |
| D17 | 7.0 | 16.5 | 26.0 | 22.5 | 3.2 | | | | 216 | 300 | 600 | |
| D18 | 10.5 | 19.0 | 26.0 | 22.5 | 5.8 | | | | 264 | | | |
| D19 | 15.5 | 24.5 | 26.0 | 22.5 | 10.0 | | | | 176 | | | |
| D20 | 13.5 | 23.0 | 26.0 | 22.5 | 8.2 | | | | 209 | | | |
| F03 | 13.5 | 23.0 | 31.5 | 27.5 | 10.8 | | | | 171 | | | |
| F11 | 10.5 | 20.5 | 31.5 | 27.5 | 8.0 | | | | 216 | | | |
| F12 | 11.5 | 22.5 | 31.5 | 27.5 | 9.1 | | | | 198 | | | |
| F13 | 14.5 | 24.5 | 31.5 | 27.5 | 14.5 | | | | 153 | | | |
| F14 | 17.5 | 28.0 | 31.5 | 27.5 | 17.0 | | | | 126 | | | |
| F15 | 19.0 | 29.0 | 31.5 | 27.5 | 19.5 | | | | 117 | | | |
| F16 | 21.0 | 30.0 | 31.5 | 27.5 | 22.6 | | | | 108 | | | |
| F17 | 21.0 | 12.5 | 31.5 | 27.5 | 9.0 | | | | 108 | | | |
| F18 | 31.0 | 19.0 | 31.5 | 27.5 | 20.0 | | | | 72 | | | |
| F19 | 27.5 | 16.0 | 31.5 | 27.5 | 17.0 | | | | 81 | | | |
| J01 | 2.5 | 6.5 | 7.2 | 5.0 | 0.2 | 2000 | 2000 | | | 2500 | 5000 | 3000 |
| J02 | 3.5 | 8.0 | 7.2 | 5.0 | 0.3 | 2000 | 2000 | | | 2000 | 4000 | 2000 |
| J03 | 4.5 | 9.0 | 7.2 | 5.0 | 0.4 | 1000 | 1000 | | | 1500 | 3000 | 1700 |
| J04 | 5.0 | 10.0 | 7.2 | 5.0 | 0.5 | 1000 | 1000 | | | 1300 | 2600 | 1500 |
| J05 | 6.0 | 11.0 | 7.2 | 5.0 | 0.6 | 1000 | 1000 | | | 1000 | 2000 | 1200 |
| J06 | 7.2 | 13.0 | 7.2 | 5.0 | 0.9 | 1000 | 1000 | | | 800 | 1600 | |
| J11 | 4.5 | 6.0 | 7.2 | 5.0 | 0.3 | 1000 | | | | 1500 | 3000 | 1700 |
| J12 | 5.5 | 7.0 | 7.2 | 5.0 | 0.4 | 1000 | | | | 1200 | 2400 | 1300 |
| J13 | 6.5 | 8.0 | 7.2 | 5.0 | 0.5 | 1000 | | | | 900 | 1800 | 1100 |
| K00 | 2.5 | 6.0 | 10.0 | 7.5 | 0.3 | 2000 | 2000 | | | 2500 | 5000 | 3000 |
| K01 | 4.0 | 8.0 | 10.0 | 7.5 | 0.5 | 1000 | 1000 | | | 1700 | 3400 | 1900 |
| K03 | 5.0 | 11.0 | 10.0 | 7.5 | 0.8 | 1000 | 1000 | | | 1300 | 2600 | 1500 |
| K04 | 6.0 | 12.0 | 10.5 | 7.5 | 1.0 | 1000 | 1000 | | | 1000 | 2000 | 1200 |
| R02 | 16.5 | 32.0 | 41.0 | 37.5 | 23.0 | | | | | 105 | | |
| R03 | 19.0 | 36.0 | 41.0 | 37.5 | 28.5 | | | | | 91 | | |
| R04 | 15.0 | 26.0 | 41.0 | 37.5 | 17.0 | | | | | 119 | | |
| R05 | 13.0 | 24.0 | 41.0 | 37.5 | 14.0 | | | | | 140 | | |
| R06 | 21.0 | 38.0 | 41.0 | 37.5 | 34.4 | | | | | 84 | | |
| R08 | 28.0 | 43.0 | 41.0 | 37.5 | 53.0 | | | | | 54 ¹⁾ | | |

¹⁾ Capacitors with lead length of 4 to 6 mm according to the data sheet.

²⁾ Capacitors with lead length of 16.5 mm or 17.0 mm according to the data sheet.

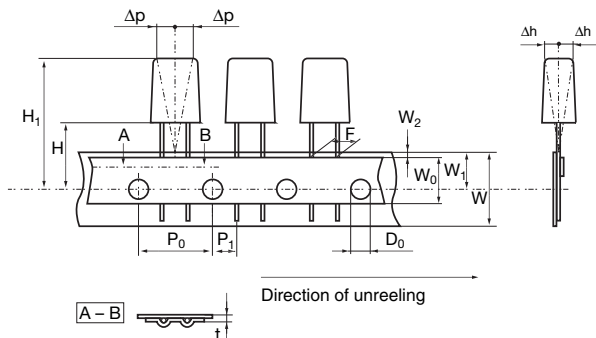
³⁾ Capacitors with lead length of 30 mm and insulated leads.

⁴⁾ For Ammo packaging of parts in 10 mm and 15 mm lead spacing, please ask Evox Rifa Customer Service.

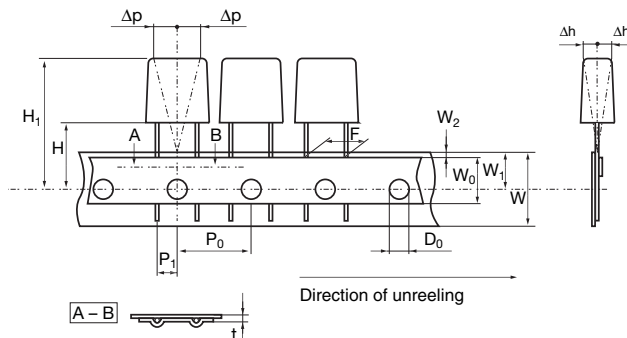
TAPING OF EVOX RIFA RADIAL CAPACITORS

The taping is carried out in accordance with IEC 60286-2.

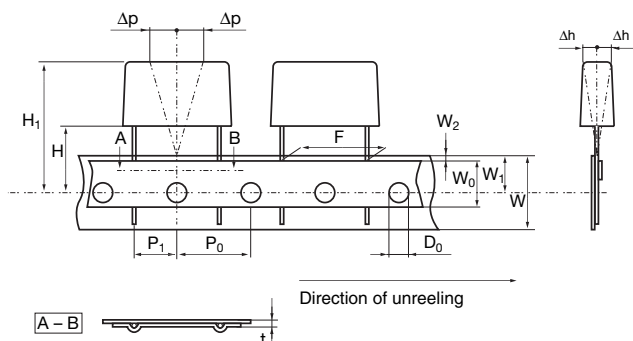
Lead spacing 5 mm



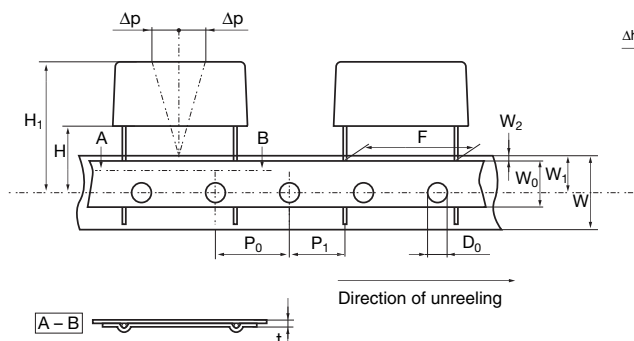
Lead spacing 7.5 mm



Lead spacing 10 and 15 mm



Lead spacing 22.5 and 27.5 mm



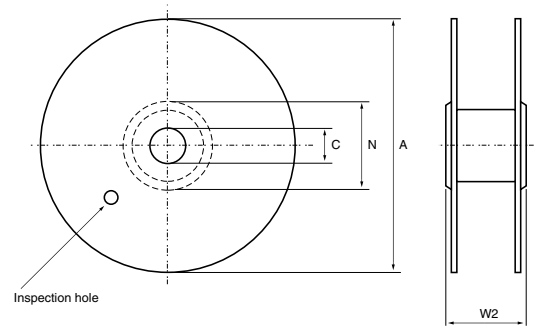
| Taping specification | | | | | | Standard |
|--------------------------------------|------------------------------|----------------------------------|----------------------------------|----------------|------------------------------------|---------------------|
| Dimensions in mm | | | | | | IEC 60286-2 |
| Lead spacing, $^{+0.6}_{-0.1}$ | F | 5.0/7.5 ⁴⁾ | 10.0/15.0 | 22.5/27.5 | 10.2/15.2/20.3 Paper capacitors | F |
| Carrier tape width, ± 0.5 | W | 18 | 18 | 18 | 18 | 18 $^{+1.0}_{-0.5}$ |
| Hold-down tape width, ± 0.3 | W ₀ | 9 | 12 | 12 | 12 | |
| Position of sprocket hole, ± 0.5 | W ₁ | 9 | 9 | 9 | 9 | 9 $^{+0.75}_{-0.5}$ |
| Distance between tapes, max | W ₂ | 3 | 3 | 3 | 3 | 3 |
| Sprocket hole diameter, ± 0.2 | D ₀ | 4 | 4 | 4 | 4 | 4 |
| Feed hole pitch, ± 0.3 | P ₀ ¹⁾ | 12.7 | 12.7 | 12.7 | 12.7 | 12.7 |
| Distance lead – feed hole, ± 0.7 | P ₁ | 3.85/3.75 | 7.7/5.2 | 5.3 | 7.6/5.1/8.9 | P ₁ |
| Max deviation tape – plane | Δp | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 |
| Max lateral deviation | Δh | 2 | 2 | 2 | 2 | 2 |
| Total thickness, ± 0.2 | t | 0.7 | 0.7 | 0.9 max | 0.7 | 0.9 max |
| Sprocket hole/cap body | H ²⁾ | 18.5 ± 0.5 16.5 ± 0.5 | 18.5 ± 0.5 16.5 ± 0.5 | 18.5 ± 0.5 | 18.0 $^{+2}_{-0}$ | 18.0 $^{+2}_{-0}$ |
| Sprocket hole/top of cap body, max | H ₁ ³⁾ | 32/31 max | 43 max | 58 | 35 max | 58 max |

¹⁾ Cumulative pitch error
²⁾ Alternatives for different insertion machines
³⁾ Depending on case size
⁴⁾ Crimped leads available on request

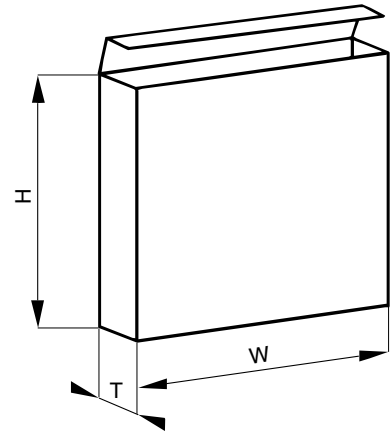
TAPING OF EVOX RIFA RADIAL CAPACITORS

| Reel specification | | | |
|----------------------------------|----|---------|------|
| Reel dimensions in mm | | | Tol. |
| Reel diameter | A | 360/500 | max |
| Hub diameter | N | 80 | min |
| Arbor hole | C | 30 | ± 1 |
| Total reel width measured at hub | W2 | 58 | max |

The standard packing for lead space ≤ 15 mm is 360 mm reel and for lead space > 15 mm 500 mm reel.



| Ammo pack specification | | | |
|----------------------------|---|------------------|--|
| Ammo pack dimensions in mm | | Lead spacing, mm | |
| | | 5, 7.5 10 | 15, 22.5, 27.5, 37.5 |
| Height | H | 330 | (135 or 200 for CQ depending on capacitance value) |
| Width | W | 330 | (335 for CQ) |
| Thickness | T | 50 | |



THE MANUFACTURING CODE Y Z, ACCORDING TO IEC 60062

where Y = year, Z = month.

| Year | Code | Year | Code | Year | Code | Month | Code | Month | Code |
|------|------|------|------|------|------|-------|------|-------|------|
| 1990 | A | 1997 | J | 2004 | S | Jan | 1 | July | 7 |
| 1991 | B | 1998 | K | 2005 | T | Febr | 2 | Aug | 8 |
| 1992 | C | 1999 | L | 2006 | U | March | 3 | Sept | 9 |
| 1993 | D | 2000 | M | 2007 | V | April | 4 | Oct | O |
| 1994 | E | 2001 | N | 2008 | W | May | 5 | Nov | N |
| 1995 | F | 2002 | P | 2009 | X | June | 6 | Dec | D |
| 1996 | H | 2003 | R | 2010 | Y | | | | |

TERMS AND DEFINITIONS

Rated capacitance (C_R)

The rated capacitance of a capacitor is the value which is indicated upon it. The capacitance is measured at 1 kHz and +23°C.

Rated voltage (U_R)

The rated voltage is the maximum direct voltage or the maximum RMS alternating voltage which may be applied continuously to the terminals of the capacitor at any temperature within the rated temperature range.

Rated temperature

The rated temperature is the maximum ambient temperature at which the rated voltage can be continuously applied.

Climatic category

The climatic category states the category temperature range and the humidity class. For example 40/085/56 stands for -40°C to +85°C; 56 states that the steady state humidity test should take 56 days.

Tangent of the loss angle (Dissipation factor, tanδ)

The tangent of the loss angle is the power loss of the capacitor divided by the reactive power of the capacitor at a sinusoidal voltage of specified frequency. The tangent of loss angle is given in percent (Eg 0.01 tanδ=1%).

The dissipation factor is of interest especially when the capacitor is operated on AC. The dielectric loss causes heating of the capacitor which under unfavourable circumstances may lead to a destructive breakdown. This will not happen if the capacitor is used within specified limits. The ability to withstand short duration thermal and voltage overload is greater for small capacitors than for large ones.

Insulation resistance

The values given in the catalogue indicate the insulation resistance after one minute of electrification at +23°C with the following voltages: 100 VDC for capacitors rated at 100 to 500 VDC and 500 VDC for capacitors rated at 500 VDC. Insulation resistance is temperature dependent and is approximately halved for each 7 °C of temperature rise. Multilayer construction provides insulation resistance higher than that of single-layer types.

Temperature derated voltage

For any temperature between the rated temperature and the upper category temperature, the temperature derated voltage is the maximum voltage that may be applied continuously to the terminals of the capacitor.

Pulse operation

Capacitors loaded with pulses with fast rise or fall times (high dU/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

$$dU/dt = U_R / (R \times C)$$

- U_R = Rated voltage
- R = Discharge resistor
- C = Rated capacitance

At repeated pulse operation, self-heating, ambient temperature and cooling set the load limit.

Pulse current limits are commonly expressed in the form of maximum permitted dU/dt in volts per microsecond. The figures stated in the type specifications refer to an unlimited number of pulses charging or discharging from rated voltage U_R.

Self-healing

A break-through in a plastic film/foil capacitor leads to a permanent short circuit of the capacitor due to a carbon bridge which is built up in the break-down channel due to the high temperature rise and carbon content of the dielectric. A metallized capacitor can withstand a break-through without a permanent short circuit because of its self-healing ability. The metallized layer is between 0.02 – 0.1 µm. At a weak point in the dielectric, or because of a transient, a break-down may occur. The thin metal layer around the weak point is evaporated and the weak point is isolated. The capacitor has self-healed thereby.

Active flammability

The ability of a capacitor to burn with a flame as a consequence of electrical loading.

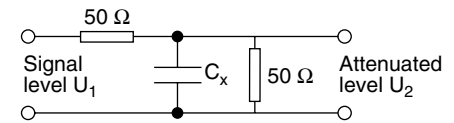
Passive flammability

The ability of a capacitor to burn with a flame as a consequence of the application of an external source of heat.

Attenuation

The attenuation of a capacitor is measured in a 50 Ω system.

The highest attenuation is achieved at the resonant frequency.



$$\text{Attenuation } a = 20 \log U_1 / 2U_2 \text{ dB}$$

Resonance frequency

The resonance frequency of a capacitor is reached when

$$\omega L = 1 / \omega C$$

- ω = 2πf (f = frequency)
- L = inductance caused by the winding

- C = the capacitance at f.

Dielectric absorption (DA)

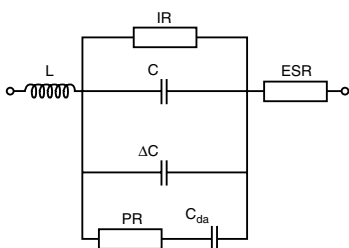
Dielectric absorption describes the dielectric material's properties to "remember" the applied voltage. One method to define DA is:

The capacitor is to be charged for one hour at rated voltage DC (U_R) then discharged through a resistor of 5 ohms for 10 seconds. The discharge resistor must then be disconnected and the recovery voltage U_r measured 15 minutes after disconnection. The dielectric absorption is defined by:

$$DA = (U_r / U_R) \times 100\%$$

More specific terms and definitions for EMI, RC and Pulse capacitors can be found in the beginning of respective sections.

CAPACITOR EQUIVALENT DIAGRAM



- C = nominal value of the capacitor
- L = inductance (leads, metallization, winding)
- ESR = equivalent series resistance (leads, metallization, metal spraying)
- IR = insulation resistance (properties of the dielectric material)

- ΔC = capacitance change (depending on changes in temperature, DC voltage and/or frequency)
- PR = dielectric polarization resistance
- C_{da} = dielectric absorption

PROPERTIES OF DIELECTRICS

POLYESTER
(Polyethylene Terephthalate, PET)
Metallized and Film/foil

High dielectric constant and high dielectric strength provides good volumetric efficiency for metallized polyester film capacitors. Metallized polyester film has excellent self-healing properties.

Typical applications: Bypassing, coupling, filtering.

POLYESTER
(Polyethylene Naphthalate, PEN)
Metallized

High temperature Polyester. Relatively high dielectric constant and dielectric strength,

and availability of thin films, provide good volumetric efficiency for metallized construction. High melting point allows SMD constructions and service in high ambient temperatures. General purpose capacitor.

POLYPROPYLENE (PP)
Metallized and Film/foil

Very low losses, low dielectric absorption, high dielectric strength, very high insulation resistance, and negative temperature coefficient.

Typical applications: Stable oscillators and filters. Sample & hold circuits, pulse handling circuits, AC applications and mains filtering.

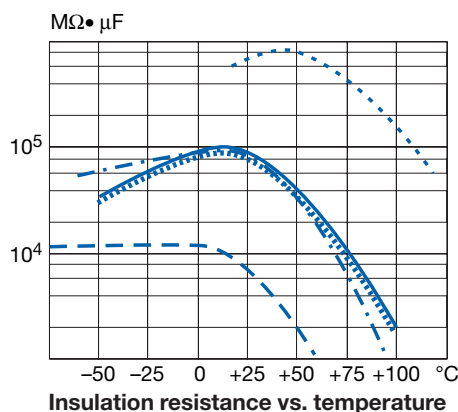
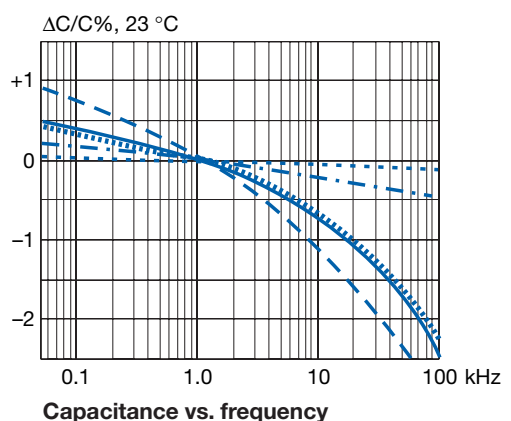
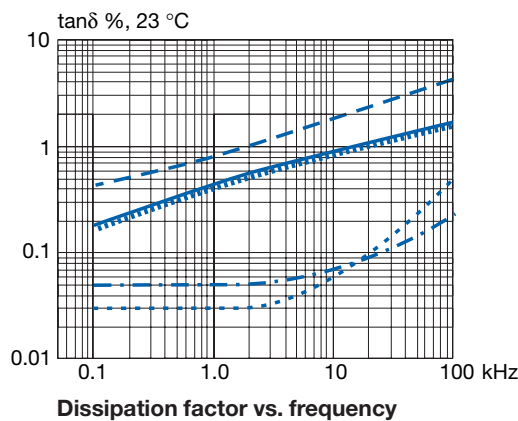
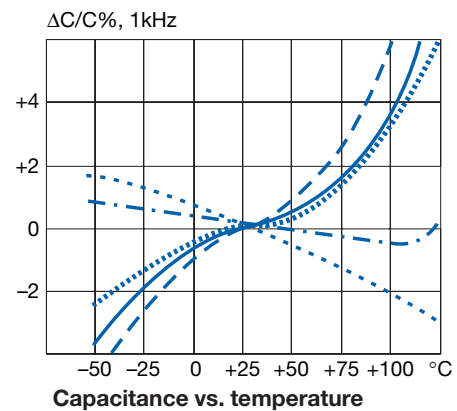
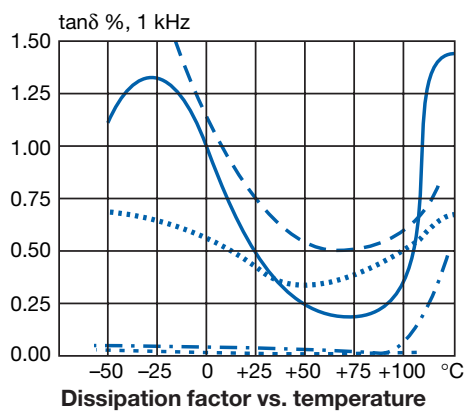
POLYPHENYLENE SULPHIDE (PPS)
Metallized

Low losses, wide operating temperature range, low temperature coefficient, good stability.

Typical applications: Timers and filters. Automotive and other applications in high ambient temperatures.

PAPER
Metallized

High dielectric constant. Excellent self-healing properties and transient handling capability. High ionisation level due to impregnated dielectric material. Outstanding reliability in mains connected and other low frequency applications.



- Polyester PET
- Polyethylene Naphthalate PEN
- · - · Polyphenylene sulfide PPS
- Polypropylene PP
- Paper

The reliability of a capacitor is mainly a function of:

- The construction; dielectric material and its thickness
- The manufacturing process
- The application; electrical stress and temperature

The failure rate, λ , vs. voltage and temperature for the most common dielectric materials is shown in the diagrams below. U_R = rated voltage.

The operating life (L) can be calculated as:

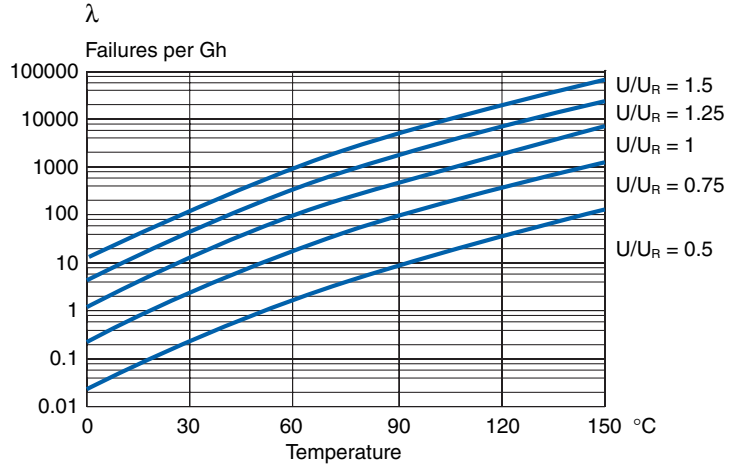
$$L = \frac{1}{\lambda} \times \ln \frac{1}{1-F}$$

where F is the expected probability of failures.

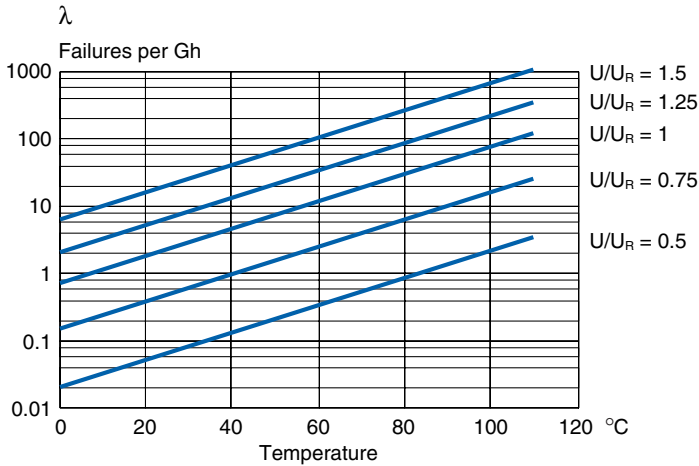
Example: If $\lambda = 20 \times 10^{-9}$ it takes 6 years to have
 $F = 0.001$ (0.1% failures)
 and 300 years to have
 $F = 0.05$ (5% failures)

MTBF (mean time between failures) = $1 / \lambda$

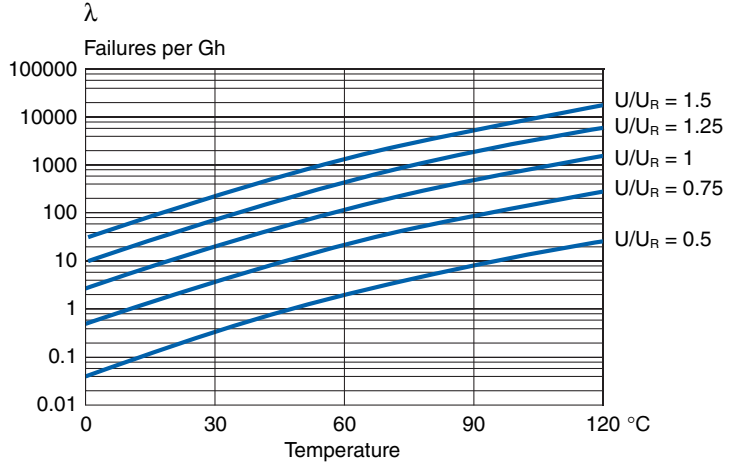
Failure rates vs. temperature and voltage
 Polyethylene Naphthalate (PEN)



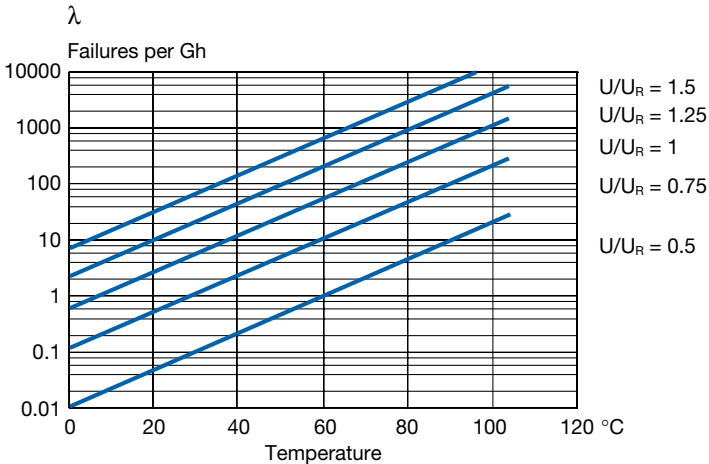
Failure rates vs. temperature and voltage
 Paper



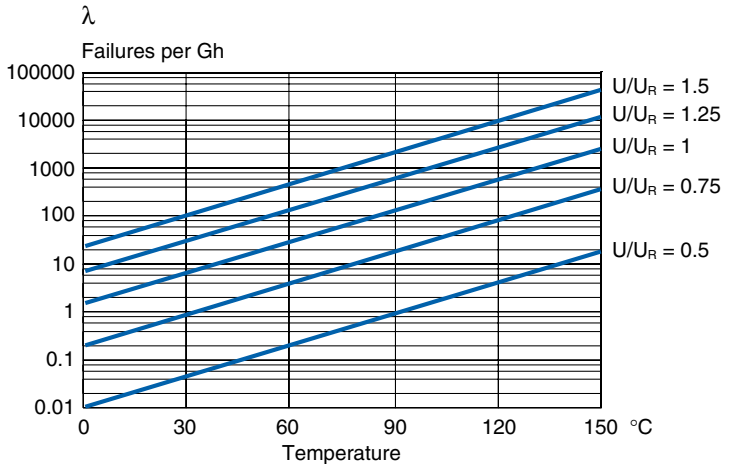
Failure rates vs. temperature and voltage
 Polyester



Failure rates vs. temperature and voltage
 Polypropylene



Failure rates vs. temperature and voltage
 Polyphenylene sulfide



NUMERICAL COMPARISON OF FILM MATERIALS

| Material (Trade names) | Abbreviation | Min. film thickness (μm) | Dielectric constant at 1 kHz, +23°C | Operating temperature (°C) | Temperature coefficient (ppm/°C) | Dissipation factor at 1 kHz, +23°C | Insulation time constant (s) at +23°C | Dielectric absorption % |
|---|--------------|--|-------------------------------------|----------------------------|----------------------------------|------------------------------------|---------------------------------------|-------------------------|
| Polyester (Mylar, Lumirror, Hostaphan, Diafoil) | PET | 0.9 | 3.3 | -55 ... +100 (... +125) | +400 (± 200) | 0.5% | 25 000 | 0.5 |
| Polyethylene Naphthalate (Teonex) | PEN | 1.4 | 3.0 | -55 ... +125 (... +150) | +200 (± 150) | 0.4% | 25 000 | 1.2 |
| Polyphenylene sulfide (Torelina) | PPS | 1.2 | 3.0 | -55 ... +125 (... +150) | 0 (-50) up to +100 °C | 0.06% | 25 000 | 0.05 |
| Polypropylene (Torayfan, Trespaphan) | PP | 3.0 | 2.2 | -55 ... +110 | -200 almost linear | 0.03% (-100, +50) | 100 000 | 0.01 |
| Paper Impregnated | P | 7.0 | 5.5 | -40 ... +115 | +1200 (± 200) | 0.8% | 15 000 | |

ENVIRONMENTAL COMMITMENT

As an environmentally conscious company, Evox Rifa (including BHC Components) is working continuously with improvements concerning the environmental effects of both our capacitors and the production of them.

In Europe (RoHS Directive) and in some other geographical areas like China, legislation has been put on place to prevent the use of some hazardous materials, like Lead (Pb), in electronic equipment. All products in this catalogue are produced to help our customer's obligations to guarantee their products to fulfil these legislative requirements. The only material of concern in our products has been Lead (Pb), which has been removed from all designs to fulfil the requirement of containing less than 0,1% of

Lead in any homogeneous material.

Evox Rifa will follow closely any changes in legislation world wide, and makes any necessary changes in its products, whenever needed.

Some customer segments like Medical, Military and Automotive Electronics may still require e.g. the use of Lead in electrode coatings. To clarify the situation, and to distinguish products from each other, a special symbol is used on the packaging labels for RoHS compatible capacitors. See pictures to the right.

Because of customer requirements there may appear additional markings like LF = Lead Free or LFW = Lead Free Wires on the label.



RoHS Compliant

Examples of RoHS Compliance markings on packaging labels

WARNING

The implementation of RoHS Directive has forced to select SnAuCu (SAC) alloys or SnCu alloys as primary solder. This has increased the liquidus temperature from that of 183 °C for SnPb eutectic alloy to 217 – 221 °C for the new alloys. This means that the heat stress to components, even in Wave Soldering, has increased considerably due to higher pre-heat and wave temperatures.

The Polypropylene Capacitors are especially sensitive to heat (melting point of Polypropylene is 160 – 170 °C). The Wave Soldering can be destructive especially for mechanically small Polypropylene Capacitors (Lead spacings 5-10 mm), and great care has to be taken when soldering them. The recommended solder profiles from Evox Rifa should be used. In case of doubt, Evox Rifa should be consulted. In general the Wave Soldering curve from IEC Publ. 61760-1 edition 2 gives a good guideline for successful soldering. See Figure 1.

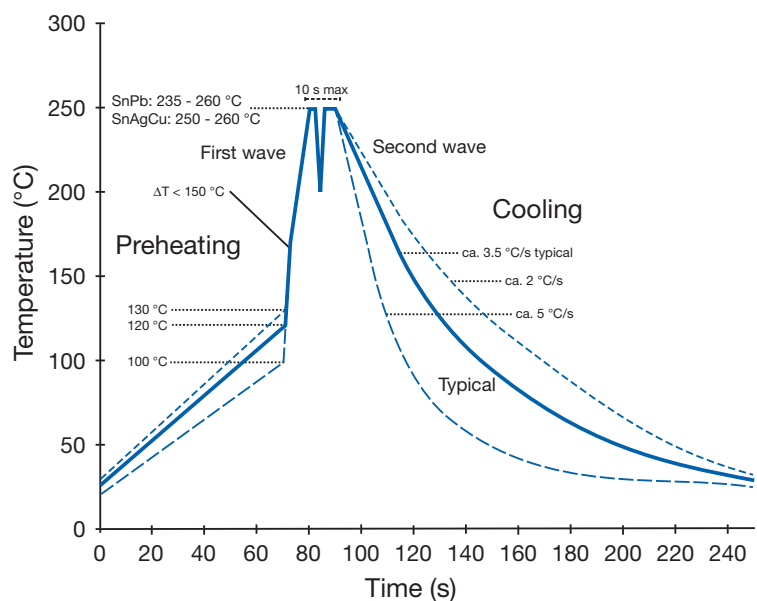


Figure 1

EVOX RIFA QUALITY

The quality of Evox Rifa's products and services is based on a continuous strive towards excellency throughout the whole organization. Skilled and motivated personnel, technical know-how and modern equipment combined with extensive quality assurance make Evox Rifa the supplier of components of the highest quality.

The up-to date quality tools like Statistical Process Control (SPC) in various forms, Failure Mode and Effect Analysis (FMEA), Accelerated Reliability Testing and Zero Defect Acceptance concept in final testing are the corner stones of the every day quality work. Cross-functional teams are routinely used in Problem Solving (8D method) with effective Failure Analysis support.

As a visible evidence of our quality, all the manufacturing units world wide are certified according to ISO 9001. In addition to that, the relevant factories have the automotive industry's QS9000 certifications, which is in process to be upgraded to ISO TS 16949

during 2006. The Finnish factory has also IECQ approval. Our well known EMI suppression capacitors carry the important safety marks for world wide applications.

Evox Rifa companies have the following certificates:

ISO 14001

P.T. Evox Rifa, Batam, Indonesia

ISO 9001

BHC Components

Evox Rifa AB, Gränna, Sweden

Evox Rifa Oy, Suomussalmi, Finland

Nantong Evox Rifa Electrolytics, P.R. China

P.T. Evox Rifa, Batam, Indonesia

ISO TS 16949

Evox Rifa AB, Gränna, Sweden

QS9000 (TS 16949 pending at the time of printing of this catalogue)

Evox Rifa Oy, Suomussalmi, Finland

Nantong Evox Rifa Electrolytics, P.R. China

P.T. Evox Rifa, Batam, Indonesia

IECQ

Evox Rifa Oy, Suomussalmi Finland

Customer in Focus

The only real measure of our total quality performance is the acceptance of our customers.

Evox Rifa's quality work has always been focused on the customer. We have actively made quality agreements with ambitious goal settings with World-Class Companies – small and large.

This active quality cooperation has been most fruitful to Evox Rifa by bringing in most modern quality tools, but especially by providing us with reliable feedback on the performance quality of our products and services.

The cooperation has not only lead to continuous improvement of the quality of our products, but sometimes also helped our customers to spot some weaknesses in their designs. A visible sign of these close links between Evox Rifa and various customers is the numerous prestigious customer approvals and the performance awards addressed to Evox Rifa and BHC Components.

IN-HOUSE RESEARCH AND DEVELOPMENT FOR TOMORROW'S NEEDS

Evox Rifa has over sixty years accumulated experience in developing a wide range of world-class capacitor products. Our leading position in the market with a wide product range is based on our deep knowledge of the materials and ways in which they can be used in capacitor designs to provide the best possible solutions.

Evox Rifa invests substantial human and financial resources in finding new highly reliable

and cost effective solutions for today's and tomorrow's needs. Our R&D department can simulate most operational conditions and apply our products to the envisaged working environment, giving to the customer optimized capacitors for a particular specification.

The simulation capabilities substantially shorten the design cycle of capacitors.

To assist in shortening the design cycle of

our customers, we have brought our R&D department to our customers by providing them with a CAD software, which allows them to select the most suitable capacitors for their application (Fig. 1). For easy calculation of signal stresses, there is also a fast Fourier transform software available. In this software complicated signal forms can easily be simulated and analysed (Fig. 2 and 3).

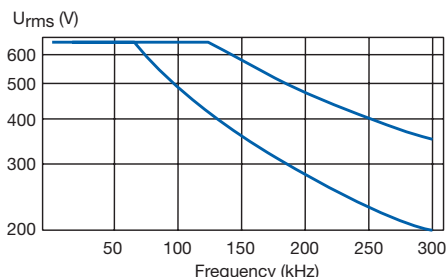


Fig. 1. From CAD software, showing max U_{rms} vs. frequency for two different capacitors

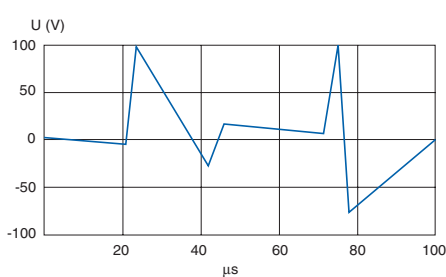


Fig. 2. Signal $s(t)$

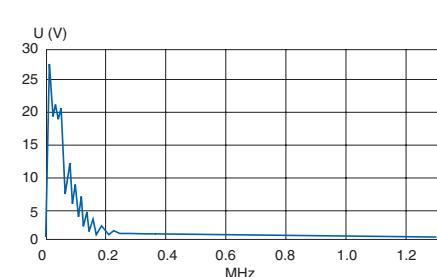


Fig. 3. Frequency spectrum

PRODUCT SPECIFICATION

All descriptions, drawings and other particulars (including dimensions, materials and performance data) given by Evox Rifa are as accurate as possible but, being given for general information, are not binding on Evox Rifa unless specifically agreed in writing. All dimensions and materials are, unless otherwise stated, subject to reasonable variations resulting from the raw material available or arising in the ordinary course of manufacture. Any performance data are based upon Evox Rifa's experience and are such as Evox Rifa normally expects to achieve.

WARRANTY, PRODUCT LIABILITY

Evox Rifa warrants that the goods manufactured by Evox Rifa are free from defects in design, material and workmanship.

Evox Rifa's liability under this warranty shall be limited to replacement or repair free of charge, at one of Evox Rifa's factories selected by Evox Rifa, provided that notification of such failure or defect is given to Evox Rifa immediately upon the same becoming apparent and that on Evox Rifa's request and instruction the goods are promptly returned to Evox Rifa carriage paid by buyer.

In case the goods thus returned as defective, prove to be without fault or defect, Evox Rifa is entitled to charge buyer 100% of the value of the returned goods.

If the goods supplied or part thereof are not manufactured by or branded Evox Rifa, Evox Rifa will only extend to the buyer the benefit of the warranty granted by the manufacturer of the goods.

Evox Rifa's liability is further limited to a period of 12 months from the date of shipment

to buyer.

Evox Rifa shall not be liable for any defect which is due to accident, fair wear and tear, negligent use, tampering, improper handling, improper use, improper operation or improper storage or any other default on the part of any person other than Evox Rifa.

Evox Rifa shall have no other liabilities in case of defective goods than those stated above and shall under no circumstances be liable for any consequential loss or damage arising from the use of goods sold by Evox Rifa. Liability under paragraph 823 BGB is expressly excluded.

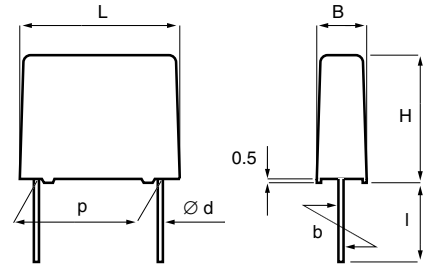
The above limitations of Evox Rifa's liability for defective goods shall apply also with regard to product liability, and Evox Rifa shall have no responsibility for injury to persons or for damage to goods or property of any kind.

In case of product liability claims from third parties against Evox Rifa, not falling within Evox Rifa's liability in accordance with the above, buyer shall hold Evox Rifa harmless.

- Metallized polyester
- According to CECC 30401-042, IEC 60384-2, DIN 44122

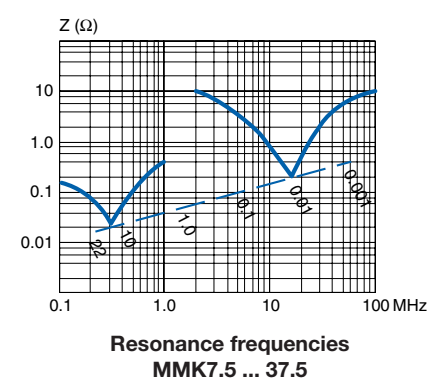
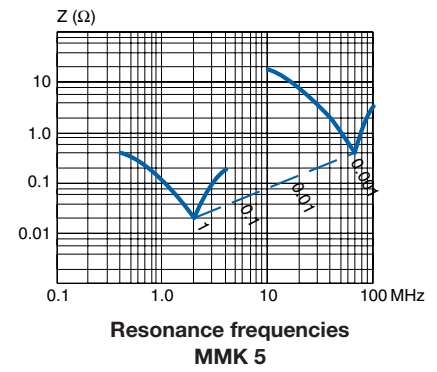


| TYPICAL APPLICATIONS | CONSTRUCTION |
|---|--|
| By-passing, signal coupling. General purpose for highest reliability. | Metallized polyester film capacitor. Radial leads of tinned wire are electrically welded to the contact metal layer on the ends of the capacitor winding. Encapsulation in self-extinguishing material meeting the requirements of UL 94V-0. |



| TECHNICAL DATA | | | | | | | |
|----------------------------|---|-------|-------|-------|-------|-------|-------|
| Rated voltage U_R , VDC | 50 | 63 | 100 | 250 | 400 | 630 | 1000 |
| | 30 | 40 | 63 | 160 | 200 | 220 | 250 |
| Rated voltage U_R , VAC | | | | | | | |
| Capacitance, μF | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 |
| | -10.0 | -82 | -82 | -39 | -18 | -6.8 | -4.7 |
| Capacitance tolerance | $\pm 20\%$, $\pm 10\%$ standard, $\pm 5\%$. | | | | | | |
| Category temperature range | -55 ... +100°C | | | | | | |
| Voltage derating | Above +85°C DC and AC voltage derating is 1.25%/°C. | | | | | | |
| Rated temperature | +85°C | | | | | | |
| Climatic category | IEC 60068-1, 55/100/56 DIN 40040, FME -55 ... +100°C Average relative humidity $\leq 75\%$ RH = 95% for 30 days per year. RH = 85% for further days limited by average value per year, occasional slight condensation permitted. | | | | | | |
| Test voltage | 1.6 x U_R VDC for 2s | | | | | | |
| Capacitance drift | Max. 2% after a 2 year storage period at a temperature of +10 ... +40°C and a relative humidity of 40...60%. | | | | | | |
| Reliability | Operational life > 200 000 h. Failure rate < 3 FIT, T = +40°C, U = 0.5 x U_R . Failure criteria according to DIN 44122. | | | | | | |
| Maximum pulse steepness: | dU/dt according to article table. For peak to peak voltages lower than rated voltage ($U_{pp} < U_R$), the specified dU/dt can be multiplied by the factor U_R/U_{pp} . | | | | | | |
| Temperature coefficient | +400 (± 200) ppm/°C at 1 kHz | | | | | | |
| Self inductance | Approximately 6 nH/cm for the total length of capacitor winding and the leads. | | | | | | |

| p | d | std l | max l | b |
|------------|-----|-----------------|-------|-------|
| 5.0 ± 0.4 | 0.5 | 4 ⁺¹ | 30 | ± 0.4 |
| 7.5 ± 0.4 | 0.6 | 4 ⁺¹ | 30 | ± 0.4 |
| 10.0 ± 0.4 | 0.6 | 4 ⁺¹ | 30 | ± 0.4 |
| 15.0 ± 0.4 | 0.8 | 4 ⁺¹ | 30 | ± 0.4 |
| 22.5 ± 0.4 | 0.8 | 4 ⁺¹ | 30 | ± 0.4 |
| 27.5 ± 0.4 | 0.8 | 4 ⁺¹ | 30 | ± 0.4 |
| 37.5 ± 0.5 | 1.0 | 4 ⁺¹ | 30 | ± 0.7 |



| ENVIRONMENTAL TEST DATA | | |
|-------------------------|--|---|
| Damp heat test | Test conditions: Test criteria: | T = +40°C, RH = 93%, t = 56 days. $\Delta C/C \leq \pm 5\%$, $\Delta \tan \delta \leq 0.005$ (1kHz), IR after test 0.5 x IR min. |
| Endurance test | Test conditions: Test criteria: | T = +100°C, U = 1.25 x (0.8 x U_R), t = 2000 h. $\Delta C/C \leq \pm 5\%$, $\Delta \tan \delta \leq 0.005$ (1kHz) $\Delta \tan \delta \leq 0.010$ (100kHz) IR after test 0.5 x IR min. |

TECHNICAL DATA

Dissipation factor $\tan\delta$

Maximum values at +23°C
 $C \leq 0.1 \mu\text{F}$ $0.1 \mu\text{F} < C \leq 1.0 \mu\text{F}$ $C > 1.0 \mu\text{F}$

| | | | | |
|-----------------|---------|------|------|------|
| MMK5 | 1 kHz | 0.8% | 0.8% | 0.8% |
| | 10 kHz | 1.2% | 1.2% | 1.5% |
| | 100 kHz | 2.5% | 3.0% | |
| MMK7.5 ... 37.5 | 1 kHz | 0.8% | 0.8% | 1.0% |
| | 10 kHz | 1.5% | 1.5% | |
| | 100 kHz | 3.0% | | |

Insulation resistance

Minimum values between terminals.
 Measured at +20°C, according to IEC 60384-2.
 $C \leq 0.33 \mu\text{F}$ $C > 0.33 \mu\text{F}$

| | | |
|------------------------|----------|---------|
| $U_R \leq 100\text{V}$ | 15000 MΩ | 5000 s |
| $U_R > 100\text{V}$ | 30000 MΩ | 10000 s |

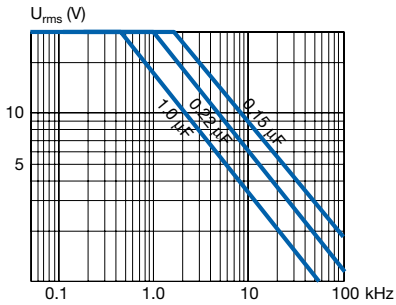
ORDERING INFORMATION

See article table and pages 11 to 15 for options and article code construction.

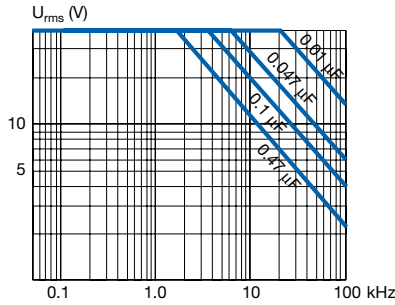
MARKING

- Capacitance
- Tolerance code
- Rated voltage
- Capacitor family code MMK
- Manufacturing date code

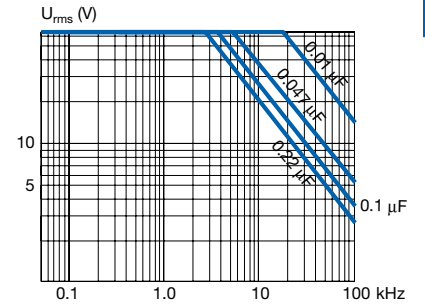
RATED AC VOLTAGE VS. FREQUENCY



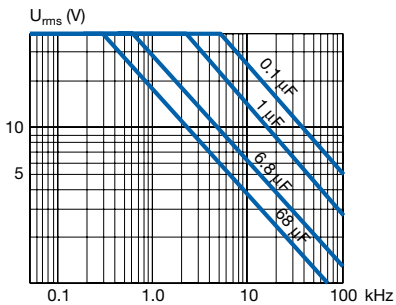
MMK5 50/30



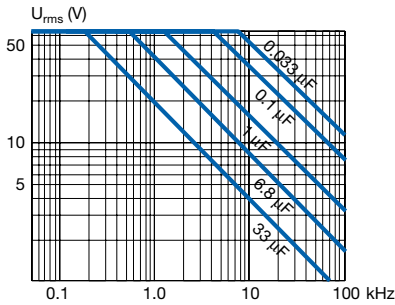
MMK5 63/40



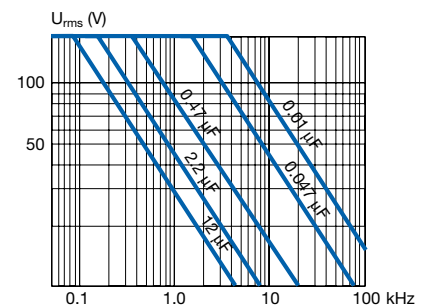
MMK5 100/63



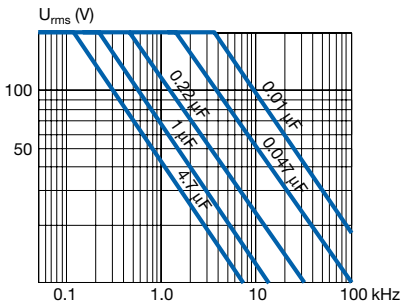
MMK7.5 ... 37.5 63/40



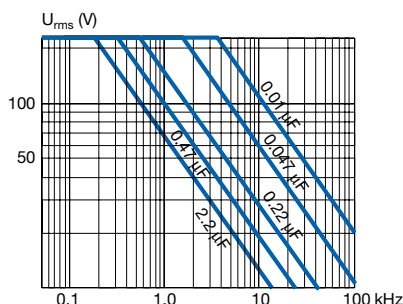
MMK7.5 ... 37.5 100/63



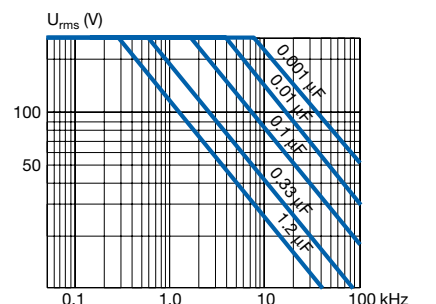
MMK7.5 ... 37.5 250/160



MMK7.5 ... 37.5 400/200



MMK7.5 ... 37.5 630/220



MMK7.5 ... 37.5 1000/250

ARTICLE TABLE

| Capaci- tance μF | Box code | Max dimen- sions in mm | | | Max dU/dt V/ μs | Article code | | Capaci- tance μF | Box code | Max dimen- sions in mm | | | Max dU/dt V/ μs | Article code |
|-----------------------------------|-------------|---------------------------|------|------|----------------------------------|-------------------------|----------------------------|-----------------------------------|-------------|---------------------------|------|---|----------------------------------|--------------|
| | | B | H | L | | | | | | B | H | L | | |
| 50 VDC/30 VAC | | | | | | | 50 VDC/30 VAC | | | | | | | |
| LEAD SPACING 5 MM | | | | | | | LEAD SPACING 7.5 MM | | | | | | | |
| 0.0010 | J01 | 2.5 | 6.5 | 7.2 | 12 | MMK5 102K50J01L4 BULK | 0.0068 | K00 | 2.5 | 6.0 | 10.0 | 5 | MMK7,5 682K50K00L4 BULK | |
| 0.0012 | J01 | 2.5 | 6.5 | 7.2 | 12 | MMK5 122K50J01L4 BULK | 0.0082 | K00 | 2.5 | 6.0 | 10.0 | 5 | MMK7,5 822K50K00L4 BULK | |
| 0.0015 | J01 | 2.5 | 6.5 | 7.2 | 12 | MMK5 152K50J01L4 BULK | 0.010 | K00 | 2.5 | 6.0 | 10.0 | 5 | MMK7,5 103K50K00L4 BULK | |
| 0.0018 | J01 | 2.5 | 6.5 | 7.2 | 12 | MMK5 182K50J01L4 BULK | 0.012 | K00 | 2.5 | 6.0 | 10.0 | 5 | MMK7,5 123K50K00L4 BULK | |
| 0.0022 | J01 | 2.5 | 6.5 | 7.2 | 12 | MMK5 222K50J01L4 BULK | 0.015 | K00 | 2.5 | 6.0 | 10.0 | 5 | MMK7,5 153K50K00L4 BULK | |
| 0.0027 | J01 | 2.5 | 6.5 | 7.2 | 12 | MMK5 272K50J01L4 BULK | 0.018 | K00 | 2.5 | 6.0 | 10.0 | 5 | MMK7,5 183K50K00L4 BULK | |
| 0.0033 | J01 | 2.5 | 6.5 | 7.2 | 12 | MMK5 332K50J01L4 BULK | 0.022 | K00 | 2.5 | 6.0 | 10.0 | 5 | MMK7,5 223K50K00L4 BULK | |
| 0.0039 | J01 | 2.5 | 6.5 | 7.2 | 12 | MMK5 392K50J01L4 BULK | 0.027 | K00 | 2.5 | 6.0 | 10.0 | 5 | MMK7,5 273K50K00L4 BULK | |
| 0.0047 | J01 | 2.5 | 6.5 | 7.2 | 12 | MMK5 472K50J01L4 BULK | 0.033 | K00 | 2.5 | 6.0 | 10.0 | 5 | MMK7,5 333K50K00L4 BULK | |
| 0.0056 | J01 | 2.5 | 6.5 | 7.2 | 12 | MMK5 562K50J01L4 BULK | 0.039 | K00 | 2.5 | 6.0 | 10.0 | 5 | MMK7,5 393K50K00L4 BULK | |
| 0.0068 | J01 | 2.5 | 6.5 | 7.2 | 12 | MMK5 682K50J01L4 BULK | 0.047 | K00 | 2.5 | 6.0 | 10.0 | 5 | MMK7,5 473K50K00L4 BULK | |
| 0.0082 | J01 | 2.5 | 6.5 | 7.2 | 12 | MMK5 822K50J01L4 BULK | 0.056 | K00 | 2.5 | 6.0 | 10.0 | 5 | MMK7,5 563K50K00L4 BULK | |
| 0.010 | J01 | 2.5 | 6.5 | 7.2 | 12 | MMK5 103K50J01L4 BULK | 0.068 | K00 | 2.5 | 6.0 | 10.0 | 5 | MMK7,5 683K50K00L4 BULK | |
| 0.012 | J01 | 2.5 | 6.5 | 7.2 | 12 | MMK5 123K50J01L4 BULK | 0.082 | K00 | 2.5 | 6.0 | 10.0 | 5 | MMK7,5 823K50K00L4 BULK | |
| 0.015 | J01 | 2.5 | 6.5 | 7.2 | 12 | MMK5 153K50J01L4 BULK | 0.10 | K00 | 2.5 | 6.0 | 10.0 | 5 | MMK7,5 104K50K00L4 BULK | |
| 0.018 | J01 | 2.5 | 6.5 | 7.2 | 12 | MMK5 183K50J01L4 BULK | 0.12 | K00 | 2.5 | 6.0 | 10.0 | 5 | MMK7,5 124K50K00L4 BULK | |
| 0.022 | J01 | 2.5 | 6.5 | 7.2 | 12 | MMK5 223K50J01L4 BULK | 0.15 | K00 | 2.5 | 6.0 | 10.0 | 5 | MMK7,5 154K50K00L4 BULK | |
| 0.027 | J01 | 2.5 | 6.5 | 7.2 | 12 | MMK5 273K50J01L4 BULK | 0.18 | K00 | 2.5 | 6.0 | 10.0 | 5 | MMK7,5 184K50K00L4 BULK | |
| 0.033 | J01 | 2.5 | 6.5 | 7.2 | 12 | MMK5 333K50J01L4 BULK | 0.22 | K00 | 2.5 | 6.0 | 10.0 | 5 | MMK7,5 224K50K00L4 BULK | |
| 0.039 | J01 | 2.5 | 6.5 | 7.2 | 12 | MMK5 393K50J01L4 BULK | 0.27 | K00 | 2.5 | 6.0 | 10.0 | 5 | MMK7,5 274K50K00L4 BULK | |
| 0.047 | J01 | 2.5 | 6.5 | 7.2 | 12 | MMK5 473K50J01L4 BULK | 0.33 | K00 | 2.5 | 6.0 | 10.0 | 5 | MMK7,5 334K50K00L4 BULK | |
| 0.056 | J01 | 2.5 | 6.5 | 7.2 | 12 | MMK5 563K50J01L4 BULK | 0.39 | K01 | 4.0 | 8.0 | 10.0 | 5 | MMK7,5 394K50K01L4 BULK | |
| 0.068 | J01 | 2.5 | 6.5 | 7.2 | 12 | MMK5 683K50J01L4 BULK | 0.47 | K01 | 4.0 | 8.0 | 10.0 | 5 | MMK7,5 474K50K01L4 BULK | |
| 0.082 | J01 | 2.5 | 6.5 | 7.2 | 12 | MMK5 823K50J01L4 BULK | 0.56 | K01 | 4.0 | 8.0 | 10.0 | 5 | MMK7,5 564K50K01L4 BULK | |
| 0.10 | J01 | 2.5 | 6.5 | 7.2 | 12 | MMK5 104K50J01L4 BULK | 0.68 | K01 | 4.0 | 8.0 | 10.0 | 5 | MMK7,5 684K50K01L4 BULK | |
| 0.12 | J01 | 2.5 | 6.5 | 7.2 | 12 | MMK5 124K50J01L4 BULK | 0.82 | K01 | 4.0 | 8.0 | 10.0 | 5 | MMK7,5 824K50K01L4 BULK | |
| 0.15 | J01 | 2.5 | 6.5 | 7.2 | 12 | MMK5 154K50J01L4 BULK | 1.0 | K01 | 4.0 | 8.0 | 10.0 | 5 | MMK7,5 105K50K01L4 BULK | |
| 0.18 | J01 | 2.5 | 6.5 | 7.2 | 12 | MMK5 184K50J01L4 BULK | 1.2 | K03 | 5.0 | 11.0 | 10.0 | 5 | MMK7,5 125K50K03L4 BULK | |
| 0.22 | J01 | 2.5 | 6.5 | 7.2 | 12 | MMK5 224K50J01L4 BULK | 1.5 | K03 | 5.0 | 11.0 | 10.0 | 5 | MMK7,5 155K50K03L4 BULK | |
| 0.27 | J01 | 2.5 | 6.5 | 7.2 | 12 | MMK5 274K50J01L4 BULK | 1.8 | K03 | 5.0 | 11.0 | 10.0 | 5 | MMK7,5 185K50K03L4 BULK | |
| 0.33 | J01 | 2.5 | 6.5 | 7.2 | 12 | MMK5 334K50J01L4 BULK | 2.2 | K04 | 6.0 | 12.0 | 10.5 | 5 | MMK7,5 225K50K04L4 BULK | |
| 0.39 | J01 | 2.5 | 6.5 | 7.2 | 12 | MMK5 394K50J01L4 BULK | 2.7 | K04 | 6.0 | 12.0 | 10.5 | 5 | MMK7,5 275K50K04L4 BULK | |
| 0.47 | J01 | 2.5 | 6.5 | 7.2 | 12 | MMK5 474K50J01L4 BULK | 3.3 | K04 | 6.0 | 12.0 | 10.5 | 5 | MMK7,5 335K50K04L4 BULK | |
| 0.56 | J02 | 3.5 | 8.0 | 7.2 | 12 | MMK5 564K50J02L4 BULK | | | | | | | | |
| 0.68 | J02 | 3.5 | 8.0 | 7.2 | 12 | MMK5 684K50J02L4 BULK | | | | | | | | |
| 0.82 | J02 | 3.5 | 8.0 | 7.2 | 12 | MMK5 824K50J02L4 BULK | | | | | | | | |
| 1.0 | J02 | 3.5 | 8.0 | 7.2 | 12 | MMK5 105K50J02L4 BULK | 1.0 | A01 | 4.0 | 9.0 | 13.0 | 4 | MMK10 105K50A01L4 BULK | |
| 1.2 | J03 | 4.5 | 9.0 | 7.2 | 12 | MMK5 125K50J03L4 BULK | 1.2 | A01 | 4.0 | 9.0 | 13.0 | 4 | MMK10 125K50A01L4 BULK | |
| 1.5 | J03 | 4.5 | 9.0 | 7.2 | 12 | MMK5 155K50J03L4 BULK | 1.5 | A02 | 4.5 | 10.5 | 13.0 | 4 | MMK10 155K50A02L4 BULK | |
| 1.8 | J04 | 5.0 | 10.0 | 7.2 | 12 | MMK5 185K50J04L4 BULK | 1.8 | A03 | 5.0 | 11.0 | 13.0 | 4 | MMK10 185K50A03L4 BULK | |
| 2.2 | J04 | 5.0 | 10.0 | 7.2 | 12 | MMK5 225K50J04L4 BULK | 2.2 | A03 | 5.0 | 11.0 | 13.0 | 4 | MMK10 225K50A03L4 BULK | |
| 2.7 | J05 | 6.0 | 11.0 | 7.2 | 12 | MMK5 275K50J05L4 BULK | 2.7 | A04 | 6.0 | 12.0 | 13.0 | 4 | MMK10 275K50A04L4 BULK | |
| 3.3 | J05 | 6.0 | 11.0 | 7.2 | 12 | MMK5 335K50J05L4 BULK | | | | | | | | |
| 3.9 | J06 | 7.2 | 13.0 | 7.2 | 12 | MMK5 395K50J06L4 BULK | | | | | | | | |
| 4.7 | J06 | 7.2 | 13.0 | 7.2 | 12 | MMK5 475K50J06L4 BULK | | | | | | | | |
| 5.6 | J06 | 7.2 | 13.0 | 7.2 | 12 | MMK5 565K50J06L4 BULK | | | | | | | | |
| 6.0 | J06 | 7.2 | 13.0 | 7.2 | 12 | MMK5 605K50J06L4 BULK | | | | | | | | |
| LEAD SPACING 7.5 MM | | | | | | | LEAD SPACING 10 MM | | | | | | | |
| 0.0010 | K00 | 2.5 | 6.0 | 10.0 | 5 | MMK7,5 102K50K00L4 BULK | 1.0 | A01 | 4.0 | 9.0 | 13.0 | 4 | MMK10 105K50A01L4 BULK | |
| 0.0012 | K00 | 2.5 | 6.0 | 10.0 | 5 | MMK7,5 122K50K00L4 BULK | 1.2 | A01 | 4.0 | 9.0 | 13.0 | 4 | MMK10 125K50A01L4 BULK | |
| 0.0015 | K00 | 2.5 | 6.0 | 10.0 | 5 | MMK7,5 152K50K00L4 BULK | 1.5 | A02 | 4.5 | 10.5 | 13.0 | 4 | MMK10 155K50A02L4 BULK | |
| 0.0018 | K00 | 2.5 | 6.0 | 10.0 | 5 | MMK7,5 182K50K00L4 BULK | 1.8 | A03 | 5.0 | 11.0 | 13.0 | 4 | MMK10 185K50A03L4 BULK | |
| 0.0022 | K00 | 2.5 | 6.0 | 10.0 | 5 | MMK7,5 222K50K00L4 BULK | 2.2 | A03 | 5.0 | 11.0 | 13.0 | 4 | MMK10 225K50A03L4 BULK | |
| 0.0027 | K00 | 2.5 | 6.0 | 10.0 | 5 | MMK7,5 272K50K00L4 BULK | 2.7 | A04 | 6.0 | 12.0 | 13.0 | 4 | MMK10 275K50A04L4 BULK | |
| 0.0033 | K00 | 2.5 | 6.0 | 10.0 | 5 | MMK7,5 332K50K00L4 BULK | | | | | | | | |
| 0.0039 | K00 | 2.5 | 6.0 | 10.0 | 5 | MMK7,5 392K50K00L4 BULK | | | | | | | | |
| 0.0047 | K00 | 2.5 | 6.0 | 10.0 | 5 | MMK7,5 472K50K00L4 BULK | | | | | | | | |
| 0.0056 | K00 | 2.5 | 6.0 | 10.0 | 5 | MMK7,5 562K50K00L4 BULK | | | | | | | | |
| LEAD SPACING 15 MM | | | | | | | LEAD SPACING 15 MM | | | | | | | |
| 2.0 | B04 | 5.5 | 10.5 | 18.0 | 3 | MMK15 205K50B04L4 BULK | 2.0 | B04 | 5.5 | 10.5 | 18.0 | 3 | MMK15 205K50B04L4 BULK | |
| 2.2 | B04 | 5.5 | 10.5 | 18.0 | 3 | MMK15 225K50B04L4 BULK | 2.2 | B04 | 5.5 | 10.5 | 18.0 | 3 | MMK15 225K50B04L4 BULK | |
| 2.7 | B05 | 5.5 | 12.5 | 18.0 | 3 | MMK15 275K50B05L4 BULK | 2.7 | B05 | 5.5 | 12.5 | 18.0 | 3 | MMK15 275K50B05L4 BULK | |
| 3.3 | B05 | 5.5 | 12.5 | 18.0 | 3 | MMK15 335K50B05L4 BULK | 3.3 | B05 | 5.5 | 12.5 | 18.0 | 3 | MMK15 335K50B05L4 BULK | |
| 3.9 | B10 | 6.5 | 12.5 | 18.0 | 3 | MMK15 395K50B10L4 BULK | 3.9 | B10 | 6.5 | 12.5 | 18.0 | 3 | MMK15 395K50B10L4 BULK | |
| 4.7 | B06 | 7.5 | 14.5 | 18.0 | 3 | MMK15 475K50B06L4 BULK | 4.7 | B06 | 7.5 | 14.5 | 18.0 | 3 | MMK15 475K50B06L4 BULK | |
| 5.6 | B06 | 7.5 | 14.5 | 18.0 | 3 | MMK15 565K50B06L4 BULK | 5.6 | B06 | 7.5 | 14.5 | 18.0 | 3 | MMK15 565K50B06L4 BULK | |
| 6.8 | B12 | 8.0 | 15.0 | 18.0 | 3 | MMK15 685K50B12L4 BULK | 6.8 | B12 | 8.0 | 15.0 | 18.0 | 3 | MMK15 685K50B12L4 BULK | |
| 8.2 | B11 | 8.5 | 16.0 | 18.0 | 3 | MMK15 825K50B11L4 BULK | 8.2 | B11 | 8.5 | 16.0 | 18.0 | 3 | MMK15 825K50B11L4 BULK | |
| 10.0 | B14 | 9.5 | 17.5 | 18.0 | 3 | MMK15 106K50B14L4 BULK | 10.0 | B14 | 9.5 | 17.5 | 18.0 | 3 | MMK15 106K50B14L4 BULK | |

ARTICLE TABLE

| Capacitance μF | Box code | Max dimensions in mm | | | Max dU/dt V/ μs | Article code | Capacitance μF | Box code | Max dimensions in mm | | | Max dU/dt V/ μs | Article code |
|----------------------------|----------|----------------------|------|------|-------------------------|----------------------------|---------------------------|----------|----------------------|------|------|-------------------------|-------------------------|
| | | B | H | L | | | | B | H | L | | | |
| 63 VDC/40 VAC | | | | | | 63 VDC/40 VAC | | | | | | | |
| LEAD SPACING 5 MM | | | | | | LEAD SPACING 7.5 MM | | | | | | | |
| 0.0010 | J01 | 2.5 | 6.5 | 7.2 | 25 | MMK5 102K63J01L4 BULK | 0.022 | K00 | 2.5 | 6.0 | 10.0 | 10 | MMK7,5 223K63K00L4 BULK |
| 0.0012 | J01 | 2.5 | 6.5 | 7.2 | 25 | MMK5 122K63J01L4 BULK | 0.027 | K00 | 2.5 | 6.0 | 10.0 | 10 | MMK7,5 273K63K00L4 BULK |
| 0.0015 | J01 | 2.5 | 6.5 | 7.2 | 25 | MMK5 152K63J01L4 BULK | 0.033 | K00 | 2.5 | 6.0 | 10.0 | 10 | MMK7,5 333K63K00L4 BULK |
| 0.0018 | J01 | 2.5 | 6.5 | 7.2 | 25 | MMK5 182K63J01L4 BULK | 0.039 | K00 | 2.5 | 6.0 | 10.0 | 10 | MMK7,5 393K63K00L4 BULK |
| 0.0022 | J01 | 2.5 | 6.5 | 7.2 | 25 | MMK5 222K63J01L4 BULK | 0.047 | K00 | 2.5 | 6.0 | 10.0 | 10 | MMK7,5 473K63K00L4 BULK |
| 0.0027 | J01 | 2.5 | 6.5 | 7.2 | 25 | MMK5 272K63J01L4 BULK | 0.056 | K00 | 2.5 | 6.0 | 10.0 | 10 | MMK7,5 563K63K00L4 BULK |
| 0.0033 | J01 | 2.5 | 6.5 | 7.2 | 25 | MMK5 332K63J01L4 BULK | 0.068 | K00 | 2.5 | 6.0 | 10.0 | 10 | MMK7,5 683K63K00L4 BULK |
| 0.0039 | J01 | 2.5 | 6.5 | 7.2 | 25 | MMK5 392K63J01L4 BULK | 0.082 | K00 | 2.5 | 6.0 | 10.0 | 10 | MMK7,5 823K63K00L4 BULK |
| 0.0047 | J01 | 2.5 | 6.5 | 7.2 | 25 | MMK5 472K63J01L4 BULK | 0.10 | K00 | 2.5 | 6.0 | 10.0 | 10 | MMK7,5 104K63K00L4 BULK |
| 0.0056 | J01 | 2.5 | 6.5 | 7.2 | 25 | MMK5 562K63J01L4 BULK | 0.12 | K00 | 2.5 | 6.0 | 10.0 | 10 | MMK7,5 124K63K00L4 BULK |
| 0.0068 | J01 | 2.5 | 6.5 | 7.2 | 25 | MMK5 682K63J01L4 BULK | 0.15 | K00 | 2.5 | 6.0 | 10.0 | 10 | MMK7,5 154K63K00L4 BULK |
| 0.0082 | J01 | 2.5 | 6.5 | 7.2 | 25 | MMK5 822K63J01L4 BULK | 0.18 | K00 | 2.5 | 6.0 | 10.0 | 10 | MMK7,5 184K63K00L4 BULK |
| 0.010 | J01 | 2.5 | 6.5 | 7.2 | 25 | MMK5 103K63J01L4 BULK | 0.22 | K01 | 4.0 | 8.0 | 10.0 | 10 | MMK7,5 224K63K01L4 BULK |
| 0.012 | J01 | 2.5 | 6.5 | 7.2 | 25 | MMK5 123K63J01L4 BULK | 0.27 | K01 | 4.0 | 8.0 | 10.0 | 10 | MMK7,5 274K63K01L4 BULK |
| 0.015 | J01 | 2.5 | 6.5 | 7.2 | 25 | MMK5 153K63J01L4 BULK | 0.33 | K01 | 4.0 | 8.0 | 10.0 | 10 | MMK7,5 334K63K01L4 BULK |
| 0.018 | J01 | 2.5 | 6.5 | 7.2 | 25 | MMK5 183K63J01L4 BULK | 0.39 | K01 | 4.0 | 8.0 | 10.0 | 10 | MMK7,5 394K63K01L4 BULK |
| 0.022 | J01 | 2.5 | 6.5 | 7.2 | 25 | MMK5 223K63J01L4 BULK | 0.47 | K01 | 4.0 | 8.0 | 10.0 | 10 | MMK7,5 474K63K01L4 BULK |
| 0.027 | J01 | 2.5 | 6.5 | 7.2 | 25 | MMK5 273K63J01L4 BULK | 0.56 | K03 | 5.0 | 11.0 | 10.0 | 10 | MMK7,5 564K63K03L4 BULK |
| 0.033 | J01 | 2.5 | 6.5 | 7.2 | 25 | MMK5 333K63J01L4 BULK | 0.68 | K03 | 5.0 | 11.0 | 10.0 | 10 | MMK7,5 684K63K03L4 BULK |
| 0.039 | J01 | 2.5 | 6.5 | 7.2 | 25 | MMK5 393K63J01L4 BULK | 0.82 | K03 | 5.0 | 11.0 | 10.0 | 10 | MMK7,5 824K63K03L4 BULK |
| 0.047 | J01 | 2.5 | 6.5 | 7.2 | 25 | MMK5 473K63J01L4 BULK | 1.0 | K03 | 5.0 | 11.0 | 10.0 | 10 | MMK7,5 105K63K03L4 BULK |
| 0.056 | J01 | 2.5 | 6.5 | 7.2 | 25 | MMK5 563K63J01L4 BULK | 1.2 | K04 | 6.0 | 12.0 | 10.5 | 10 | MMK7,5 125K63K04L4 BULK |
| 0.068 | J01 | 2.5 | 6.5 | 7.2 | 25 | MMK5 683K63J01L4 BULK | 1.5 | K04 | 6.0 | 12.0 | 10.5 | 10 | MMK7,5 155K63K04L4 BULK |
| 0.082 | J01 | 2.5 | 6.5 | 7.2 | 25 | MMK5 823K63J01L4 BULK | | | | | | | |
| 0.10 | J01 | 2.5 | 6.5 | 7.2 | 25 | MMK5 104K63J01L4 BULK | LEAD SPACING 10 MM | | | | | | |
| 0.12 | J01 | 2.5 | 6.5 | 7.2 | 25 | MMK5 124K63J01L4 BULK | 0.0010 | A01 | 4.0 | 9.0 | 13.0 | 8 | MMK10 102K63A01L4 BULK |
| 0.15 | J01 | 2.5 | 6.5 | 7.2 | 25 | MMK5 154K63J01L4 BULK | 0.0012 | A01 | 4.0 | 9.0 | 13.0 | 8 | MMK10 122K63A01L4 BULK |
| 0.18 | J01 | 2.5 | 6.5 | 7.2 | 25 | MMK5 184K63J01L4 BULK | 0.0015 | A01 | 4.0 | 9.0 | 13.0 | 8 | MMK10 152K63A01L4 BULK |
| 0.22 | J01 | 2.5 | 6.5 | 7.2 | 25 | MMK5 224K63J01L4 BULK | 0.0018 | A01 | 4.0 | 9.0 | 13.0 | 8 | MMK10 182K63A01L4 BULK |
| 0.27 | J02 | 3.5 | 8.0 | 7.2 | 25 | MMK5 274K63J02L4 BULK | 0.0022 | A01 | 4.0 | 9.0 | 13.0 | 8 | MMK10 222K63A01L4 BULK |
| 0.33 | J02 | 3.5 | 8.0 | 7.2 | 25 | MMK5 334K63J02L4 BULK | 0.0027 | A01 | 4.0 | 9.0 | 13.0 | 8 | MMK10 272K63A01L4 BULK |
| 0.39 | J02 | 3.5 | 8.0 | 7.2 | 25 | MMK5 394K63J02L4 BULK | 0.0033 | A01 | 4.0 | 9.0 | 13.0 | 8 | MMK10 332K63A01L4 BULK |
| 0.47 | J02 | 3.5 | 8.0 | 7.2 | 25 | MMK5 474K63J02L4 BULK | 0.0039 | A01 | 4.0 | 9.0 | 13.0 | 8 | MMK10 392K63A01L4 BULK |
| 0.56 | J03 | 4.5 | 9.0 | 7.2 | 25 | MMK5 564K63J03L4 BULK | 0.0047 | A01 | 4.0 | 9.0 | 13.0 | 8 | MMK10 472K63A01L4 BULK |
| 0.68 | J03 | 4.5 | 9.0 | 7.2 | 25 | MMK5 684K63J03L4 BULK | 0.0056 | A01 | 4.0 | 9.0 | 13.0 | 8 | MMK10 562K63A01L4 BULK |
| 0.82 | J04 | 5.0 | 10.0 | 7.2 | 25 | MMK5 824K63J04L4 BULK | 0.0068 | A01 | 4.0 | 9.0 | 13.0 | 8 | MMK10 682K63A01L4 BULK |
| 1.0 | J04 | 5.0 | 10.0 | 7.2 | 25 | MMK5 105K63J04L4 BULK | 0.0078 | A01 | 4.0 | 9.0 | 13.0 | 8 | MMK10 782K63A01L4 BULK |
| 1.2 | J05 | 6.0 | 11.0 | 7.2 | 25 | MMK5 125K63J05L4 BULK | 0.0082 | A01 | 4.0 | 9.0 | 13.0 | 8 | MMK10 822K63A01L4 BULK |
| 1.5 | J05 | 6.0 | 11.0 | 7.2 | 25 | MMK5 155K63J05L4 BULK | 0.010 | A01 | 4.0 | 9.0 | 13.0 | 8 | MMK10 103K63A01L4 BULK |
| 1.8 | J06 | 7.2 | 13.0 | 7.2 | 25 | MMK5 185K63J06L4 BULK | 0.012 | A01 | 4.0 | 9.0 | 13.0 | 8 | MMK10 123K63A01L4 BULK |
| 2.2 | J06 | 7.2 | 13.0 | 7.2 | 25 | MMK5 225K63J06L4 BULK | 0.015 | A01 | 4.0 | 9.0 | 13.0 | 8 | MMK10 153K63A01L4 BULK |
| LEAD SPACING 7.5 MM | | | | | | 0.018 | A01 | 4.0 | 9.0 | 13.0 | 8 | MMK10 183K63A01L4 BULK | |
| 0.0010 | K00 | 2.5 | 6.0 | 10.0 | 10 | MMK7,5 102K63K00L4 BULK | 0.022 | A01 | 4.0 | 9.0 | 13.0 | 8 | MMK10 223K63A01L4 BULK |
| 0.0012 | K00 | 2.5 | 6.0 | 10.0 | 10 | MMK7,5 122K63K00L4 BULK | 0.027 | A01 | 4.0 | 9.0 | 13.0 | 8 | MMK10 273K63A01L4 BULK |
| 0.0015 | K00 | 2.5 | 6.0 | 10.0 | 10 | MMK7,5 152K63K00L4 BULK | 0.033 | A01 | 4.0 | 9.0 | 13.0 | 8 | MMK10 333K63A01L4 BULK |
| 0.0018 | K00 | 2.5 | 6.0 | 10.0 | 10 | MMK7,5 182K63K00L4 BULK | 0.039 | A01 | 4.0 | 9.0 | 13.0 | 8 | MMK10 393K63A01L4 BULK |
| 0.0022 | K00 | 2.5 | 6.0 | 10.0 | 10 | MMK7,5 222K63K00L4 BULK | 0.047 | A01 | 4.0 | 9.0 | 13.0 | 8 | MMK10 473K63A01L4 BULK |
| 0.0027 | K00 | 2.5 | 6.0 | 10.0 | 10 | MMK7,5 272K63K00L4 BULK | 0.056 | A01 | 4.0 | 9.0 | 13.0 | 8 | MMK10 563K63A01L4 BULK |
| 0.0033 | K00 | 2.5 | 6.0 | 10.0 | 10 | MMK7,5 332K63K00L4 BULK | 0.068 | A01 | 4.0 | 9.0 | 13.0 | 8 | MMK10 683K63A01L4 BULK |
| 0.0039 | K00 | 2.5 | 6.0 | 10.0 | 10 | MMK7,5 392K63K00L4 BULK | 0.082 | A01 | 4.0 | 9.0 | 13.0 | 8 | MMK10 823K63A01L4 BULK |
| 0.0047 | K00 | 2.5 | 6.0 | 10.0 | 10 | MMK7,5 472K63K00L4 BULK | 0.10 | A01 | 4.0 | 9.0 | 13.0 | 8 | MMK10 104K63A01L4 BULK |
| 0.0056 | K00 | 2.5 | 6.0 | 10.0 | 10 | MMK7,5 562K63K00L4 BULK | 0.12 | A01 | 4.0 | 9.0 | 13.0 | 8 | MMK10 124K63A01L4 BULK |
| 0.0068 | K00 | 2.5 | 6.0 | 10.0 | 10 | MMK7,5 682K63K00L4 BULK | 0.15 | A01 | 4.0 | 9.0 | 13.0 | 8 | MMK10 154K63A01L4 BULK |
| 0.0082 | K00 | 2.5 | 6.0 | 10.0 | 10 | MMK7,5 822K63K00L4 BULK | 0.18 | A01 | 4.0 | 9.0 | 13.0 | 8 | MMK10 184K63A01L4 BULK |
| 0.010 | K00 | 2.5 | 6.0 | 10.0 | 10 | MMK7,5 103K63K00L4 BULK | 0.22 | A01 | 4.0 | 9.0 | 13.0 | 8 | MMK10 224K63A01L4 BULK |
| 0.012 | K00 | 2.5 | 6.0 | 10.0 | 10 | MMK7,5 123K63K00L4 BULK | 0.27 | A01 | 4.0 | 9.0 | 13.0 | 8 | MMK10 274K63A01L4 BULK |
| 0.015 | K00 | 2.5 | 6.0 | 10.0 | 10 | MMK7,5 153K63K00L4 BULK | 0.33 | A01 | 4.0 | 9.0 | 13.0 | 8 | MMK10 334K63A01L4 BULK |
| 0.018 | K00 | 2.5 | 6.0 | 10.0 | 10 | MMK7,5 183K63K00L4 BULK | 0.39 | A01 | 4.0 | 9.0 | 13.0 | 8 | MMK10 394K63A01L4 BULK |
| | | | | | | | 0.47 | A01 | 4.0 | 9.0 | 13.0 | 8 | MMK10 474K63A01L4 BULK |

ARTICLE TABLE

Capaci- Box Max dimen- Max
tance code sions in mm dU/dt
µF B H L V/µs Article code

Capaci- Box Max dimen- Max
tance code sions in mm dU/dt
µF B H L V/µs Article code

63 VDC/40 VAC

63 VDC/40 VAC

LEAD SPACING 10 MM

LEAD SPACING 37.5 MM

| | | | | | | |
|------|-----|-----|------|------|---|------------------------|
| 0.56 | A01 | 4.0 | 9.0 | 13.0 | 8 | MMK10 564K63A01L4 BULK |
| 0.68 | A01 | 4.0 | 9.0 | 13.0 | 8 | MMK10 684K63A01L4 BULK |
| 0.82 | A01 | 4.0 | 9.0 | 13.0 | 8 | MMK10 824K63A01L4 BULK |
| 1.0 | A02 | 4.5 | 10.5 | 13.0 | 8 | MMK10 105K63A02L4 BULK |
| 1.2 | A02 | 4.5 | 10.5 | 13.0 | 8 | MMK10 125K63A02L4 BULK |
| 1.5 | A03 | 5.0 | 11.0 | 13.0 | 8 | MMK10 155K63A03L4 BULK |
| 1.8 | A04 | 6.0 | 12.0 | 13.0 | 8 | MMK10 185K63A04L4 BULK |
| 2.2 | A04 | 6.0 | 12.0 | 13.0 | 8 | MMK10 225K63A04L4 BULK |

| | | | | | | |
|----|-----|------|------|------|---|--------------------------|
| 27 | R05 | 13.0 | 24.0 | 41.0 | 1 | MMK37,5 276K63R05L4 TRAY |
| 33 | R04 | 15.0 | 26.0 | 41.0 | 1 | MMK37,5 336K63R04L4 TRAY |
| 39 | R04 | 15.0 | 26.0 | 41.0 | 1 | MMK37,5 396K63R04L4 TRAY |
| 47 | R02 | 16.5 | 32.0 | 41.0 | 1 | MMK37,5 476K63R02L4 TRAY |
| 56 | R03 | 19.0 | 36.0 | 41.0 | 1 | MMK37,5 566K63R03L4 TRAY |
| 68 | R03 | 19.0 | 36.0 | 41.0 | 1 | MMK37,5 686K63R03L4 TRAY |
| 82 | R06 | 21.0 | 38.0 | 41.0 | 1 | MMK37,5 826K63R06L4 TRAY |

LEAD SPACING 15 MM

100 VDC/63 VAC

LEAD SPACING 5 MM

| | | | | | | |
|------|-----|-----|------|------|---|------------------------|
| 0.68 | B04 | 5.5 | 10.5 | 18.0 | 5 | MMK15 684K63B04L4 BULK |
| 0.82 | B04 | 5.5 | 10.5 | 18.0 | 5 | MMK15 824K63B04L4 BULK |
| 1.0 | B04 | 5.5 | 10.5 | 18.0 | 5 | MMK15 105K63B04L4 BULK |
| 1.2 | B04 | 5.5 | 10.5 | 18.0 | 5 | MMK15 125K63B04L4 BULK |
| 1.5 | B04 | 5.5 | 10.5 | 18.0 | 5 | MMK15 155K63B04L4 BULK |
| 1.8 | B04 | 5.5 | 10.5 | 18.0 | 5 | MMK15 185K63B04L4 BULK |
| 2.0 | B05 | 5.5 | 12.5 | 18.0 | 5 | MMK15 205K63B05L4 BULK |
| 2.2 | B05 | 5.5 | 12.5 | 18.0 | 5 | MMK15 225K63B05L4 BULK |
| 2.7 | B10 | 6.5 | 12.5 | 18.0 | 5 | MMK15 275K63B10L4 BULK |
| 3.3 | B10 | 6.5 | 12.5 | 18.0 | 5 | MMK15 335K63B10L4 BULK |
| 3.9 | B06 | 7.5 | 14.5 | 18.0 | 5 | MMK15 395K63B06L4 BULK |
| 4.7 | B06 | 7.5 | 14.5 | 18.0 | 5 | MMK15 475K63B06L4 BULK |
| 5.6 | B11 | 8.5 | 16.0 | 18.0 | 5 | MMK15 565K63B11L4 BULK |
| 6.8 | B14 | 9.5 | 17.5 | 18.0 | 5 | MMK15 685K63B14L4 BULK |

| | | | | | | |
|--------|-----|-----|------|-----|----|------------------------|
| 0.0010 | J01 | 2.5 | 6.5 | 7.2 | 30 | MMK5 102K100J01L4 BULK |
| 0.0012 | J01 | 2.5 | 6.5 | 7.2 | 30 | MMK5 122K100J01L4 BULK |
| 0.0015 | J01 | 2.5 | 6.5 | 7.2 | 30 | MMK5 152K100J01L4 BULK |
| 0.0018 | J01 | 2.5 | 6.5 | 7.2 | 30 | MMK5 182K100J01L4 BULK |
| 0.0022 | J01 | 2.5 | 6.5 | 7.2 | 30 | MMK5 222K100J01L4 BULK |
| 0.0027 | J01 | 2.5 | 6.5 | 7.2 | 30 | MMK5 272K100J01L4 BULK |
| 0.0033 | J01 | 2.5 | 6.5 | 7.2 | 30 | MMK5 332K100J01L4 BULK |
| 0.0039 | J01 | 2.5 | 6.5 | 7.2 | 30 | MMK5 392K100J01L4 BULK |
| 0.0047 | J01 | 2.5 | 6.5 | 7.2 | 30 | MMK5 472K100J01L4 BULK |
| 0.0056 | J01 | 2.5 | 6.5 | 7.2 | 30 | MMK5 562K100J01L4 BULK |
| 0.0068 | J01 | 2.5 | 6.5 | 7.2 | 30 | MMK5 682K100J01L4 BULK |
| 0.0082 | J01 | 2.5 | 6.5 | 7.2 | 30 | MMK5 822K100J01L4 BULK |
| 0.010 | J01 | 2.5 | 6.5 | 7.2 | 30 | MMK5 103K100J01L4 BULK |
| 0.012 | J01 | 2.5 | 6.5 | 7.2 | 30 | MMK5 123K100J01L4 BULK |
| 0.015 | J01 | 2.5 | 6.5 | 7.2 | 30 | MMK5 153K100J01L4 BULK |
| 0.018 | J01 | 2.5 | 6.5 | 7.2 | 30 | MMK5 183K100J01L4 BULK |
| 0.022 | J01 | 2.5 | 6.5 | 7.2 | 30 | MMK5 223K100J01L4 BULK |
| 0.027 | J01 | 2.5 | 6.5 | 7.2 | 30 | MMK5 273K100J01L4 BULK |
| 0.033 | J01 | 2.5 | 6.5 | 7.2 | 30 | MMK5 333K100J01L4 BULK |
| 0.039 | J01 | 2.5 | 6.5 | 7.2 | 30 | MMK5 393K100J01L4 BULK |
| 0.047 | J01 | 2.5 | 6.5 | 7.2 | 30 | MMK5 473K100J01L4 BULK |
| 0.056 | J01 | 2.5 | 6.5 | 7.2 | 30 | MMK5 563K100J01L4 BULK |
| 0.068 | J01 | 2.5 | 6.5 | 7.2 | 30 | MMK5 683K100J01L4 BULK |
| 0.082 | J01 | 2.5 | 6.5 | 7.2 | 30 | MMK5 823K100J01L4 BULK |
| 0.10 | J01 | 2.5 | 6.5 | 7.2 | 30 | MMK5 104K100J01L4 BULK |
| 0.12 | J02 | 3.5 | 8.0 | 7.2 | 30 | MMK5 124K100J02L4 BULK |
| 0.15 | J02 | 3.5 | 8.0 | 7.2 | 30 | MMK5 154K100J02L4 BULK |
| 0.18 | J02 | 3.5 | 8.0 | 7.2 | 30 | MMK5 184K100J02L4 BULK |
| 0.22 | J02 | 3.5 | 8.0 | 7.2 | 30 | MMK5 224K100J02L4 BULK |
| 0.27 | J03 | 4.5 | 9.0 | 7.2 | 30 | MMK5 274K100J03L4 BULK |
| 0.33 | J03 | 4.5 | 9.0 | 7.2 | 30 | MMK5 334K100J03L4 BULK |
| 0.39 | J04 | 5.0 | 10.0 | 7.2 | 30 | MMK5 394K100J04L4 BULK |
| 0.47 | J04 | 5.0 | 10.0 | 7.2 | 30 | MMK5 474K100J04L4 BULK |
| 0.56 | J05 | 6.0 | 11.0 | 7.2 | 30 | MMK5 564K100J05L4 BULK |
| 0.68 | J05 | 6.0 | 11.0 | 7.2 | 30 | MMK5 684K100J05L4 BULK |
| 0.82 | J06 | 7.2 | 13.0 | 7.2 | 30 | MMK5 824K100J06L4 BULK |
| 1.0 | J06 | 7.2 | 13.0 | 7.2 | 30 | MMK5 105K100J06L4 BULK |

LEAD SPACING 22.5 MM

| | | | | | | |
|-----|-----|------|------|------|---|--------------------------|
| 3.3 | D13 | 6.5 | 14.5 | 26.0 | 3 | MMK22,5 335K63D13L4 TRAY |
| 3.9 | D13 | 6.5 | 14.5 | 26.0 | 3 | MMK22,5 395K63D13L4 TRAY |
| 4.7 | D13 | 6.5 | 14.5 | 26.0 | 3 | MMK22,5 475K63D13L4 TRAY |
| 5.6 | D17 | 7.0 | 16.5 | 26.0 | 3 | MMK22,5 565K63D17L4 TRAY |
| 6.8 | D17 | 7.0 | 16.5 | 26.0 | 3 | MMK22,5 685K63D17L4 TRAY |
| 8.2 | D14 | 8.0 | 16.0 | 26.0 | 3 | MMK22,5 825K63D14L4 TRAY |
| 10 | D15 | 9.0 | 18.5 | 26.0 | 3 | MMK22,5 106K63D15L4 TRAY |
| 12 | D18 | 10.5 | 19.0 | 26.0 | 3 | MMK22,5 126K63D18L4 TRAY |
| 15 | D16 | 11.0 | 21.5 | 26.0 | 3 | MMK22,5 156K63D16L4 TRAY |
| 18 | D20 | 13.5 | 23.0 | 26.0 | 3 | MMK22,5 186K63D20L4 TRAY |
| 22 | D19 | 15.5 | 24.5 | 26.0 | 3 | MMK22,5 226K63D19L4 TRAY |

LEAD SPACING 27.5 MM

| | | | | | | |
|-----|-----|------|------|------|---|--------------------------|
| 8.2 | F11 | 10.5 | 20.5 | 31.5 | 2 | MMK27,5 825K63F11L4 TRAY |
| 10 | F11 | 10.5 | 20.5 | 31.5 | 2 | MMK27,5 106K63F11L4 TRAY |
| 12 | F11 | 10.5 | 20.5 | 31.5 | 2 | MMK27,5 126K63F11L4 TRAY |
| 15 | F12 | 11.5 | 22.5 | 31.5 | 2 | MMK27,5 156K63F12L4 TRAY |
| 15 | F17 | 21.0 | 12.5 | 31.5 | 2 | MMK27,5 156K63F17L4 TRAY |
| 18 | F12 | 11.5 | 22.5 | 31.5 | 2 | MMK27,5 186K63F12L4 TRAY |
| 22 | F13 | 14.5 | 24.5 | 31.5 | 2 | MMK27,5 226K63F13L4 TRAY |
| 27 | F14 | 17.5 | 28.0 | 31.5 | 2 | MMK27,5 276K63F14L4 TRAY |
| 33 | F14 | 17.5 | 28.0 | 31.5 | 2 | MMK27,5 336K63F14L4 TRAY |
| 33 | F19 | 27.5 | 16.0 | 31.5 | 2 | MMK27,5 336K63F19L4 TRAY |
| 39 | F15 | 19.0 | 29.0 | 31.5 | 2 | MMK27,5 396K63F15L4 TRAY |
| 47 | F16 | 21.0 | 30.0 | 31.5 | 2 | MMK27,5 476K63F16L4 TRAY |
| 47 | F18 | 31.0 | 19.0 | 31.5 | 2 | MMK27,5 476K63F18L4 TRAY |

LEAD SPACING 7.5 MM

| | | | | | | |
|--------|-----|-----|-----|------|----|--------------------------|
| 0.0010 | K00 | 2.5 | 6.0 | 10.0 | 20 | MMK7,5 102K100K00L4 BULK |
| 0.0012 | K00 | 2.5 | 6.0 | 10.0 | 20 | MMK7,5 122K100K00L4 BULK |
| 0.0015 | K00 | 2.5 | 6.0 | 10.0 | 20 | MMK7,5 152K100K00L4 BULK |
| 0.0018 | K00 | 2.5 | 6.0 | 10.0 | 20 | MMK7,5 182K100K00L4 BULK |
| 0.0022 | K00 | 2.5 | 6.0 | 10.0 | 20 | MMK7,5 222K100K00L4 BULK |
| 0.0027 | K00 | 2.5 | 6.0 | 10.0 | 20 | MMK7,5 272K100K00L4 BULK |
| 0.0033 | K00 | 2.5 | 6.0 | 10.0 | 20 | MMK7,5 332K100K00L4 BULK |
| 0.0039 | K00 | 2.5 | 6.0 | 10.0 | 20 | MMK7,5 392K100K00L4 BULK |
| 0.0047 | K00 | 2.5 | 6.0 | 10.0 | 20 | MMK7,5 472K100K00L4 BULK |
| 0.0056 | K00 | 2.5 | 6.0 | 10.0 | 20 | MMK7,5 562K100K00L4 BULK |

ARTICLE TABLE

| Capacitance µF | Box code | Max dimensions in mm | | | Max dU/dt V/µs | Article code | | | | | | | |
|----------------------------|----------|----------------------|------|------|-------------------|--------------------------|-----------------------------|----------|----------------------|------|------|-------------------|---------------------------|
| | | B | H | L | | | Capacitance µF | Box code | Max dimensions in mm | | | Max dU/dt V/µs | Article code |
| 100 VDC/63 VAC | | | | | | | 100 VDC/63 VAC | | | | | | |
| LEAD SPACING 7.5 MM | | | | | | | LEAD SPACING 10 MM | | | | | | |
| 0.0068 | K00 | 2.5 | 6.0 | 10.0 | 20 | MMK7,5 682K100K00L4 BULK | 0.39 | A01 | 4.0 | 9.0 | 13.0 | 12 | MMK10 394K100A01L4 BULK |
| 0.0082 | K00 | 2.5 | 6.0 | 10.0 | 20 | MMK7,5 822K100K00L4 BULK | 0.47 | A01 | 4.0 | 9.0 | 13.0 | 12 | MMK10 474K100A01L4 BULK |
| 0.010 | K00 | 2.5 | 6.0 | 10.0 | 20 | MMK7,5 103K100K00L4 BULK | 0.56 | A02 | 4.5 | 10.5 | 13.0 | 12 | MMK10 564K100A02L4 BULK |
| 0.012 | K00 | 2.5 | 6.0 | 10.0 | 20 | MMK7,5 123K100K00L4 BULK | 0.68 | A02 | 4.5 | 10.5 | 13.0 | 12 | MMK10 684K100A02L4 BULK |
| 0.015 | K00 | 2.5 | 6.0 | 10.0 | 20 | MMK7,5 153K100K00L4 BULK | 0.82 | A02 | 4.5 | 10.5 | 13.0 | 12 | MMK10 824K100A02L4 BULK |
| 0.018 | K00 | 2.5 | 6.0 | 10.0 | 20 | MMK7,5 183K100K00L4 BULK | 1.0 | A04 | 6.0 | 12.0 | 13.0 | 12 | MMK10 105K100A04L4 BULK |
| 0.022 | K00 | 2.5 | 6.0 | 10.0 | 20 | MMK7,5 223K100K00L4 BULK | LEAD SPACING 15 MM | | | | | | |
| 0.027 | K00 | 2.5 | 6.0 | 10.0 | 20 | MMK7,5 273K100K00L4 BULK | 0.27 | B04 | 5.5 | 10.5 | 18.0 | 8 | MMK15 274K100B04L4 BULK |
| 0.033 | K00 | 2.5 | 6.0 | 10.0 | 20 | MMK7,5 333K100K00L4 BULK | 0.33 | B04 | 5.5 | 10.5 | 18.0 | 8 | MMK15 334K100B04L4 BULK |
| 0.039 | K00 | 2.5 | 6.0 | 10.0 | 20 | MMK7,5 393K100K00L4 BULK | 0.39 | B04 | 5.5 | 10.5 | 18.0 | 8 | MMK15 394K100B04L4 BULK |
| 0.047 | K00 | 2.5 | 6.0 | 10.0 | 20 | MMK7,5 473K100K00L4 BULK | 0.47 | B04 | 5.5 | 10.5 | 18.0 | 8 | MMK15 474K100B04L4 BULK |
| 0.056 | K00 | 2.5 | 6.0 | 10.0 | 20 | MMK7,5 563K100K00L4 BULK | 0.56 | B04 | 5.5 | 10.5 | 18.0 | 8 | MMK15 564K100B04L4 BULK |
| 0.068 | K00 | 2.5 | 6.0 | 10.0 | 20 | MMK7,5 683K100K00L4 BULK | 0.68 | B04 | 5.5 | 10.5 | 18.0 | 8 | MMK15 684K100B04L4 BULK |
| 0.082 | K00 | 2.5 | 6.0 | 10.0 | 20 | MMK7,5 823K100K00L4 BULK | 0.82 | B04 | 5.5 | 10.5 | 18.0 | 8 | MMK15 824K100B04L4 BULK |
| 0.10 | K00 | 2.5 | 6.0 | 10.0 | 20 | MMK7,5 104K100K00L4 BULK | 1.0 | B04 | 5.5 | 10.5 | 18.0 | 8 | MMK15 105K100B04L4 BULK |
| 0.12 | K01 | 4.0 | 8.0 | 10.0 | 20 | MMK7,5 124K100K01L4 BULK | 1.2 | B05 | 5.5 | 12.5 | 18.0 | 8 | MMK15 125K100B05L4 BULK |
| 0.15 | K01 | 4.0 | 8.0 | 10.0 | 20 | MMK7,5 154K100K01L4 BULK | 1.5 | B10 | 6.5 | 12.5 | 18.0 | 8 | MMK15 155K100B10L4 BULK |
| 0.18 | K01 | 4.0 | 8.0 | 10.0 | 20 | MMK7,5 184K100K01L4 BULK | 1.8 | B06 | 7.5 | 14.5 | 18.0 | 8 | MMK15 185K100B06L4 BULK |
| 0.22 | K01 | 4.0 | 8.0 | 10.0 | 20 | MMK7,5 224K100K01L4 BULK | 2.2 | B06 | 7.5 | 14.5 | 18.0 | 8 | MMK15 225K100B06L4 BULK |
| 0.27 | K01 | 4.0 | 8.0 | 10.0 | 20 | MMK7,5 274K100K01L4 BULK | 2.7 | B12 | 8.0 | 15.0 | 18.0 | 8 | MMK15 275K100B12L4 BULK |
| 0.33 | K03 | 5.0 | 11.0 | 10.0 | 20 | MMK7,5 334K100K03L4 BULK | 3.3 | B11 | 8.5 | 16.0 | 18.0 | 8 | MMK15 335K100B11L4 BULK |
| 0.39 | K03 | 5.0 | 11.0 | 10.0 | 20 | MMK7,5 394K100K03L4 BULK | 3.9 | B14 | 9.5 | 17.5 | 18.0 | 8 | MMK15 395K100B14L4 BULK |
| 0.47 | K03 | 5.0 | 11.0 | 10.0 | 20 | MMK7,5 474K100K03L4 BULK | LEAD SPACING 22.5 MM | | | | | | |
| 0.56 | K03 | 5.0 | 11.0 | 10.0 | 20 | MMK7,5 564K100K03L4 BULK | 1.2 | D13 | 6.5 | 14.5 | 26.0 | 5 | MMK22,5 125K100D13L4 TRAY |
| 0.68 | K03 | 5.0 | 11.0 | 10.0 | 20 | MMK7,5 684K100K03L4 BULK | 1.5 | D13 | 6.5 | 14.5 | 26.0 | 5 | MMK22,5 155K100D13L4 TRAY |
| 0.82 | K04 | 6.0 | 12.0 | 10.5 | 20 | MMK7,5 824K100K04L4 BULK | 1.8 | D13 | 6.5 | 14.5 | 26.0 | 5 | MMK22,5 185K100D13L4 TRAY |
| 1.0 | K04 | 6.0 | 12.0 | 10.5 | 20 | MMK7,5 105K100K04L4 BULK | 2.0 | D13 | 6.5 | 14.5 | 26.0 | 5 | MMK22,5 205K100D13L4 TRAY |
| LEAD SPACING 10 MM | | | | | | | 2.2 | D13 | 6.5 | 14.5 | 26.0 | 5 | MMK22,5 225K100D13L4 TRAY |
| 0.0010 | A01 | 4.0 | 9.0 | 13.0 | 12 | MMK10 102K100A01L4 BULK | 2.7 | D13 | 6.5 | 14.5 | 26.0 | 5 | MMK22,5 275K100D13L4 TRAY |
| 0.0012 | A01 | 4.0 | 9.0 | 13.0 | 12 | MMK10 122K100A01L4 BULK | 3.3 | D17 | 7.0 | 16.5 | 26.0 | 5 | MMK22,5 335K100D17L4 TRAY |
| 0.0015 | A01 | 4.0 | 9.0 | 13.0 | 12 | MMK10 152K100A01L4 BULK | 3.9 | D14 | 8.0 | 16.0 | 26.0 | 5 | MMK22,5 395K100D14L4 TRAY |
| 0.0018 | A01 | 4.0 | 9.0 | 13.0 | 12 | MMK10 182K100A01L4 BULK | 4.7 | D15 | 9.0 | 18.5 | 26.0 | 5 | MMK22,5 475K100D15L4 TRAY |
| 0.0022 | A01 | 4.0 | 9.0 | 13.0 | 12 | MMK10 222K100A01L4 BULK | 5.6 | D15 | 9.0 | 18.5 | 26.0 | 5 | MMK22,5 565K100D15L4 TRAY |
| 0.0027 | A01 | 4.0 | 9.0 | 13.0 | 12 | MMK10 272K100A01L4 BULK | 6.8 | D18 | 10.5 | 19.0 | 26.0 | 5 | MMK22,5 685K100D18L4 TRAY |
| 0.0033 | A01 | 4.0 | 9.0 | 13.0 | 12 | MMK10 332K100A01L4 BULK | 8.2 | D16 | 11.0 | 21.5 | 26.0 | 5 | MMK22,5 825K100D16L4 TRAY |
| 0.0039 | A01 | 4.0 | 9.0 | 13.0 | 12 | MMK10 392K100A01L4 BULK | 10.0 | D20 | 13.5 | 23.0 | 26.0 | 5 | MMK22,5 106K100D20L4 TRAY |
| 0.0047 | A01 | 4.0 | 9.0 | 13.0 | 12 | MMK10 472K100A01L4 BULK | 12.0 | D19 | 15.5 | 24.5 | 26.0 | 5 | MMK22,5 126K100D19L4 TRAY |
| 0.0056 | A01 | 4.0 | 9.0 | 13.0 | 12 | MMK10 562K100A01L4 BULK | 15.0 | D19 | 15.5 | 24.5 | 26.0 | 5 | MMK22,5 156K100D19L4 TRAY |
| 0.0068 | A01 | 4.0 | 9.0 | 13.0 | 12 | MMK10 682K100A01L4 BULK | LEAD SPACING 27.5 MM | | | | | | |
| 0.0078 | A01 | 4.0 | 9.0 | 13.0 | 12 | MMK10 782K100A01L4 BULK | 3.9 | F11 | 10.5 | 20.5 | 31.5 | 3 | MMK27,5 395K100F11L4 TRAY |
| 0.0082 | A01 | 4.0 | 9.0 | 13.0 | 12 | MMK10 822K100A01L4 BULK | 4.7 | F11 | 10.5 | 20.5 | 31.5 | 3 | MMK27,5 475K100F11L4 TRAY |
| 0.010 | A01 | 4.0 | 9.0 | 13.0 | 12 | MMK10 103K100A01L4 BULK | 5.6 | F11 | 10.5 | 20.5 | 31.5 | 3 | MMK27,5 565K100F11L4 TRAY |
| 0.012 | A01 | 4.0 | 9.0 | 13.0 | 12 | MMK10 123K100A01L4 BULK | 6.8 | F11 | 10.5 | 20.5 | 31.5 | 3 | MMK27,5 685K100F11L4 TRAY |
| 0.015 | A01 | 4.0 | 9.0 | 13.0 | 12 | MMK10 153K100A01L4 BULK | 8.2 | F11 | 10.5 | 20.5 | 31.5 | 3 | MMK27,5 825K100F11L4 TRAY |
| 0.018 | A01 | 4.0 | 9.0 | 13.0 | 12 | MMK10 183K100A01L4 BULK | 10 | F12 | 11.5 | 22.5 | 31.5 | 3 | MMK27,5 106K100F12L4 TRAY |
| 0.022 | A01 | 4.0 | 9.0 | 13.0 | 12 | MMK10 223K100A01L4 BULK | 10 | F17 | 21.0 | 12.5 | 31.5 | 3 | MMK27,5 106K100F17L4 TRAY |
| 0.027 | A01 | 4.0 | 9.0 | 13.0 | 12 | MMK10 273K100A01L4 BULK | 12 | F12 | 11.5 | 22.5 | 31.5 | 3 | MMK27,5 126K100F12L4 TRAY |
| 0.033 | A01 | 4.0 | 9.0 | 13.0 | 12 | MMK10 333K100A01L4 BULK | 15 | F13 | 14.5 | 24.5 | 31.5 | 3 | MMK27,5 156K100F13L4 TRAY |
| 0.039 | A01 | 4.0 | 9.0 | 13.0 | 12 | MMK10 393K100A01L4 BULK | 18 | F14 | 17.5 | 28.0 | 31.5 | 3 | MMK27,5 186K100F14L4 TRAY |
| 0.047 | A01 | 4.0 | 9.0 | 13.0 | 12 | MMK10 473K100A01L4 BULK | 22 | F14 | 17.5 | 28.0 | 31.5 | 3 | MMK27,5 226K100F14L4 TRAY |
| 0.056 | A01 | 4.0 | 9.0 | 13.0 | 12 | MMK10 563K100A01L4 BULK | 22 | F19 | 27.5 | 16.0 | 31.5 | 3 | MMK27,5 226K100F19L4 TRAY |
| 0.068 | A01 | 4.0 | 9.0 | 13.0 | 12 | MMK10 683K100A01L4 BULK | 27 | F15 | 19.0 | 29.0 | 31.5 | 3 | MMK27,5 276K100F15L4 TRAY |
| 0.082 | A01 | 4.0 | 9.0 | 13.0 | 12 | MMK10 823K100A01L4 BULK | 27 | F18 | 31.0 | 19.0 | 31.5 | 3 | MMK27,5 276K100F18L4 TRAY |
| 0.10 | A01 | 4.0 | 9.0 | 13.0 | 12 | MMK10 104K100A01L4 BULK | 33 | F16 | 21.0 | 30.0 | 31.5 | 3 | MMK27,5 336K100F16L4 TRAY |
| 0.12 | A01 | 4.0 | 9.0 | 13.0 | 12 | MMK10 124K100A01L4 BULK | | | | | | | |
| 0.15 | A01 | 4.0 | 9.0 | 13.0 | 12 | MMK10 154K100A01L4 BULK | | | | | | | |
| 0.18 | A01 | 4.0 | 9.0 | 13.0 | 12 | MMK10 184K100A01L4 BULK | | | | | | | |
| 0.22 | A01 | 4.0 | 9.0 | 13.0 | 12 | MMK10 224K100A01L4 BULK | | | | | | | |
| 0.27 | A01 | 4.0 | 9.0 | 13.0 | 12 | MMK10 274K100A01L4 BULK | | | | | | | |
| 0.33 | A01 | 4.0 | 9.0 | 13.0 | 12 | MMK10 334K100A01L4 BULK | | | | | | | |

ARTICLE TABLE

| Capaci- tance µF | Box code | Max dimen- sions in mm | | | Max dU/dt V/µs | Article code | | Capaci- tance µF | Box code | Max dimen- sions in mm | | | Max dU/dt V/µs | Article code |
|-----------------------------|-------------|---------------------------|------|------|----------------------|---------------------------|----------------------------|------------------------|-------------|---------------------------|------|----|--------------------------|--------------|
| | | B | H | L | | | | | | B | H | L | | |
| 100 VDC/63 VAC | | | | | | | 250 VDC/160 VAC | | | | | | | |
| LEAD SPACING 37.5 MM | | | | | | | LEAD SPACING 7.5 MM | | | | | | | |
| 12 | R05 | 13.0 | 24.0 | 41.0 | 2 | MMK37,5 126K100R05L4 TRAY | 0.015 | K00 | 2.5 | 6.0 | 10.0 | 30 | MMK7,5 153K250K00L4 BULK | |
| 15 | R05 | 13.0 | 24.0 | 41.0 | 2 | MMK37,5 156K100R05L4 TRAY | 0.018 | K00 | 2.5 | 6.0 | 10.0 | 30 | MMK7,5 183K250K00L4 BULK | |
| 18 | R05 | 13.0 | 24.0 | 41.0 | 2 | MMK37,5 186K100R05L4 TRAY | 0.022 | K00 | 2.5 | 6.0 | 10.0 | 30 | MMK7,5 223K250K00L4 BULK | |
| 22 | R04 | 15.0 | 26.0 | 41.0 | 2 | MMK37,5 226K100R04L4 TRAY | 0.027 | K00 | 2.5 | 6.0 | 10.0 | 30 | MMK7,5 273K250K00L4 BULK | |
| 27 | R04 | 15.0 | 26.0 | 41.0 | 2 | MMK37,5 276K100R04L4 TRAY | 0.033 | K00 | 2.5 | 6.0 | 10.0 | 30 | MMK7,5 333K250K00L4 BULK | |
| 33 | R02 | 16.5 | 32.0 | 41.0 | 2 | MMK37,5 336K100R02L4 TRAY | 0.039 | K01 | 4.0 | 8.0 | 10.0 | 30 | MMK7,5 393K250K01L4 BULK | |
| 39 | R03 | 19.0 | 36.0 | 41.0 | 2 | MMK37,5 396K100R03L4 TRAY | 0.047 | K01 | 4.0 | 8.0 | 10.0 | 30 | MMK7,5 473K250K01L4 BULK | |
| 47 | R03 | 19.0 | 36.0 | 41.0 | 2 | MMK37,5 476K100R03L4 TRAY | 0.056 | K01 | 4.0 | 8.0 | 10.0 | 30 | MMK7,5 563K250K01L4 BULK | |
| 56 | R06 | 21.0 | 38.0 | 41.0 | 2 | MMK37,5 566K100R06L4 TRAY | 0.068 | K01 | 4.0 | 8.0 | 10.0 | 30 | MMK7,5 683K250K01L4 BULK | |
| 68 | R08 | 28.0 | 43.0 | 41.0 | 2 | MMK37,5 686K100R08L4 TRAY | 0.082 | K01 | 4.0 | 8.0 | 10.0 | 30 | MMK7,5 823K250K01L4 BULK | |
| 82 | R08 | 28.0 | 43.0 | 41.0 | 2 | MMK37,5 826K100R08L4 TRAY | 0.10 | K01 | 4.0 | 8.0 | 10.0 | 30 | MMK7,5 104K250K01L4 BULK | |
| 250 VDC/160 VAC | | | | | | | LEAD SPACING 10 MM | | | | | | | |
| LEAD SPACING 5 MM | | | | | | | LEAD SPACING 15 MM | | | | | | | |
| 0.0010 | J01 | 2.5 | 6.5 | 7.2 | 40 | MMK5 102K250J01L4 BULK | 0.082 | B04 | 5.5 | 10.5 | 18.0 | 12 | MMK15 823K250B04L4 BULK | |
| 0.0012 | J01 | 2.5 | 6.5 | 7.2 | 40 | MMK5 122K250J01L4 BULK | 0.10 | B04 | 5.5 | 10.5 | 18.0 | 12 | MMK15 104K250B04L4 BULK | |
| 0.0015 | J01 | 2.5 | 6.5 | 7.2 | 40 | MMK5 152K250J01L4 BULK | 0.12 | B04 | 5.5 | 10.5 | 18.0 | 12 | MMK15 124K250B04L4 BULK | |
| 0.0018 | J01 | 2.5 | 6.5 | 7.2 | 40 | MMK5 182K250J01L4 BULK | 0.15 | B04 | 5.5 | 10.5 | 18.0 | 12 | MMK15 154K250B04L4 BULK | |
| 0.0022 | J01 | 2.5 | 6.5 | 7.2 | 40 | MMK5 222K250J01L4 BULK | 0.18 | B04 | 5.5 | 10.5 | 18.0 | 12 | MMK15 184K250B04L4 BULK | |
| 0.0027 | J01 | 2.5 | 6.5 | 7.2 | 40 | MMK5 272K250J01L4 BULK | 0.22 | B04 | 5.5 | 10.5 | 18.0 | 12 | MMK15 224K250B04L4 BULK | |
| 0.0033 | J01 | 2.5 | 6.5 | 7.2 | 40 | MMK5 332K250J01L4 BULK | 0.27 | B04 | 5.5 | 10.5 | 18.0 | 12 | MMK15 274K250B04L4 BULK | |
| 0.0039 | J01 | 2.5 | 6.5 | 7.2 | 40 | MMK5 392K250J01L4 BULK | | | | | | | | |
| 0.0047 | J01 | 2.5 | 6.5 | 7.2 | 40 | MMK5 472K250J01L4 BULK | | | | | | | | |
| 0.0056 | J01 | 2.5 | 6.5 | 7.2 | 40 | MMK5 562K250J01L4 BULK | | | | | | | | |
| 0.0068 | J01 | 2.5 | 6.5 | 7.2 | 40 | MMK5 682K250J01L4 BULK | | | | | | | | |
| 0.0082 | J01 | 2.5 | 6.5 | 7.2 | 40 | MMK5 822K250J01L4 BULK | | | | | | | | |
| 0.010 | J01 | 2.5 | 6.5 | 7.2 | 40 | MMK5 103K250J01L4 BULK | | | | | | | | |
| 0.012 | J01 | 2.5 | 6.5 | 7.2 | 40 | MMK5 123K250J01L4 BULK | | | | | | | | |
| 0.015 | J01 | 2.5 | 6.5 | 7.2 | 40 | MMK5 153K250J01L4 BULK | | | | | | | | |
| 0.018 | J01 | 2.5 | 6.5 | 7.2 | 40 | MMK5 183K250J01L4 BULK | | | | | | | | |
| 0.022 | J01 | 2.5 | 6.5 | 7.2 | 40 | MMK5 223K250J01L4 BULK | | | | | | | | |
| 0.027 | J02 | 3.5 | 8.0 | 7.2 | 40 | MMK5 273K250J02L4 BULK | | | | | | | | |
| 0.033 | J02 | 3.5 | 8.0 | 7.2 | 40 | MMK5 333K250J02L4 BULK | | | | | | | | |
| 0.039 | J02 | 3.5 | 8.0 | 7.2 | 40 | MMK5 393K250J02L4 BULK | | | | | | | | |
| 0.047 | J02 | 3.5 | 8.0 | 7.2 | 40 | MMK5 473K250J02L4 BULK | | | | | | | | |
| 0.056 | J02 | 3.5 | 8.0 | 7.2 | 40 | MMK5 563K250J02L4 BULK | | | | | | | | |
| 0.068 | J02 | 3.5 | 8.0 | 7.2 | 40 | MMK5 683K250J02L4 BULK | | | | | | | | |
| 0.082 | J03 | 4.5 | 9.0 | 7.2 | 40 | MMK5 823K250J03L4 BULK | | | | | | | | |
| 0.10 | J03 | 4.5 | 9.0 | 7.2 | 40 | MMK5 104K250J03L4 BULK | | | | | | | | |
| 0.12 | J04 | 5.0 | 10.0 | 7.2 | 40 | MMK5 124K250J04L4 BULK | | | | | | | | |
| 0.15 | J04 | 5.0 | 10.0 | 7.2 | 40 | MMK5 154K250J04L4 BULK | | | | | | | | |
| 0.18 | J05 | 6.0 | 11.0 | 7.2 | 40 | MMK5 184K250J05L4 BULK | | | | | | | | |
| 0.22 | J05 | 6.0 | 11.0 | 7.2 | 40 | MMK5 224K250J05L4 BULK | | | | | | | | |

ARTICLE TABLE

| Capacitance µF | Box code | Max dimensions in mm | | | Max dU/dt V/µs | Article code | | | | | | | |
|-----------------------------|----------|----------------------|------|------|-------------------|----------------------------|---------------------------|----------|----------------------|------|------|--------------------------|--------------------------|
| | | B | H | L | | | Capacitance µF | Box code | Max dimensions in mm | | | Max dU/dt V/µs | Article code |
| 250 VDC/160 VA | | | | | | 400 VDC/200 VAC | | | | | | | |
| LEAD SPACING 15 MM | | | | | | LEAD SPACING 5 MM | | | | | | | |
| 0.33 | B04 | 5.5 | 10.5 | 18.0 | 12 | MMK15 334K250B04L4 BULK | 0.0010 | J01 | 2.5 | 6.5 | 7.2 | 50 | MMK5 102K400J01L4 BULK |
| 0.39 | B04 | 5.5 | 10.5 | 18.0 | 12 | MMK15 394K250B04L4 BULK | 0.0012 | J01 | 2.5 | 6.5 | 7.2 | 50 | MMK5 122K400J01L4 BULK |
| 0.47 | B05 | 5.5 | 12.5 | 18.0 | 12 | MMK15 474K250B05L4 BULK | 0.0015 | J01 | 2.5 | 6.5 | 7.2 | 50 | MMK5 152K400J01L4 BULK |
| 0.56 | B10 | 6.5 | 12.5 | 18.0 | 12 | MMK15 564K250B10L4 BULK | 0.0018 | J01 | 2.5 | 6.5 | 7.2 | 50 | MMK5 182K400J01L4 BULK |
| 0.68 | B10 | 6.5 | 12.5 | 18.0 | 12 | MMK15 684K250B10L4 BULK | 0.0022 | J01 | 2.5 | 6.5 | 7.2 | 50 | MMK5 222K400J01L4 BULK |
| 0.82 | B06 | 7.5 | 14.5 | 18.0 | 12 | MMK15 824K250B06L4 BULK | 0.0027 | J01 | 2.5 | 6.5 | 7.2 | 50 | MMK5 272K400J01L4 BULK |
| 1.0 | B06 | 7.5 | 14.5 | 18.0 | 12 | MMK15 105K250B06L4 BULK | 0.0033 | J01 | 2.5 | 6.5 | 7.2 | 50 | MMK5 332K400J01L4 BULK |
| 1.2 | B12 | 8.0 | 15.0 | 18.0 | 12 | MMK15 125K250B12L4 BULK | 0.0039 | J01 | 2.5 | 6.5 | 7.2 | 50 | MMK5 392K400J01L4 BULK |
| 1.5 | B14 | 9.5 | 17.5 | 18.0 | 12 | MMK15 155K250B14L4 BULK | 0.0047 | J01 | 2.5 | 6.5 | 7.2 | 50 | MMK5 472K400J01L4 BULK |
| 1.8 | B14 | 9.5 | 17.5 | 18.0 | 12 | MMK15 185K250B14L4 BULK | 0.0056 | J01 | 2.5 | 6.5 | 7.2 | 50 | MMK5 562K400J01L4 BULK |
| LEAD SPACING 22.5 MM | | | | | | 0.0068 | J01 | 2.5 | 6.5 | 7.2 | 50 | MMK5 682K400J01L4 BULK | |
| 0.47 | D13 | 6.5 | 14.5 | 26.0 | 8 | MMK22,5 474K250D13L4 TRAY | 0.0082 | J01 | 2.5 | 6.5 | 7.2 | 50 | MMK5 822K400J01L4 BULK |
| 0.56 | D13 | 6.5 | 14.5 | 26.0 | 8 | MMK22,5 564K250D13L4 TRAY | 0.010 | J01 | 2.5 | 6.5 | 7.2 | 50 | MMK5 103K400J01L4 BULK |
| 0.68 | D13 | 6.5 | 14.5 | 26.0 | 8 | MMK22,5 684K250D13L4 TRAY | 0.012 | J01 | 2.5 | 6.5 | 7.2 | 50 | MMK5 123K400J01L4 BULK |
| 0.82 | D13 | 6.5 | 14.5 | 26.0 | 8 | MMK22,5 824K250D13L4 TRAY | 0.015 | J01 | 2.5 | 6.5 | 7.2 | 50 | MMK5 153K400J01L4 BULK |
| 1.0 | D13 | 6.5 | 14.5 | 26.0 | 8 | MMK22,5 105K250D13L4 TRAY | 0.018 | J02 | 3.5 | 8.0 | 7.2 | 50 | MMK5 183K400J02L4 BULK |
| 1.2 | D17 | 7.0 | 16.5 | 26.0 | 8 | MMK22,5 125K250D17L4 TRAY | 0.022 | J02 | 3.5 | 8.0 | 7.2 | 50 | MMK5 223K400J02L4 BULK |
| 1.5 | D14 | 8.0 | 16.0 | 26.0 | 8 | MMK22,5 155K250D14L4 TRAY | 0.027 | J03 | 4.5 | 9.0 | 7.2 | 50 | MMK5 273K400J03L4 BULK |
| 1.8 | D15 | 9.0 | 18.5 | 26.0 | 8 | MMK22,5 185K250D15L4 TRAY | 0.033 | J03 | 4.5 | 9.0 | 7.2 | 50 | MMK5 333K400J03L4 BULK |
| 2.0 | D15 | 9.0 | 18.5 | 26.0 | 8 | MMK22,5 205K250D15L4 TRAY | 0.039 | J03 | 4.5 | 9.0 | 7.2 | 50 | MMK5 393K400J03L4 BULK |
| 2.2 | D15 | 9.0 | 18.5 | 26.0 | 8 | MMK22,5 225K250D15L4 TRAY | 0.047 | J03 | 4.5 | 9.0 | 7.2 | 50 | MMK5 473K400J03L4 BULK |
| 2.7 | D18 | 10.5 | 19.0 | 26.0 | 8 | MMK22,5 275K250D18L4 TRAY | 0.056 | J05 | 6.0 | 11.0 | 7.2 | 50 | MMK5 563K400J05L4 BULK |
| 3.3 | D16 | 11.0 | 21.5 | 26.0 | 8 | MMK22,5 335K250D16L4 TRAY | 0.068 | J05 | 6.0 | 11.0 | 7.2 | 50 | MMK5 683K400J05L4 BULK |
| 3.9 | D20 | 13.5 | 23.0 | 26.0 | 8 | MMK22,5 395K250D20L4 TRAY | 0.082 | J06 | 7.2 | 13.0 | 7.2 | 50 | MMK5 823K400J06L4 BULK |
| 4.7 | D19 | 15.5 | 24.5 | 26.0 | 8 | MMK22,5 475K250D19L4 TRAY | 0.10 | J06 | 7.2 | 13.0 | 7.2 | 50 | MMK5 104K400J06L4 BULK |
| 5.6 | D19 | 15.5 | 24.5 | 26.0 | 8 | MMK22,5 565K250D19L4 TRAY | 0.12 | J06 | 7.2 | 13.0 | 7.2 | 50 | MMK5 124K400J06L4 BULK |
| LEAD SPACING 27.5 MM | | | | | | LEAD SPACING 7.5 MM | | | | | | | |
| 1.5 | F11 | 10.5 | 20.5 | 31.5 | 5 | MMK27,5 155K250F11L4 TRAY | 0.0010 | K00 | 2.5 | 6.0 | 10.0 | 40 | MMK7,5 102K400K00L4 BULK |
| 1.8 | F11 | 10.5 | 20.5 | 31.5 | 5 | MMK27,5 185K250F11L4 TRAY | 0.0012 | K00 | 2.5 | 6.0 | 10.0 | 40 | MMK7,5 122K400K00L4 BULK |
| 2.0 | F11 | 10.5 | 20.5 | 31.5 | 5 | MMK27,5 205K250F11L4 TRAY | 0.0015 | K00 | 2.5 | 6.0 | 10.0 | 40 | MMK7,5 152K400K00L4 BULK |
| 2.2 | F11 | 10.5 | 20.5 | 31.5 | 5 | MMK27,5 225K250F11L4 TRAY | 0.0018 | K00 | 2.5 | 6.0 | 10.0 | 40 | MMK7,5 182K400K00L4 BULK |
| 2.5 | F11 | 10.5 | 20.5 | 31.5 | 5 | MMK27,5 255K250F11L4 TRAY | 0.0022 | K00 | 2.5 | 6.0 | 10.0 | 40 | MMK7,5 222K400K00L4 BULK |
| 2.7 | F11 | 10.5 | 20.5 | 31.5 | 5 | MMK27,5 275K250F11L4 TRAY | 0.0027 | K00 | 2.5 | 6.0 | 10.0 | 40 | MMK7,5 272K400K00L4 BULK |
| 3.3 | F11 | 10.5 | 20.5 | 31.5 | 5 | MMK27,5 335K250F11L4 TRAY | 0.0033 | K00 | 2.5 | 6.0 | 10.0 | 40 | MMK7,5 332K400K00L4 BULK |
| 3.3 | F17 | 21.0 | 12.5 | 31.5 | 5 | MMK27,5 335K250F17L4 TRAY | 0.0039 | K00 | 2.5 | 6.0 | 10.0 | 40 | MMK7,5 392K400K00L4 BULK |
| 3.9 | F12 | 11.5 | 22.5 | 31.5 | 5 | MMK27,5 395K250F12L4 TRAY | 0.0047 | K00 | 2.5 | 6.0 | 10.0 | 40 | MMK7,5 472K400K00L4 BULK |
| 4.7 | F03 | 13.5 | 23.0 | 31.5 | 5 | MMK27,5 475K250F03L4 TRAY | 0.0056 | K00 | 2.5 | 6.0 | 10.0 | 40 | MMK7,5 562K400K00L4 BULK |
| 5.6 | F13 | 14.5 | 24.5 | 31.5 | 5 | MMK27,5 565K250F13L4 TRAY | 0.0068 | K00 | 2.5 | 6.0 | 10.0 | 40 | MMK7,5 682K400K00L4 BULK |
| 6.8 | F14 | 17.5 | 28.0 | 31.5 | 5 | MMK27,5 685K250F14L4 TRAY | 0.0082 | K00 | 2.5 | 6.0 | 10.0 | 40 | MMK7,5 822K400K00L4 BULK |
| 8.2 | F15 | 19.0 | 29.0 | 31.5 | 5 | MMK27,5 825K250F15L4 TRAY | 0.010 | K00 | 2.5 | 6.0 | 10.0 | 40 | MMK7,5 103K400K00L4 BULK |
| 8.2 | F19 | 27.5 | 16.0 | 31.5 | 5 | MMK27,5 825K250F19L4 TRAY | 0.012 | K00 | 2.5 | 6.0 | 10.0 | 40 | MMK7,5 123K400K00L4 BULK |
| 10 | F16 | 21.0 | 30.0 | 31.5 | 5 | MMK27,5 106K250F16L4 TRAY | 0.015 | K00 | 2.5 | 6.0 | 10.0 | 40 | MMK7,5 153K400K00L4 BULK |
| 10 | F18 | 31.0 | 19.0 | 31.5 | 5 | MMK27,5 106K250F18L4 TRAY | 0.018 | K01 | 4.0 | 8.0 | 10.0 | 40 | MMK7,5 183K400K01L4 BULK |
| LEAD SPACING 37.5 MM | | | | | | 0.022 | K01 | 4.0 | 8.0 | 10.0 | 40 | MMK7,5 223K400K01L4 BULK | |
| 4.7 | R05 | 13.0 | 24.0 | 41.0 | 3 | MMK37,5 475K250R05L4 TRAY | 0.027 | K01 | 4.0 | 8.0 | 10.0 | 40 | MMK7,5 273K400K01L4 BULK |
| 5.6 | R05 | 13.0 | 24.0 | 41.0 | 3 | MMK37,5 565K250R05L4 TRAY | 0.033 | K01 | 4.0 | 8.0 | 10.0 | 40 | MMK7,5 333K400K01L4 BULK |
| 6.8 | R05 | 13.0 | 24.0 | 41.0 | 3 | MMK37,5 685K250R05L4 TRAY | 0.039 | K01 | 4.0 | 8.0 | 10.0 | 40 | MMK7,5 393K400K01L4 BULK |
| 8.2 | R04 | 15.0 | 26.0 | 41.0 | 3 | MMK37,5 825K250R04L4 TRAY | 0.047 | K03 | 5.0 | 11.0 | 10.0 | 40 | MMK7,5 473K400K03L4 BULK |
| 10 | R04 | 15.0 | 26.0 | 41.0 | 3 | MMK37,5 106K250R04L4 TRAY | 0.056 | K03 | 5.0 | 11.0 | 10.0 | 40 | MMK7,5 563K400K03L4 BULK |
| 12 | R02 | 16.5 | 32.0 | 41.0 | 3 | MMK37,5 126K250R02L4 TRAY | 0.068 | K03 | 5.0 | 11.0 | 10.0 | 40 | MMK7,5 683K400K03L4 BULK |
| 15 | R02 | 16.5 | 32.0 | 41.0 | 3 | MMK37,5 156K250R02L4 TRAY | 0.082 | K03 | 5.0 | 11.0 | 10.0 | 40 | MMK7,5 823K400K03L4 BULK |
| 18 | R03 | 19.0 | 36.0 | 41.0 | 3 | MMK37,5 186K250R03L4 TRAY | 0.10 | K03 | 5.0 | 11.0 | 10.0 | 40 | MMK7,5 104K400K03L4 BULK |
| 22 | R06 | 21.0 | 38.0 | 41.0 | 3 | MMK37,5 226K250R06L4 TRAY | 0.12 | K04 | 6.0 | 12.0 | 10.5 | 40 | MMK7,5 124K400K04L4 BULK |
| 27 | R08 | 28.0 | 43.0 | 41.0 | 3 | MMK37,5 276K250R08L4 TRAY | 0.15 | K04 | 6.0 | 12.0 | 10.5 | 40 | MMK7,5 154K400K04L4 BULK |
| 33 | R08 | 28.0 | 43.0 | 41.0 | 3 | MMK37,5 336K250R08L4 TRAY | LEAD SPACING 10 MM | | | | | | |
| 39 | R08 | 28.0 | 43.0 | 41.0 | 3 | MMK37,5 396K250R08L4 TRAY | 0.0010 | A01 | 4.0 | 9.0 | 13.0 | 30 | MMK10 102K400A01L4 BULK |
| | | | | | | | 0.0012 | A01 | 4.0 | 9.0 | 13.0 | 30 | MMK10 122K400A01L4 BULK |
| | | | | | | | 0.0015 | A01 | 4.0 | 9.0 | 13.0 | 30 | MMK10 152K400A01L4 BULK |

ARTICLE TABLE

| Capacitance μF | Box code | Max dimensions in mm | | | Max dU/dt $\text{V}/\mu\text{s}$ | Article code | Capacitance μF | Box code | Max dimensions in mm | | | Max dU/dt $\text{V}/\mu\text{s}$ | Article code |
|------------------------------|----------|----------------------|------|------|-------------------------------------|-----------------------------|------------------------------|----------|----------------------|------|------|-------------------------------------|---------------------------|
| | | B | H | L | | | | B | H | L | | | |
| 400 VDC/200 VAC | | | | | | 400 VDC/200 VAC | | | | | | | |
| LEAD SPACING 10 MM | | | | | | LEAD SPACING 27.5 MM | | | | | | | |
| 0.0018 | A01 | 4.0 | 9.0 | 13.0 | 30 | MMK10 182K400A01L4 BULK | 0.68 | F11 | 10.5 | 20.5 | 31.5 | 8 | MMK27,5 684K400F11L4 TRAY |
| 0.0022 | A01 | 4.0 | 9.0 | 13.0 | 30 | MMK10 222K400A01L4 BULK | 0.82 | F11 | 10.5 | 20.5 | 31.5 | 8 | MMK27,5 824K400F11L4 TRAY |
| 0.0027 | A01 | 4.0 | 9.0 | 13.0 | 30 | MMK10 272K400A01L4 BULK | 1.0 | F11 | 10.5 | 20.5 | 31.5 | 8 | MMK27,5 105K400F11L4 TRAY |
| 0.0033 | A01 | 4.0 | 9.0 | 13.0 | 30 | MMK10 332K400A01L4 BULK | 1.2 | F11 | 10.5 | 20.5 | 31.5 | 8 | MMK27,5 125K400F11L4 TRAY |
| 0.0039 | A01 | 4.0 | 9.0 | 13.0 | 30 | MMK10 392K400A01L4 BULK | 1.5 | F11 | 10.5 | 20.5 | 31.5 | 8 | MMK27,5 155K400F11L4 TRAY |
| 0.0047 | A01 | 4.0 | 9.0 | 13.0 | 30 | MMK10 472K400A01L4 BULK | 1.8 | F11 | 10.5 | 20.5 | 31.5 | 8 | MMK27,5 185K400F11L4 TRAY |
| 0.0056 | A01 | 4.0 | 9.0 | 13.0 | 30 | MMK10 562K400A01L4 BULK | 1.8 | F17 | 21.0 | 12.5 | 31.5 | 8 | MMK27,5 185K400F17L4 TRAY |
| 0.0068 | A01 | 4.0 | 9.0 | 13.0 | 30 | MMK10 682K400A01L4 BULK | 2.2 | F12 | 11.5 | 22.5 | 31.5 | 8 | MMK27,5 225K400F12L4 TRAY |
| 0.0078 | A01 | 4.0 | 9.0 | 13.0 | 30 | MMK10 782K400A01L4 BULK | 2.7 | F03 | 13.5 | 23.0 | 31.5 | 8 | MMK27,5 275K400F03L4 TRAY |
| 0.0082 | A01 | 4.0 | 9.0 | 13.0 | 30 | MMK10 822K400A01L4 BULK | 3.3 | F14 | 17.5 | 28.0 | 31.5 | 8 | MMK27,5 335K400F14L4 TRAY |
| 0.010 | A01 | 4.0 | 9.0 | 13.0 | 30 | MMK10 103K400A01L4 BULK | 3.9 | F14 | 17.5 | 28.0 | 31.5 | 8 | MMK27,5 395K400F14L4 TRAY |
| 0.012 | A01 | 4.0 | 9.0 | 13.0 | 30 | MMK10 123K400A01L4 BULK | 3.9 | F19 | 27.5 | 16.0 | 31.5 | 8 | MMK27,5 395K400F19L4 TRAY |
| 0.015 | A01 | 4.0 | 9.0 | 13.0 | 30 | MMK10 153K400A01L4 BULK | 4.7 | F15 | 19.0 | 29.0 | 31.5 | 8 | MMK27,5 475K400F15L4 TRAY |
| 0.018 | A01 | 4.0 | 9.0 | 13.0 | 30 | MMK10 183K400A01L4 BULK | 5.6 | F16 | 21.0 | 30.0 | 31.5 | 8 | MMK27,5 565K400F16L4 TRAY |
| 0.022 | A01 | 4.0 | 9.0 | 13.0 | 30 | MMK10 223K400A01L4 BULK | 5.6 | F18 | 31.0 | 19.0 | 31.5 | 8 | MMK27,5 565K400F18L4 TRAY |
| 0.027 | A01 | 4.0 | 9.0 | 13.0 | 30 | MMK10 273K400A01L4 BULK | | | | | | | |
| 0.033 | A01 | 4.0 | 9.0 | 13.0 | 30 | MMK10 333K400A01L4 BULK | LEAD SPACING 37.5 MM | | | | | | |
| 0.039 | A01 | 4.0 | 9.0 | 13.0 | 30 | MMK10 393K400A01L4 BULK | 1.8 | R05 | 13.0 | 24.0 | 41.0 | 5 | MMK37,5 185K400R05L4 TRAY |
| 0.047 | A01 | 4.0 | 9.0 | 13.0 | 30 | MMK10 473K400A01L4 BULK | 2.2 | R05 | 13.0 | 24.0 | 41.0 | 5 | MMK37,5 225K400R05L4 TRAY |
| 0.056 | A01 | 4.0 | 9.0 | 13.0 | 30 | MMK10 563K400A01L4 BULK | 2.7 | R05 | 13.0 | 24.0 | 41.0 | 5 | MMK37,5 275K400R05L4 TRAY |
| 0.068 | A01 | 4.0 | 9.0 | 13.0 | 30 | MMK10 683K400A01L4 BULK | 3.3 | R05 | 13.0 | 24.0 | 41.0 | 5 | MMK37,5 335K400R05L4 TRAY |
| 0.082 | A02 | 4.5 | 10.5 | 13.0 | 30 | MMK10 823K400A02L4 BULK | 3.9 | R04 | 15.0 | 26.0 | 41.0 | 5 | MMK37,5 395K400R04L4 TRAY |
| 0.10 | A03 | 5.0 | 11.0 | 13.0 | 30 | MMK10 104K400A03L4 BULK | 4.7 | R04 | 15.0 | 26.0 | 41.0 | 5 | MMK37,5 475K400R04L4 TRAY |
| 0.12 | A03 | 5.0 | 11.0 | 13.0 | 30 | MMK10 124K400A03L4 BULK | 5.6 | R02 | 16.5 | 32.0 | 41.0 | 5 | MMK37,5 565K400R02L4 TRAY |
| 0.15 | A04 | 6.0 | 12.0 | 13.0 | 30 | MMK10 154K400A04L4 BULK | 6.8 | R03 | 19.0 | 36.0 | 41.0 | 5 | MMK37,5 685K400R03L4 TRAY |
| | | | | | | | 8.2 | R03 | 19.0 | 36.0 | 41.0 | 5 | MMK37,5 825K400R03L4 TRAY |
| | | | | | | | 10 | R06 | 21.0 | 38.0 | 41.0 | 5 | MMK37,5 106K400R06L4 TRAY |
| | | | | | | | 12 | R08 | 28.0 | 43.0 | 41.0 | 5 | MMK37,5 126K400R08L4 TRAY |
| | | | | | | | 15 | R08 | 28.0 | 43.0 | 41.0 | 5 | MMK37,5 156K400R08L4 TRAY |
| | | | | | | | 18 | R08 | 28.0 | 43.0 | 41.0 | 5 | MMK37,5 186K400R08L4 TRAY |
| LEAD SPACING 15 MM | | | | | | 630 VDC/220 VAC | | | | | | | |
| 0.047 | B04 | 5.5 | 10.5 | 18.0 | 20 | MMK15 473K400B04L4 BULK | LEAD SPACING 5 MM | | | | | | |
| 0.056 | B04 | 5.5 | 10.5 | 18.0 | 20 | MMK15 563K400B04L4 BULK | 0.0010 | J01 | 2.5 | 6.5 | 7.2 | 80 | MMK5 102K630J01L4 BULK |
| 0.068 | B04 | 5.5 | 10.5 | 18.0 | 20 | MMK15 683K400B04L4 BULK | 0.0012 | J01 | 2.5 | 6.5 | 7.2 | 80 | MMK5 122K630J01L4 BULK |
| 0.082 | B04 | 5.5 | 10.5 | 18.0 | 20 | MMK15 823K400B04L4 BULK | 0.0015 | J01 | 2.5 | 6.5 | 7.2 | 80 | MMK5 152K630J01L4 BULK |
| 0.10 | B04 | 5.5 | 10.5 | 18.0 | 20 | MMK15 104K400B04L4 BULK | 0.0018 | J01 | 2.5 | 6.5 | 7.2 | 80 | MMK5 182K630J01L4 BULK |
| 0.12 | B04 | 5.5 | 10.5 | 18.0 | 20 | MMK15 124K400B04L4 BULK | 0.0022 | J01 | 2.5 | 6.5 | 7.2 | 80 | MMK5 222K630J01L4 BULK |
| 0.15 | B04 | 5.5 | 10.5 | 18.0 | 20 | MMK15 154K400B04L4 BULK | 0.0027 | J01 | 2.5 | 6.5 | 7.2 | 80 | MMK5 272K630J01L4 BULK |
| 0.18 | B05 | 5.5 | 12.5 | 18.0 | 20 | MMK15 184K400B05L4 BULK | 0.0033 | J01 | 2.5 | 6.5 | 7.2 | 80 | MMK5 332K630J01L4 BULK |
| 0.22 | B05 | 5.5 | 12.5 | 18.0 | 20 | MMK15 224K400B05L4 BULK | 0.0039 | J01 | 2.5 | 6.5 | 7.2 | 80 | MMK5 392K630J01L4 BULK |
| 0.27 | B10 | 6.5 | 12.5 | 18.0 | 20 | MMK15 274K400B10L4 BULK | 0.0047 | J02 | 3.5 | 8.0 | 7.2 | 80 | MMK5 472K630J02L4 BULK |
| 0.33 | B06 | 7.5 | 14.5 | 18.0 | 20 | MMK15 334K400B06L4 BULK | 0.0056 | J02 | 3.5 | 8.0 | 7.2 | 80 | MMK5 562K630J02L4 BULK |
| 0.39 | B06 | 7.5 | 14.5 | 18.0 | 20 | MMK15 394K400B06L4 BULK | 0.0068 | J02 | 3.5 | 8.0 | 7.2 | 80 | MMK5 682K630J02L4 BULK |
| 0.47 | B11 | 8.5 | 16.0 | 18.0 | 20 | MMK15 474K400B11L4 BULK | 0.0082 | J02 | 3.5 | 8.0 | 7.2 | 80 | MMK5 822K630J02L4 BULK |
| 0.56 | B11 | 8.5 | 16.0 | 18.0 | 20 | MMK15 564K400B11L4 BULK | 0.010 | J02 | 3.5 | 8.0 | 7.2 | 80 | MMK5 103K630J02L4 BULK |
| 0.68 | B14 | 9.5 | 17.5 | 18.0 | 20 | MMK15 684K400B14L4 BULK | 0.012 | J03 | 4.5 | 9.0 | 7.2 | 80 | MMK5 123K630J03L4 BULK |
| LEAD SPACING 22.5 MM | | | | | | 0.015 | J03 | 4.5 | 9.0 | 7.2 | 80 | MMK5 153K630J03L4 BULK | |
| 0.18 | D13 | 6.5 | 14.5 | 26.0 | 10 | MMK22,5 184K400D13L4 TRAY | 0.018 | J03 | 4.5 | 9.0 | 7.2 | 80 | MMK5 183K630J03L4 BULK |
| 0.22 | D13 | 6.5 | 14.5 | 26.0 | 10 | MMK22,5 224K400D13L4 TRAY | 0.022 | J04 | 5.0 | 10.0 | 7.2 | 80 | MMK5 223K630J04L4 BULK |
| 0.27 | D13 | 6.5 | 14.5 | 26.0 | 10 | MMK22,5 274K400D13L4 TRAY | 0.027 | J05 | 6.0 | 11.0 | 7.2 | 80 | MMK5 273K630J05L4 BULK |
| 0.33 | D13 | 6.5 | 14.5 | 26.0 | 10 | MMK22,5 334K400D13L4 TRAY | 0.033 | J05 | 6.0 | 11.0 | 7.2 | 80 | MMK5 333K630J05L4 BULK |
| 0.39 | D13 | 6.5 | 14.5 | 26.0 | 10 | MMK22,5 394K400D13L4 TRAY | 0.039 | J06 | 7.2 | 13.0 | 7.2 | 80 | MMK5 393K630J06L4 BULK |
| 0.47 | D13 | 6.5 | 14.5 | 26.0 | 10 | MMK22,5 474K400D13L4 TRAY | 0.047 | J06 | 7.2 | 13.0 | 7.2 | 80 | MMK5 473K630J06L4 BULK |
| 0.56 | D17 | 7.0 | 16.5 | 26.0 | 10 | MMK22,5 564K400D17L4 TRAY | | | | | | | |
| 0.68 | D14 | 8.0 | 16.0 | 26.0 | 10 | MMK22,5 684K400D14L4 TRAY | | | | | | | |
| 0.82 | D15 | 9.0 | 18.5 | 26.0 | 10 | MMK22,5 824K400D15L4 TRAY | | | | | | | |
| 1.0 | D15 | 9.0 | 18.5 | 26.0 | 10 | MMK22,5 105K400D15L4 TRAY | | | | | | | |
| 1.2 | D18 | 10.5 | 19.0 | 26.0 | 10 | MMK22,5 125K400D18L4 TRAY | | | | | | | |
| 1.5 | D16 | 11.0 | 21.5 | 26.0 | 10 | MMK22,5 155K400D16L4 TRAY | | | | | | | |
| 1.8 | D20 | 13.5 | 23.0 | 26.0 | 10 | MMK22,5 185K400D20L4 TRAY | | | | | | | |
| 2.2 | D19 | 15.5 | 24.5 | 26.0 | 10 | MMK22,5 225K400D19L4 TRAY | | | | | | | |
| 2.7 | D19 | 15.5 | 24.5 | 26.0 | 10 | MMK22,5 275K400D19L4 TRAY | | | | | | | |

ARTICLE TABLE

| Capacitance μF | Box code | Max dimensions in mm | | | Max dU/dt V/μs | Article code | Capacitance μF | Box code | Max dimensions in mm | | | Max dU/dt V/μs | Article code | | | | |
|----------------------------|----------|----------------------|------|------|-------------------|-----------------------------|-------------------|----------|-----------------------------|-----|------|-------------------|--------------|----|---------|--------------|------|
| | | B | H | L | | | | B | H | L | | | | | | | |
| 630 VDC/220 VAC | | | | | | 630 VDC/220 VAC | | | | | | | | | | | |
| LEAD SPACING 7.5 MM | | | | | | LEAD SPACING 15 MM | | | | | | | | | | | |
| 0.0010 | K00 | 2.5 | 6.0 | 10.0 | 60 | MMK7,5 | 102K630K00L4 | BULK | 0.15 | B06 | 7.5 | 14.5 | 18.0 | 25 | MMK15 | 154K630B06L4 | BULK |
| 0.0012 | K00 | 2.5 | 6.0 | 10.0 | 60 | MMK7,5 | 122K630K00L4 | BULK | 0.18 | B12 | 8.0 | 15.0 | 18.0 | 25 | MMK15 | 184K630B12L4 | BULK |
| 0.0015 | K00 | 2.5 | 6.0 | 10.0 | 60 | MMK7,5 | 152K630K00L4 | BULK | 0.22 | B14 | 9.5 | 17.5 | 18.0 | 25 | MMK15 | 224K630B14L4 | BULK |
| 0.0018 | K00 | 2.5 | 6.0 | 10.0 | 60 | MMK7,5 | 182K630K00L4 | BULK | LEAD SPACING 22.5 MM | | | | | | | | |
| 0.0022 | K00 | 2.5 | 6.0 | 10.0 | 60 | MMK7,5 | 222K630K00L4 | BULK | 0.082 | D13 | 6.5 | 14.5 | 26.0 | 12 | MMK22,5 | 823K630D13L4 | TRAY |
| 0.0027 | K00 | 2.5 | 6.0 | 10.0 | 60 | MMK7,5 | 272K630K00L4 | BULK | 0.10 | D13 | 6.5 | 14.5 | 26.0 | 12 | MMK22,5 | 104K630D13L4 | TRAY |
| 0.0033 | K00 | 2.5 | 6.0 | 10.0 | 60 | MMK7,5 | 332K630K00L4 | BULK | 0.12 | D13 | 6.5 | 14.5 | 26.0 | 12 | MMK22,5 | 124K630D13L4 | TRAY |
| 0.0039 | K00 | 2.5 | 6.0 | 10.0 | 60 | MMK7,5 | 392K630K00L4 | BULK | 0.15 | D13 | 6.5 | 14.5 | 26.0 | 12 | MMK22,5 | 154K630D13L4 | TRAY |
| 0.0047 | K01 | 4.0 | 8.0 | 10.0 | 60 | MMK7,5 | 472K630K01L4 | BULK | 0.18 | D17 | 7.0 | 16.5 | 26.0 | 12 | MMK22,5 | 184K630D17L4 | TRAY |
| 0.0056 | K01 | 4.0 | 8.0 | 10.0 | 60 | MMK7,5 | 562K630K01L4 | BULK | 0.22 | D17 | 7.0 | 16.5 | 26.0 | 12 | MMK22,5 | 224K630D17L4 | TRAY |
| 0.0068 | K01 | 4.0 | 8.0 | 10.0 | 60 | MMK7,5 | 682K630K01L4 | BULK | 0.27 | D14 | 8.0 | 16.0 | 26.0 | 12 | MMK22,5 | 274K630D14L4 | TRAY |
| 0.0082 | K01 | 4.0 | 8.0 | 10.0 | 60 | MMK7,5 | 822K630K01L4 | BULK | 0.33 | D15 | 9.0 | 18.5 | 26.0 | 12 | MMK22,5 | 334K630D15L4 | TRAY |
| 0.010 | K01 | 4.0 | 8.0 | 10.0 | 60 | MMK7,5 | 103K630K01L4 | BULK | 0.39 | D18 | 10.5 | 19.0 | 26.0 | 12 | MMK22,5 | 394K630D18L4 | TRAY |
| 0.012 | K01 | 4.0 | 8.0 | 10.0 | 60 | MMK7,5 | 123K630K01L4 | BULK | 0.47 | D16 | 11.0 | 21.5 | 26.0 | 12 | MMK22,5 | 474K630D16L4 | TRAY |
| 0.015 | K03 | 5.0 | 11.0 | 10.0 | 60 | MMK7,5 | 153K630K03L4 | BULK | 0.56 | D20 | 13.5 | 23.0 | 26.0 | 12 | MMK22,5 | 564K630D20L4 | TRAY |
| 0.018 | K03 | 5.0 | 11.0 | 10.0 | 60 | MMK7,5 | 183K630K03L4 | BULK | 0.68 | D20 | 13.5 | 23.0 | 26.0 | 12 | MMK22,5 | 684K630D20L4 | TRAY |
| 0.022 | K03 | 5.0 | 11.0 | 10.0 | 60 | MMK7,5 | 223K630K03L4 | BULK | 0.82 | D19 | 15.5 | 24.5 | 26.0 | 12 | MMK22,5 | 824K630D19L4 | TRAY |
| 0.027 | K03 | 5.0 | 11.0 | 10.0 | 60 | MMK7,5 | 273K630K03L4 | BULK | LEAD SPACING 27.5 MM | | | | | | | | |
| 0.033 | K04 | 6.0 | 12.0 | 10.5 | 60 | MMK7,5 | 333K630K04L4 | BULK | 0.33 | F11 | 10.5 | 20.5 | 31.5 | 10 | MMK27,5 | 334K630F11L4 | TRAY |
| 0.039 | K04 | 6.0 | 12.0 | 10.5 | 60 | MMK7,5 | 393K630K04L4 | BULK | 0.39 | F11 | 10.5 | 20.5 | 31.5 | 10 | MMK27,5 | 394K630F11L4 | TRAY |
| LEAD SPACING 10 MM | | | | | | LEAD SPACING 37.5 MM | | | | | | | | | | | |
| 0.0010 | A01 | 4.0 | 9.0 | 13.0 | 40 | MMK10 | 102K630A01L4 | BULK | 0.47 | F11 | 10.5 | 20.5 | 31.5 | 10 | MMK27,5 | 474K630F11L4 | TRAY |
| 0.0012 | A01 | 4.0 | 9.0 | 13.0 | 40 | MMK10 | 122K630A01L4 | BULK | 0.56 | F11 | 10.5 | 20.5 | 31.5 | 10 | MMK27,5 | 564K630F11L4 | TRAY |
| 0.0015 | A01 | 4.0 | 9.0 | 13.0 | 40 | MMK10 | 152K630A01L4 | BULK | 0.56 | F17 | 21.0 | 12.5 | 31.5 | 10 | MMK27,5 | 564K630F17L4 | TRAY |
| 0.0018 | A01 | 4.0 | 9.0 | 13.0 | 40 | MMK10 | 182K630A01L4 | BULK | 0.68 | F12 | 11.5 | 22.5 | 31.5 | 10 | MMK27,5 | 684K630F12L4 | TRAY |
| 0.0022 | A01 | 4.0 | 9.0 | 13.0 | 40 | MMK10 | 222K630A01L4 | BULK | 0.82 | F03 | 13.5 | 23.0 | 31.5 | 10 | MMK27,5 | 824K630F03L4 | TRAY |
| 0.0027 | A01 | 4.0 | 9.0 | 13.0 | 40 | MMK10 | 272K630A01L4 | BULK | 1.0 | F13 | 14.5 | 24.5 | 31.5 | 10 | MMK27,5 | 105K630F13L4 | TRAY |
| 0.0033 | A01 | 4.0 | 9.0 | 13.0 | 40 | MMK10 | 332K630A01L4 | BULK | 1.2 | F14 | 17.5 | 28.0 | 31.5 | 10 | MMK27,5 | 125K630F14L4 | TRAY |
| 0.0039 | A01 | 4.0 | 9.0 | 13.0 | 40 | MMK10 | 392K630A01L4 | BULK | 1.5 | F14 | 17.5 | 28.0 | 31.5 | 10 | MMK27,5 | 155K630F14L4 | TRAY |
| 0.0047 | A01 | 4.0 | 9.0 | 13.0 | 40 | MMK10 | 472K630A01L4 | BULK | 1.5 | F19 | 27.5 | 16.0 | 31.5 | 10 | MMK27,5 | 155K630F19L4 | TRAY |
| 0.0056 | A01 | 4.0 | 9.0 | 13.0 | 40 | MMK10 | 562K630A01L4 | BULK | 1.8 | F15 | 19.0 | 29.0 | 31.5 | 10 | MMK27,5 | 185K630F15L4 | TRAY |
| 0.0068 | A01 | 4.0 | 9.0 | 13.0 | 40 | MMK10 | 682K630A01L4 | BULK | 2.2 | F16 | 21.0 | 30.0 | 31.5 | 10 | MMK27,5 | 225K630F16L4 | TRAY |
| 0.0078 | A01 | 4.0 | 9.0 | 13.0 | 40 | MMK10 | 782K630A01L4 | BULK | 2.2 | F18 | 31.0 | 19.0 | 31.5 | 10 | MMK27,5 | 225K630F18L4 | TRAY |
| 0.0082 | A01 | 4.0 | 9.0 | 13.0 | 40 | MMK10 | 822K630A01L4 | BULK | LEAD SPACING 37.5 MM | | | | | | | | |
| 0.010 | A01 | 4.0 | 9.0 | 13.0 | 40 | MMK10 | 103K630A01L4 | BULK | 0.82 | R05 | 13.0 | 24.0 | 41.0 | 8 | MMK37,5 | 824K630R05L4 | TRAY |
| 0.012 | A01 | 4.0 | 9.0 | 13.0 | 40 | MMK10 | 123K630A01L4 | BULK | 1.0 | R05 | 13.0 | 24.0 | 41.0 | 8 | MMK37,5 | 105K630R05L4 | TRAY |
| 0.015 | A01 | 4.0 | 9.0 | 13.0 | 40 | MMK10 | 153K630A01L4 | BULK | 1.2 | R05 | 13.0 | 24.0 | 41.0 | 8 | MMK37,5 | 125K630R05L4 | TRAY |
| 0.018 | A01 | 4.0 | 9.0 | 13.0 | 40 | MMK10 | 183K630A01L4 | BULK | 1.5 | R04 | 15.0 | 26.0 | 41.0 | 8 | MMK37,5 | 155K630R04L4 | TRAY |
| 0.022 | A01 | 4.0 | 9.0 | 13.0 | 40 | MMK10 | 223K630A01L4 | BULK | 1.8 | R04 | 15.0 | 26.0 | 41.0 | 8 | MMK37,5 | 185K630R04L4 | TRAY |
| 0.027 | A02 | 4.5 | 10.5 | 13.0 | 40 | MMK10 | 273K630A02L4 | BULK | 2.2 | R02 | 16.5 | 32.0 | 41.0 | 8 | MMK37,5 | 225K630R02L4 | TRAY |
| 0.033 | A02 | 4.5 | 10.5 | 13.0 | 40 | MMK10 | 333K630A02L4 | BULK | 2.7 | R03 | 19.0 | 36.0 | 41.0 | 8 | MMK37,5 | 275K630R03L4 | TRAY |
| 0.039 | A03 | 5.0 | 11.0 | 13.0 | 40 | MMK10 | 393K630A03L4 | BULK | 3.3 | R03 | 19.0 | 36.0 | 41.0 | 8 | MMK37,5 | 335K630R03L4 | TRAY |
| 0.047 | A04 | 6.0 | 12.0 | 13.0 | 40 | MMK10 | 473K630A04L4 | BULK | 3.9 | R06 | 21.0 | 38.0 | 41.0 | 8 | MMK37,5 | 395K630R06L4 | TRAY |
| 0.056 | A04 | 6.0 | 12.0 | 13.0 | 40 | MMK10 | 563K630A04L4 | BULK | 4.7 | R06 | 21.0 | 38.0 | 41.0 | 8 | MMK37,5 | 475K630R06L4 | TRAY |
| LEAD SPACING 15 MM | | | | | | LEAD SPACING 37.5 MM | | | | | | | | | | | |
| 0.027 | B04 | 5.5 | 10.5 | 18.0 | 25 | MMK15 | 273K630B04L4 | BULK | 5.6 | R08 | 28.0 | 43.0 | 41.0 | 8 | MMK37,5 | 565K630R08L4 | TRAY |
| 0.033 | B04 | 5.5 | 10.5 | 18.0 | 25 | MMK15 | 333K630B04L4 | BULK | 6.8 | R08 | 28.0 | 43.0 | 41.0 | 8 | MMK37,5 | 685K630R08L4 | TRAY |
| 0.039 | B04 | 5.5 | 10.5 | 18.0 | 25 | MMK15 | 393K630B04L4 | BULK | | | | | | | | | |
| 0.047 | B04 | 5.5 | 10.5 | 18.0 | 25 | MMK15 | 473K630B04L4 | BULK | | | | | | | | | |
| 0.056 | B04 | 5.5 | 10.5 | 18.0 | 25 | MMK15 | 563K630B04L4 | BULK | | | | | | | | | |
| 0.068 | B05 | 5.5 | 12.5 | 18.0 | 25 | MMK15 | 683K630B05L4 | BULK | | | | | | | | | |
| 0.082 | B10 | 6.5 | 12.5 | 18.0 | 25 | MMK15 | 823K630B10L4 | BULK | | | | | | | | | |
| 0.10 | B10 | 6.5 | 12.5 | 18.0 | 25 | MMK15 | 104K630B10L4 | BULK | | | | | | | | | |
| 0.12 | B06 | 7.5 | 14.5 | 18.0 | 25 | MMK15 | 124K630B06L4 | BULK | | | | | | | | | |

ARTICLE TABLE

| Capacitance µF | Box code | Max dimensions in mm | | | Max dU/dt V/µs | Article code | Capacitance µF | Box code | Max dimensions in mm | | | Max dU/dt V/µs | Article code | | |
|----------------------------|----------|----------------------|------|------|-------------------|-----------------------------|-------------------|-----------------------------|----------------------|------|------|-------------------|--------------|-----------------------|------|
| | | B | H | L | | | | | B | H | L | | | | |
| 1000 VDC/250 VAC | | | | | | 1000 VDC/250 VAC | | | | | | | | | |
| LEAD SPACING 5 MM | | | | | | LEAD SPACING 15 MM | | | | | | | | | |
| 0.0010 | J01 | 2.5 | 6.5 | 7.2 | 100 | MMK5 102K1000J01L4 | BULK | 0.018 | B04 | 5.5 | 10.5 | 18.0 | 30 | MMK15 183K1000B04L4 | BULK |
| 0.0012 | J02 | 3.5 | 8.0 | 7.2 | 100 | MMK5 122K1000J02L4 | BULK | 0.022 | B04 | 5.5 | 10.5 | 18.0 | 30 | MMK15 223K1000B04L4 | BULK |
| 0.0015 | J02 | 3.5 | 8.0 | 7.2 | 100 | MMK5 152K1000J02L4 | BULK | 0.027 | B05 | 5.5 | 12.5 | 18.0 | 30 | MMK15 273K1000B05L4 | BULK |
| 0.0018 | J02 | 3.5 | 8.0 | 7.2 | 100 | MMK5 182K1000J02L4 | BULK | 0.033 | B10 | 6.5 | 12.5 | 18.0 | 30 | MMK15 333K1000B10L4 | BULK |
| 0.0022 | J02 | 3.5 | 8.0 | 7.2 | 100 | MMK5 222K1000J02L4 | BULK | 0.039 | B10 | 6.5 | 12.5 | 18.0 | 30 | MMK15 393K1000B10L4 | BULK |
| 0.0027 | J02 | 3.5 | 8.0 | 7.2 | 100 | MMK5 272K1000J02L4 | BULK | 0.047 | B06 | 7.5 | 14.5 | 18.0 | 30 | MMK15 473K1000B06L4 | BULK |
| 0.0033 | J02 | 3.5 | 8.0 | 7.2 | 100 | MMK5 332K1000J02L4 | BULK | 0.056 | B06 | 7.5 | 14.5 | 18.0 | 30 | MMK15 563K1000B06L4 | BULK |
| 0.0039 | J03 | 4.5 | 9.0 | 7.2 | 100 | MMK5 392K1000J03L4 | BULK | 0.068 | B11 | 8.5 | 16.0 | 18.0 | 30 | MMK15 683K1000B11L4 | BULK |
| 0.0047 | J03 | 4.5 | 9.0 | 7.2 | 100 | MMK5 472K1000J03L4 | BULK | 0.082 | B14 | 9.5 | 17.5 | 18.0 | 30 | MMK15 823K1000B14L4 | BULK |
| 0.0056 | J03 | 4.5 | 9.0 | 7.2 | 100 | MMK5 562K1000J03L4 | BULK | 0.10 | B14 | 9.5 | 17.5 | 18.0 | 30 | MMK15 104K1000B14L4 | BULK |
| 0.0068 | J04 | 5.0 | 10.0 | 7.2 | 100 | MMK5 682K1000J04L4 | BULK | LEAD SPACING 22.5 MM | | | | | | | |
| 0.0082 | J05 | 6.0 | 11.0 | 7.2 | 100 | MMK5 822K1000J05L4 | BULK | 0.033 | D13 | 6.5 | 14.5 | 26.0 | 15 | MMK22,5 333K1000D13L4 | TRAY |
| 0.010 | J05 | 6.0 | 11.0 | 7.2 | 100 | MMK5 103K1000J05L4 | BULK | 0.039 | D13 | 6.5 | 14.5 | 26.0 | 15 | MMK22,5 393K1000D13L4 | TRAY |
| 0.012 | J06 | 7.2 | 13.0 | 7.2 | 100 | MMK5 123K1000J06L4 | BULK | 0.047 | D13 | 6.5 | 14.5 | 26.0 | 15 | MMK22,5 473K1000D13L4 | TRAY |
| 0.015 | J06 | 7.2 | 13.0 | 7.2 | 100 | MMK5 153K1000J06L4 | BULK | 0.056 | D13 | 6.5 | 14.5 | 26.0 | 15 | MMK22,5 563K1000D13L4 | TRAY |
| LEAD SPACING 7.5 MM | | | | | | LEAD SPACING 27.5 MM | | | | | | | | | |
| 0.0010 | K00 | 2.5 | 6.0 | 10.0 | 80 | MMK7,5 102K1000K00L4 | BULK | 0.068 | D13 | 6.5 | 14.5 | 26.0 | 15 | MMK22,5 683K1000D13L4 | TRAY |
| 0.0012 | K00 | 2.5 | 6.0 | 10.0 | 80 | MMK7,5 122K1000K00L4 | BULK | 0.082 | D13 | 6.5 | 14.5 | 26.0 | 15 | MMK22,5 823K1000D13L4 | TRAY |
| 0.0015 | K00 | 2.5 | 6.0 | 10.0 | 80 | MMK7,5 152K1000K00L4 | BULK | 0.10 | D13 | 6.5 | 14.5 | 26.0 | 15 | MMK22,5 104K1000D13L4 | TRAY |
| 0.0015 | K01 | 4.0 | 8.0 | 10.0 | 80 | MMK7,5 152K1000K01L4 | BULK | 0.12 | D17 | 7.0 | 16.5 | 26.0 | 15 | MMK22,5 124K1000D17L4 | TRAY |
| 0.0018 | K01 | 4.0 | 8.0 | 10.0 | 80 | MMK7,5 182K1000K01L4 | BULK | 0.15 | D17 | 7.0 | 16.5 | 26.0 | 15 | MMK22,5 154K1000D17L4 | TRAY |
| 0.0022 | K01 | 4.0 | 8.0 | 10.0 | 80 | MMK7,5 222K1000K01L4 | BULK | 0.18 | D14 | 8.0 | 16.0 | 26.0 | 15 | MMK22,5 184K1000D14L4 | TRAY |
| 0.0027 | K01 | 4.0 | 8.0 | 10.0 | 80 | MMK7,5 272K1000K01L4 | BULK | 0.22 | D15 | 9.0 | 18.5 | 26.0 | 15 | MMK22,5 224K1000D15L4 | TRAY |
| 0.0033 | K01 | 4.0 | 8.0 | 10.0 | 80 | MMK7,5 332K1000K01L4 | BULK | 0.27 | D18 | 10.5 | 19.0 | 26.0 | 15 | MMK22,5 274K1000D18L4 | TRAY |
| 0.0039 | K01 | 4.0 | 8.0 | 10.0 | 80 | MMK7,5 392K1000K01L4 | BULK | 0.33 | D16 | 11.0 | 21.5 | 26.0 | 15 | MMK22,5 334K1000D16L4 | TRAY |
| 0.0047 | K01 | 4.0 | 8.0 | 10.0 | 80 | MMK7,5 472K1000K01L4 | BULK | 0.39 | D20 | 13.5 | 23.0 | 26.0 | 15 | MMK22,5 394K1000D20L4 | TRAY |
| 0.0056 | K01 | 4.0 | 8.0 | 10.0 | 80 | MMK7,5 562K1000K01L4 | BULK | 0.47 | D20 | 13.5 | 23.0 | 26.0 | 15 | MMK22,5 474K1000D20L4 | TRAY |
| 0.0068 | K03 | 5.0 | 11.0 | 10.0 | 80 | MMK7,5 682K1000K03L4 | BULK | 0.56 | D19 | 15.5 | 24.5 | 26.0 | 15 | MMK22,5 564K1000D19L4 | TRAY |
| 0.0082 | K03 | 5.0 | 11.0 | 10.0 | 80 | MMK7,5 822K1000K03L4 | BULK | LEAD SPACING 10 MM | | | | | | | |
| 0.010 | K03 | 5.0 | 11.0 | 10.0 | 80 | MMK7,5 103K1000K03L4 | BULK | 0.33 | F11 | 10.5 | 20.5 | 31.5 | 12 | MMK27,5 334K1000F11L4 | TRAY |
| 0.012 | K03 | 5.0 | 11.0 | 10.0 | 80 | MMK7,5 123K1000K03L4 | BULK | 0.39 | F11 | 10.5 | 20.5 | 31.5 | 12 | MMK27,5 394K1000F11L4 | TRAY |
| 0.015 | K04 | 6.0 | 12.0 | 10.5 | 80 | MMK7,5 153K1000K04L4 | BULK | 0.39 | F17 | 21.0 | 12.5 | 31.5 | 12 | MMK27,5 394K1000F17L4 | TRAY |
| 0.018 | K04 | 6.0 | 12.0 | 10.5 | 80 | MMK7,5 183K1000K04L4 | BULK | 0.47 | F12 | 11.5 | 22.5 | 31.5 | 12 | MMK27,5 474K1000F12L4 | TRAY |
| LEAD SPACING 10 MM | | | | | | LEAD SPACING 37.5 MM | | | | | | | | | |
| 0.0010 | A01 | 4.0 | 9.0 | 13.0 | 60 | MMK10 102K1000A01L4 | BULK | 0.56 | F03 | 13.5 | 23.0 | 31.5 | 12 | MMK27,5 564K1000F03L4 | TRAY |
| 0.0012 | A01 | 4.0 | 9.0 | 13.0 | 60 | MMK10 122K1000A01L4 | BULK | 0.68 | F13 | 14.5 | 24.5 | 31.5 | 12 | MMK27,5 684K1000F13L4 | TRAY |
| 0.0015 | A01 | 4.0 | 9.0 | 13.0 | 60 | MMK10 152K1000A01L4 | BULK | 0.82 | F14 | 17.5 | 28.0 | 31.5 | 12 | MMK27,5 824K1000F14L4 | TRAY |
| 0.0018 | A01 | 4.0 | 9.0 | 13.0 | 60 | MMK10 182K1000A01L4 | BULK | 0.82 | F19 | 27.5 | 16.0 | 31.5 | 12 | MMK27,5 824K1000F19L4 | TRAY |
| 0.0022 | A01 | 4.0 | 9.0 | 13.0 | 60 | MMK10 222K1000A01L4 | BULK | 1.0 | F14 | 17.5 | 28.0 | 31.5 | 12 | MMK27,5 105K1000F14L4 | TRAY |
| 0.0027 | A01 | 4.0 | 9.0 | 13.0 | 60 | MMK10 272K1000A01L4 | BULK | 1.2 | F15 | 19.0 | 29.0 | 31.5 | 12 | MMK27,5 125K1000F15L4 | TRAY |
| 0.0033 | A01 | 4.0 | 9.0 | 13.0 | 60 | MMK10 332K1000A01L4 | BULK | 1.2 | F18 | 31.0 | 19.0 | 31.5 | 12 | MMK27,5 125K1000F18L4 | TRAY |
| 0.0039 | A01 | 4.0 | 9.0 | 13.0 | 60 | MMK10 392K1000A01L4 | BULK | 1.5 | F16 | 21.0 | 30.0 | 31.5 | 12 | MMK27,5 155K1000F16L4 | TRAY |
| 0.0047 | A01 | 4.0 | 9.0 | 13.0 | 60 | MMK10 472K1000A01L4 | BULK | LEAD SPACING 15 MM | | | | | | | |
| 0.0056 | A01 | 4.0 | 9.0 | 13.0 | 60 | MMK10 562K1000A01L4 | BULK | 0.082 | R05 | 13.0 | 24.0 | 41.0 | 10 | MMK37,5 824K1000R05L4 | TRAY |
| 0.0068 | A01 | 4.0 | 9.0 | 13.0 | 60 | MMK10 682K1000A01L4 | BULK | 0.82 | R05 | 13.0 | 24.0 | 41.0 | 10 | MMK37,5 824K1000R05L4 | TRAY |
| 0.0082 | A01 | 4.0 | 9.0 | 13.0 | 60 | MMK10 822K1000A01L4 | BULK | 1.0 | R04 | 15.0 | 26.0 | 41.0 | 10 | MMK37,5 105K1000R04L4 | TRAY |
| 0.010 | A02 | 4.5 | 10.5 | 13.0 | 60 | MMK10 103K1000A02L4 | BULK | 1.2 | R04 | 15.0 | 26.0 | 41.0 | 10 | MMK37,5 125K1000R04L4 | TRAY |
| 0.012 | A02 | 4.5 | 10.5 | 13.0 | 60 | MMK10 123K1000A02L4 | BULK | 1.5 | R02 | 16.5 | 32.0 | 41.0 | 10 | MMK37,5 155K1000R02L4 | TRAY |
| 0.015 | A03 | 5.0 | 11.0 | 13.0 | 60 | MMK10 153K1000A03L4 | BULK | 1.8 | R02 | 16.5 | 32.0 | 41.0 | 10 | MMK37,5 185K1000R02L4 | TRAY |
| 0.018 | A04 | 6.0 | 12.0 | 13.0 | 60 | MMK10 183K1000A04L4 | BULK | 2.2 | R03 | 19.0 | 36.0 | 41.0 | 10 | MMK37,5 225K1000R03L4 | TRAY |
| 0.022 | A04 | 6.0 | 12.0 | 13.0 | 60 | MMK10 223K1000A04L4 | BULK | 2.7 | R06 | 21.0 | 38.0 | 41.0 | 10 | MMK37,5 275K1000R06L4 | TRAY |
| LEAD SPACING 15 MM | | | | | | LEAD SPACING 37.5 MM | | | | | | | | | |
| 0.0082 | B04 | 5.5 | 10.5 | 18.0 | 30 | MMK15 822K1000B04L4 | BULK | 3.3 | R08 | 28.0 | 43.0 | 41.0 | 10 | MMK37,5 335K1000R08L4 | TRAY |
| 0.010 | B04 | 5.5 | 10.5 | 18.0 | 30 | MMK15 103K1000B04L4 | BULK | 3.9 | R08 | 28.0 | 43.0 | 41.0 | 10 | MMK37,5 395K1000R08L4 | TRAY |
| 0.012 | B04 | 5.5 | 10.5 | 18.0 | 30 | MMK15 123K1000B04L4 | BULK | 4.7 | R08 | 28.0 | 43.0 | 41.0 | 10 | MMK37,5 475K1000R08L4 | TRAY |
| 0.015 | B04 | 5.5 | 10.5 | 18.0 | 30 | MMK15 153K1000B04L4 | BULK | | | | | | | | |

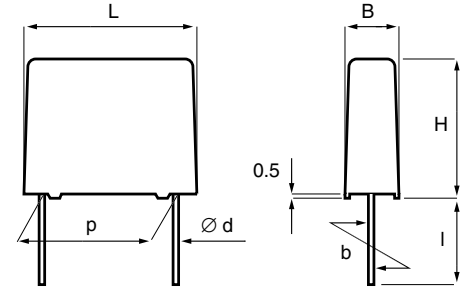
- Metallized polyphenylene sulfide
- Stable +150 °C high temperature capacitor

TYPICAL APPLICATIONS

Automotive and other applications with high ambient temperatures. Applications requiring high stability and low losses. Offers excellent sound quality in audio applications.

CONSTRUCTION

Polyphenylene sulphide film capacitor with vacuum-evaporated aluminum electrodes. Radial leads of tinned wire are electrically welded to the contact metal layer on the ends of the capacitor winding. Encapsulation in self-extinguishing material meeting the requirements of UL 94V-0.



TECHNICAL DATA

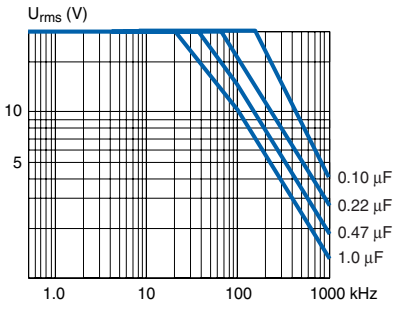
| | 50 | 63 | 100 | 250 | 400 |
|---|---|---------------------------|--|----------------------|----------------|
| Rated voltage U_R, VDC | 50 | 63 | 100 | 250 | 400 |
| Rated voltage U_R, VAC | 30 | 40 | 63 | 160 | 200 |
| Capacitance, μF | 0.001 - 22 | 0.001 - 22 | 0.001 - 12 | 0.001 - 3.9 | 0.001 - 1.8 |
| Capacitance tolerance | $\pm 20\%$, $\pm 10\%$, $\pm 5\%$, $\pm 2.5\%$ | | | | |
| Category temperature range | -55 ... +150°C | | | | |
| Rated temperature | -55 ... +125 °C | | | | |
| Voltage derating | From +125°C, the voltage derating is 2%/°C. | | | | |
| Climatic category | IEC 60068-1, 55/150/56 DIN 40040, FKD | | | | |
| Test voltage | 1.6 x U_R for 2s. | | | | |
| Reliability | Operational life > 200 000 h. Failure rate < 3 FIT, T = +40°C, U = 0.5 x U_R . Failure criteria according to DIN 44122. | | | | |
| Capacitance drift | Max. 0.3% after a 2 year storage period at a temperature of +10° ... +40°C and a relative humidity of 40 ... 60 %. | | | | |
| Dissipation factor $\tan\delta$ | Maximum values at +23°C | | | | |
| | | $C \leq 0.1\mu\text{F}$ | $0.1\mu\text{F} < C \leq 1.0\mu\text{F}$ | $C > 1.0\mu\text{F}$ | |
| SMR5 | 1 kHz | 0.15 % | 0.15 % | 0.15 % | |
| | 10 kHz | 0.25 % | 0.25 % | 0.35 % | |
| | 100 kHz | 0.50 % | 0.60 % | | |
| SMR7.5...27.5 | 1 kHz | 0.15 % | 0.15 % | 0.15 % | |
| | 10 kHz | 0.25 % | 0.25 % | | |
| | 100 kHz | 0.60 % | | | |
| Insulation resistance | Minimum values between terminals. Measured at +20°C, according to IEC 60384-1 | | | | |
| | | $C \leq 0.33 \mu\text{F}$ | $C > 0.33 \mu\text{F}$ | | |
| | $U_R \leq 100 \text{ V}$ | 15 000 M Ω | 5 000 s | | |
| | $U_R > 100 \text{ V}$ | 30 000 M Ω | 10 000 s | | |

| p | d | std l | max l | b |
|------------|-----|-----------------|-------|-------|
| 5.0 ± 0.4 | 0.5 | 4 ⁺¹ | 30 | ± 0.4 |
| 7.5 ± 0.4 | 0.6 | 4 ⁺¹ | 30 | ± 0.4 |
| 10.0 ± 0.4 | 0.6 | 4 ⁺¹ | 30 | ± 0.4 |
| 15.0 ± 0.4 | 0.8 | 4 ⁺¹ | 30 | ± 0.4 |
| 22.5 ± 0.4 | 0.8 | 4 ⁺¹ | 30 | ± 0.4 |
| 27.5 ± 0.4 | 0.8 | 4 ⁺¹ | 30 | ± 0.4 |

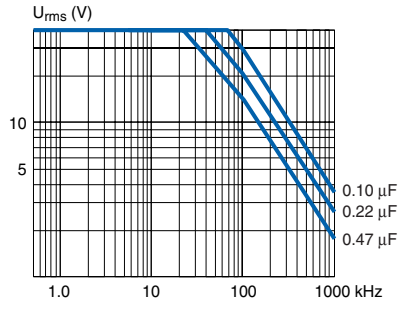
ENVIRONMENTAL TEST DATA

| | | |
|-----------------------|-------------------------|---|
| Damp heat test | Test conditions: | T = +40°C, RH = 93%, t = 56 days. |
| | Test criteria: | $\Delta C/C \leq \pm 3\%$, $\Delta \tan\delta \leq 0.0025$ (1kHz) IR after test 0.5 x IR min. |
| Endurance test | Test conditions: | T = +125°C, U = 1.25 x (0.5 x U_R), t = 2000 h. |
| | Test criteria: | $\Delta C/C \leq \pm 3\%$, $\Delta \tan\delta \leq 0.002$ (1kHz), C > 1 μF $\Delta \tan\delta \leq 0.003$ (10kHz), C ≤ 1 μF IR after test 0.5 x IR min. |

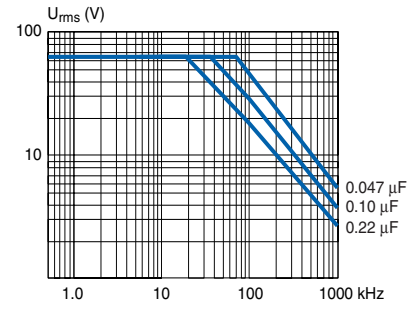
DERATING OF U_{RMS} VS FREQUENCY, +100°C AMBIENT TEMPERATURE AND 20°C INTERNAL HEATING, TYPICAL VALUES



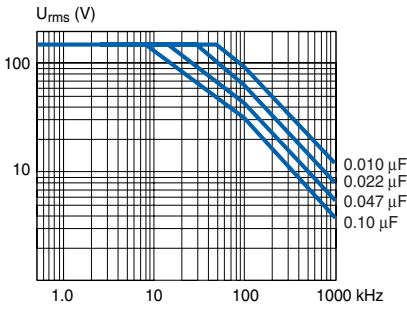
SMR5 50/30



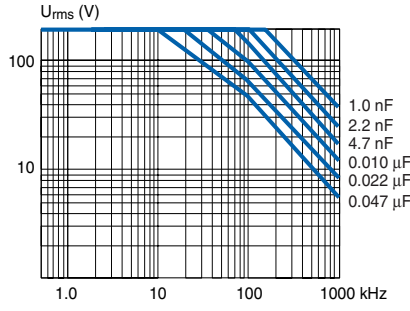
SMR5 63/40



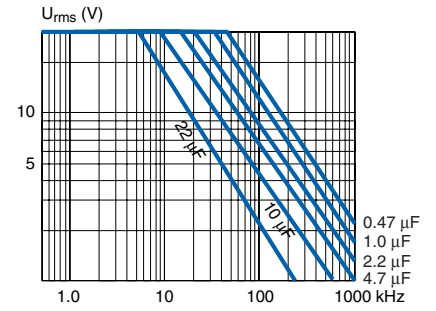
SMR5 100/63



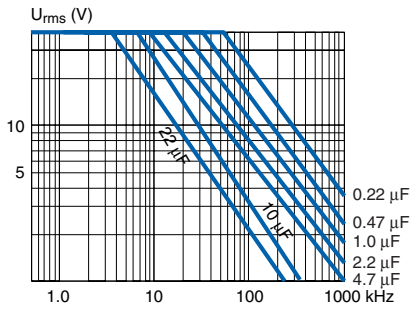
SMR5 250/160



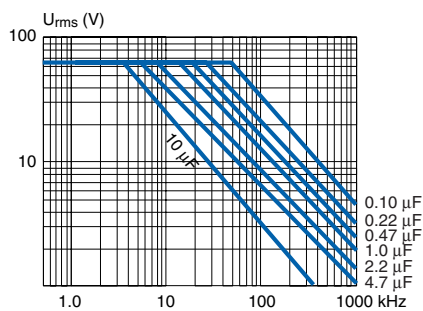
SMR5 400/200



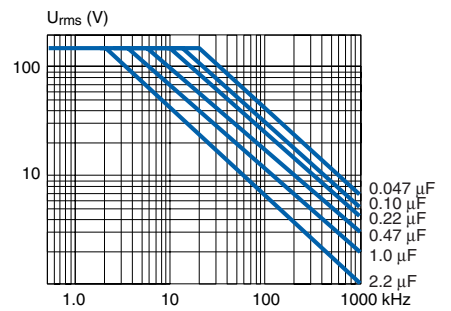
SMR7.5 ... 27.5 50/30



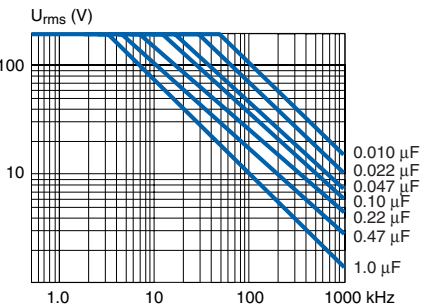
SMR7.5 ... 27.5 63/40



SMR7.5 ... 27.5 100/63



SMR7.5 ... 27.5 250/160



SMR7.5 ... 27.5 400/200

ORDERING INFORMATION

See article table and pages 11 to 15 for options and article code construction.

MARKING

- Capacitance
- Tolerance code
- Rated voltage
- Capacitor family code SMR
- Manufacturing date code

ARTICLE TABLE

| Capacitance μF | Box code | Max dimensions in mm | | | Max dU/dt $\text{V}/\mu\text{s}$ | Article code | Capacitance μF | Box code | Max dimensions in mm | | | Max dU/dt $\text{V}/\mu\text{s}$ | Article code |
|------------------------------|----------|----------------------|------|------|-------------------------------------|----------------------------|------------------------------|----------|----------------------|------|------|-------------------------------------|------------------------|
| | | B | H | L | | | | | B | H | L | | |
| 50 VDC/30 VAC | | | | | | 50 VDC/30 VAC | | | | | | | |
| LEAD SPACING 5 MM | | | | | | LEAD SPACING 7.5 MM | | | | | | | |
| 0.0010 | J01 | 2.5 | 6.5 | 7.2 | 40 | SMR5 102K50J01L4BULK | 0.039 | K01 | 4.0 | 8.0 | 10.0 | 20 | SMR7,5 393K50K01L4BULK |
| 0.0012 | J01 | 2.5 | 6.5 | 7.2 | 40 | SMR5 122K50J01L4BULK | 0.047 | K01 | 4.0 | 8.0 | 10.0 | 20 | SMR7,5 473K50K01L4BULK |
| 0.0015 | J01 | 2.5 | 6.5 | 7.2 | 40 | SMR5 152K50J01L4BULK | 0.056 | K01 | 4.0 | 8.0 | 10.0 | 15 | SMR7,5 563K50K01L4BULK |
| 0.0018 | J01 | 2.5 | 6.5 | 7.2 | 40 | SMR5 182K50J01L4BULK | 0.068 | K01 | 4.0 | 8.0 | 10.0 | 15 | SMR7,5 683K50K01L4BULK |
| 0.0022 | J01 | 2.5 | 6.5 | 7.2 | 40 | SMR5 222K50J01L4BULK | 0.082 | K01 | 4.0 | 8.0 | 10.0 | 15 | SMR7,5 823K50K01L4BULK |
| 0.0027 | J01 | 2.5 | 6.5 | 7.2 | 40 | SMR5 272K50J01L4BULK | 0.10 | K01 | 4.0 | 8.0 | 10.0 | 15 | SMR7,5 104K50K01L4BULK |
| 0.0033 | J01 | 2.5 | 6.5 | 7.2 | 40 | SMR5 332K50J01L4BULK | 0.12 | K01 | 4.0 | 8.0 | 10.0 | 15 | SMR7,5 124K50K01L4BULK |
| 0.0039 | J01 | 2.5 | 6.5 | 7.2 | 40 | SMR5 392K50J01L4BULK | 0.15 | K01 | 4.0 | 8.0 | 10.0 | 10 | SMR7,5 154K50K01L4BULK |
| 0.0047 | J01 | 2.5 | 6.5 | 7.2 | 20 | SMR5 472K50J01L4BULK | 0.18 | K01 | 4.0 | 8.0 | 10.0 | 10 | SMR7,5 184K50K01L4BULK |
| 0.0056 | J01 | 2.5 | 6.5 | 7.2 | 20 | SMR5 562K50J01L4BULK | 0.22 | K01 | 4.0 | 8.0 | 10.0 | 10 | SMR7,5 224K50K01L4BULK |
| 0.0068 | J01 | 2.5 | 6.5 | 7.2 | 20 | SMR5 682K50J01L4BULK | 0.27 | K01 | 4.0 | 8.0 | 10.0 | 10 | SMR7,5 274K50K01L4BULK |
| 0.0082 | J01 | 2.5 | 6.5 | 7.2 | 20 | SMR5 822K50J01L4BULK | 0.33 | K01 | 4.0 | 8.0 | 10.0 | 10 | SMR7,5 334K50K01L4BULK |
| 0.010 | J01 | 2.5 | 6.5 | 7.2 | 20 | SMR5 103K50J01L4BULK | 0.39 | K01 | 4.0 | 8.0 | 10.0 | 10 | SMR7,5 394K50K01L4BULK |
| 0.012 | J01 | 2.5 | 6.5 | 7.2 | 15 | SMR5 123K50J01L4BULK | 0.47 | K03 | 5.0 | 11.0 | 10.0 | 10 | SMR7,5 474K50K03L4BULK |
| 0.015 | J01 | 2.5 | 6.5 | 7.2 | 15 | SMR5 153K50J01L4BULK | 0.56 | K03 | 5.0 | 11.0 | 10.0 | 10 | SMR7,5 564K50K03L4BULK |
| 0.018 | J01 | 2.5 | 6.5 | 7.2 | 15 | SMR5 183K50J01L4BULK | 0.68 | K03 | 5.0 | 11.0 | 10.0 | 10 | SMR7,5 684K50K03L4BULK |
| 0.022 | J01 | 2.5 | 6.5 | 7.2 | 15 | SMR5 223K50J01L4BULK | 0.82 | K03 | 5.0 | 11.0 | 10.0 | 10 | SMR7,5 824K50K03L4BULK |
| 0.027 | J01 | 2.5 | 6.5 | 7.2 | 15 | SMR5 273K50J01L4BULK | 1.0 | K04 | 6.0 | 12.0 | 10.5 | 10 | SMR7,5 105K50K04L4BULK |
| 0.033 | J01 | 2.5 | 6.5 | 7.2 | 15 | SMR5 333K50J01L4BULK | 1.2 | K04 | 6.0 | 12.0 | 10.5 | 10 | SMR7,5 125K50K04L4BULK |
| 0.039 | J01 | 2.5 | 6.5 | 7.2 | 15 | SMR5 393K50J01L4BULK | | | | | | | |
| 0.047 | J01 | 2.5 | 6.5 | 7.2 | 6 | SMR5 473K50J01L4BULK | LEAD SPACING 10 MM | | | | | | |
| 0.056 | J01 | 2.5 | 6.5 | 7.2 | 6 | SMR5 563K50J01L4BULK | 0.0027 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 272K50A01L4BULK |
| 0.068 | J01 | 2.5 | 6.5 | 7.2 | 6 | SMR5 683K50J01L4BULK | 0.0033 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 332K50A01L4BULK |
| 0.082 | J01 | 2.5 | 6.5 | 7.2 | 6 | SMR5 823K50J01L4BULK | 0.0039 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 392K50A01L4BULK |
| 0.10 | J01 | 2.5 | 6.5 | 7.2 | 6 | SMR5 104K50J01L4BULK | 0.0047 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 472K50A01L4BULK |
| 0.12 | J01 | 2.5 | 6.5 | 7.2 | 6 | SMR5 124K50J01L4BULK | 0.0056 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 562K50A01L4BULK |
| 0.15 | J02 | 3.5 | 8.0 | 7.2 | 6 | SMR5 154K50J02L4BULK | 0.0068 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 682K50A01L4BULK |
| 0.18 | J02 | 3.5 | 8.0 | 7.2 | 6 | SMR5 184K50J02L4BULK | 0.0082 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 822K50A01L4BULK |
| 0.22 | J02 | 3.5 | 8.0 | 7.2 | 6 | SMR5 224K50J02L4BULK | 0.010 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 103K50A01L4BULK |
| 0.27 | J02 | 3.5 | 8.0 | 7.2 | 6 | SMR5 274K50J02L4BULK | 0.012 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 123K50A01L4BULK |
| 0.33 | J03 | 4.5 | 9.0 | 7.2 | 6 | SMR5 334K50J03L4BULK | 0.015 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 153K50A01L4BULK |
| 0.39 | J03 | 4.5 | 9.0 | 7.2 | 6 | SMR5 394K50J03L4BULK | 0.018 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 183K50A01L4BULK |
| 0.47 | J04 | 5.0 | 10.0 | 7.2 | 6 | SMR5 474K50J04L4BULK | 0.022 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 223K50A01L4BULK |
| 0.56 | J04 | 5.0 | 10.0 | 7.2 | 6 | SMR5 564K50J04L4BULK | 0.027 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 273K50A01L4BULK |
| 0.68 | J05 | 6.0 | 11.0 | 7.2 | 6 | SMR5 684K50J05L4BULK | 0.033 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 333K50A01L4BULK |
| 0.82 | J05 | 6.0 | 11.0 | 7.2 | 6 | SMR5 824K50J05L4BULK | 0.039 | A01 | 4.0 | 9.0 | 13.0 | 15 | SMR10 393K50A01L4BULK |
| 1.0 | J06 | 7.2 | 13.0 | 7.2 | 6 | SMR5 105K50J06L4BULK | 0.047 | A01 | 4.0 | 9.0 | 13.0 | 15 | SMR10 473K50A01L4BULK |
| 1.2 | J06 | 7.2 | 13.0 | 7.2 | 6 | SMR5 125K50J06L4BULK | 0.056 | A01 | 4.0 | 9.0 | 13.0 | 15 | SMR10 563K50A01L4BULK |
| LEAD SPACING 7.5 MM | | | | | | 0.068 | A01 | 4.0 | 9.0 | 13.0 | 15 | SMR10 683K50A01L4BULK | |
| 0.0010 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 102K50K01L4BULK | 0.082 | A01 | 4.0 | 9.0 | 13.0 | 10 | SMR10 823K50A01L4BULK |
| 0.0012 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 122K50K01L4BULK | 0.10 | A01 | 4.0 | 9.0 | 13.0 | 10 | SMR10 104K50A01L4BULK |
| 0.0015 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 152K50K01L4BULK | 0.12 | A01 | 4.0 | 9.0 | 13.0 | 10 | SMR10 124K50A01L4BULK |
| 0.0018 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 182K50K01L4BULK | 0.15 | A01 | 4.0 | 9.0 | 13.0 | 10 | SMR10 154K50A01L4BULK |
| 0.0022 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 222K50K01L4BULK | 0.18 | A01 | 4.0 | 9.0 | 13.0 | 10 | SMR10 184K50A01L4BULK |
| 0.0027 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 272K50K01L4BULK | 0.22 | A01 | 4.0 | 9.0 | 13.0 | 10 | SMR10 224K50A01L4BULK |
| 0.0033 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 332K50K01L4BULK | 0.27 | A01 | 4.0 | 9.0 | 13.0 | 8 | SMR10 274K50A01L4BULK |
| 0.0039 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 392K50K01L4BULK | 0.33 | A01 | 4.0 | 9.0 | 13.0 | 8 | SMR10 334K50A01L4BULK |
| 0.0047 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 472K50K01L4BULK | 0.39 | A01 | 4.0 | 9.0 | 13.0 | 8 | SMR10 394K50A01L4BULK |
| 0.0056 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 562K50K01L4BULK | 0.47 | A01 | 4.0 | 9.0 | 13.0 | 8 | SMR10 474K50A01L4BULK |
| 0.0068 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 682K50K01L4BULK | 0.56 | A01 | 4.0 | 9.0 | 13.0 | 8 | SMR10 564K50A01L4BULK |
| 0.0082 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 822K50K01L4BULK | 0.68 | A01 | 4.0 | 9.0 | 13.0 | 8 | SMR10 684K50A01L4BULK |
| 0.010 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 103K50K01L4BULK | 0.82 | A02 | 4.5 | 10.5 | 13.0 | 8 | SMR10 824K50A02L4BULK |
| 0.012 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 123K50K01L4BULK | 1.0 | A03 | 4.5 | 10.5 | 13.0 | 8 | SMR10 105K50A03L4BULK |
| 0.015 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 153K50K01L4BULK | 1.2 | A03 | 5.0 | 11.0 | 13.0 | 8 | SMR10 125K50A03L4BULK |
| 0.018 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 183K50K01L4BULK | 1.5 | A04 | 6.0 | 12.0 | 13.0 | 8 | SMR10 155K50A04L4BULK |
| 0.022 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 223K50K01L4BULK | 1.8 | A04 | 6.0 | 12.0 | 13.0 | 8 | SMR10 185K50A04L4BULK |
| 0.027 | K01 | 4.0 | 8.0 | 10.0 | 20 | SMR7,5 273K50K01L4BULK | | | | | | | |
| 0.033 | K01 | 4.0 | 8.0 | 10.0 | 20 | SMR7,5 333K50K01L4BULK | | | | | | | |

ARTICLE TABLE

Capaci- Box Max dimen- Max
tance code sions in mm dU/dt
 μF B H L $\text{V}/\mu\text{s}$ Article code

Capaci- Box Max dimen- Max
tance code sions in mm dU/dt
 μF B H L $\text{V}/\mu\text{s}$ Article code

50 VDC/30 VAC

63 VDC/40 VAC

LEAD SPACING 15 MM

LEAD SPACING 7.5 MM

| | | | | | | |
|-----|-----|-----|------|------|---|-----------------------|
| 2.2 | B10 | 6.5 | 12.5 | 18.0 | 6 | SMR15 225K50B10L4BULK |
| 2.7 | B06 | 7.5 | 14.5 | 18.0 | 6 | SMR15 275K50B06L4BULK |
| 3.3 | B06 | 7.5 | 14.5 | 18.0 | 6 | SMR15 335K50B06L4BULK |
| 3.9 | B12 | 8.0 | 15.0 | 18.0 | 6 | SMR15 395K50B12L4BULK |
| 4.7 | B11 | 8.5 | 16.0 | 18.0 | 6 | SMR15 475K50B11L4BULK |
| 5.6 | B14 | 9.5 | 17.5 | 18.0 | 6 | SMR15 565K50B14L4BULK |

| | | | | | | |
|--------|-----|-----|-----|------|----|-------------------------|
| 0.0010 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 102K63K01L4 BULK |
| 0.0012 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 122K63K01L4 BULK |
| 0.0015 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 152K63K01L4 BULK |
| 0.0018 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 182K63K01L4 BULK |
| 0.0022 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 222K63K01L4 BULK |
| 0.0027 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 272K63K01L4 BULK |

LEAD SPACING 22.5 MM

| | | | | | | |
|------|-----|------|------|------|---|-------------------------|
| 6.8 | D14 | 8.0 | 16.0 | 26.0 | 3 | SMR22,5 685K50D14L4TRAY |
| 8.2 | D15 | 9.0 | 18.5 | 26.0 | 3 | SMR22,5 825K50D15L4TRAY |
| 10.0 | D18 | 10.5 | 19.0 | 26.0 | 3 | SMR22,5 106K50D18L4TRAY |
| 12.0 | D16 | 11.0 | 21.5 | 26.0 | 3 | SMR22,5 126K50D16L4TRAY |

| | | | | | | |
|--------|-----|-----|-----|------|----|-------------------------|
| 0.0027 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 223K63K01L4 BULK |
| 0.0033 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 332K63K01L4 BULK |
| 0.0039 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 392K63K01L4 BULK |
| 0.0047 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 472K63K01L4 BULK |
| 0.0056 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 562K63K01L4 BULK |
| 0.0068 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 682K63K01L4 BULK |

LEAD SPACING 27.5 MM

| | | | | | | |
|------|-----|------|------|------|---|-------------------------|
| 15.0 | F11 | 10.5 | 20.5 | 31.5 | 2 | SMR27,5 156K50F11L4TRAY |
| 18.0 | F12 | 11.5 | 22.5 | 31.5 | 2 | SMR27,5 186K50F12L4TRAY |
| 22.0 | F13 | 14.5 | 24.5 | 31.5 | 2 | SMR27,5 226K50F13L4TRAY |

| | | | | | | |
|--------|-----|-----|-----|------|----|-------------------------|
| 0.0068 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 683K63K01L4 BULK |
| 0.0082 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 822K63K01L4 BULK |
| 0.010 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 103K63K01L4 BULK |
| 0.012 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 123K63K01L4 BULK |
| 0.015 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 153K63K01L4 BULK |
| 0.018 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 183K63K01L4 BULK |

63 VDC/40 VAC

LEAD SPACING 5 MM

| | | | | | | |
|--------|-----|-----|------|-----|----|-----------------------|
| 0.0010 | J01 | 2.5 | 6.5 | 7.2 | 40 | SMR5 102K63J01L4 BULK |
| 0.0012 | J01 | 2.5 | 6.5 | 7.2 | 40 | SMR5 122K63J01L4 BULK |
| 0.0015 | J01 | 2.5 | 6.5 | 7.2 | 40 | SMR5 152K63J01L4 BULK |
| 0.0018 | J01 | 2.5 | 6.5 | 7.2 | 40 | SMR5 182K63J01L4 BULK |
| 0.0022 | J01 | 2.5 | 6.5 | 7.2 | 40 | SMR5 222K63J01L4 BULK |
| 0.0027 | J01 | 2.5 | 6.5 | 7.2 | 40 | SMR5 272K63J01L4 BULK |
| 0.0033 | J01 | 2.5 | 6.5 | 7.2 | 40 | SMR5 332K63J01L4 BULK |
| 0.0039 | J01 | 2.5 | 6.5 | 7.2 | 40 | SMR5 392K63J01L4 BULK |
| 0.0047 | J01 | 2.5 | 6.5 | 7.2 | 20 | SMR5 472K63J01L4 BULK |
| 0.0056 | J01 | 2.5 | 6.5 | 7.2 | 20 | SMR5 562K63J01L4 BULK |
| 0.0068 | J01 | 2.5 | 6.5 | 7.2 | 20 | SMR5 682K63J01L4 BULK |
| 0.0082 | J01 | 2.5 | 6.5 | 7.2 | 20 | SMR5 822K63J01L4 BULK |
| 0.010 | J01 | 2.5 | 6.5 | 7.2 | 20 | SMR5 103K63J01L4 BULK |
| 0.012 | J01 | 2.5 | 6.5 | 7.2 | 15 | SMR5 123K63J01L4 BULK |
| 0.015 | J01 | 2.5 | 6.5 | 7.2 | 15 | SMR5 153K63J01L4 BULK |
| 0.018 | J01 | 2.5 | 6.5 | 7.2 | 15 | SMR5 183K63J01L4 BULK |
| 0.022 | J01 | 2.5 | 6.5 | 7.2 | 15 | SMR5 223K63J01L4 BULK |
| 0.027 | J01 | 2.5 | 6.5 | 7.2 | 15 | SMR5 273K63J01L4 BULK |
| 0.033 | J01 | 2.5 | 6.5 | 7.2 | 15 | SMR5 333K63J01L4 BULK |
| 0.039 | J01 | 2.5 | 6.5 | 7.2 | 15 | SMR5 393K63J01L4 BULK |
| 0.047 | J01 | 2.5 | 6.5 | 7.2 | 6 | SMR5 473K63J01L4 BULK |
| 0.056 | J01 | 2.5 | 6.5 | 7.2 | 6 | SMR5 563K63J01L4 BULK |
| 0.068 | J01 | 2.5 | 6.5 | 7.2 | 6 | SMR5 683K63J01L4 BULK |
| 0.082 | J02 | 3.5 | 8.0 | 7.2 | 6 | SMR5 823K63J02L4 BULK |
| 0.10 | J02 | 3.5 | 8.0 | 7.2 | 6 | SMR5 104K63J02L4 BULK |
| 0.12 | J02 | 3.5 | 8.0 | 7.2 | 6 | SMR5 124K63J02L4 BULK |
| 0.15 | J02 | 3.5 | 8.0 | 7.2 | 6 | SMR5 154K63J02L4 BULK |
| 0.18 | J03 | 4.5 | 9.0 | 7.2 | 6 | SMR5 184K63J03L4 BULK |
| 0.22 | J03 | 4.5 | 9.0 | 7.2 | 6 | SMR5 224K63J03L4 BULK |
| 0.27 | J04 | 5.0 | 10.0 | 7.2 | 6 | SMR5 274K63J04L4 BULK |
| 0.33 | J04 | 5.0 | 10.0 | 7.2 | 6 | SMR5 334K63J04L4 BULK |
| 0.39 | J05 | 6.0 | 11.0 | 7.2 | 6 | SMR5 394K63J05L4 BULK |
| 0.47 | J05 | 6.0 | 11.0 | 7.2 | 6 | SMR5 474K63J05L4 BULK |
| 0.56 | J06 | 7.2 | 13.0 | 7.2 | 6 | SMR5 564K63J06L4 BULK |
| 0.68 | J06 | 7.2 | 13.0 | 7.2 | 6 | SMR5 684K63J06L4 BULK |

| | | | | | | |
|-------|-----|-----|------|------|----|-------------------------|
| 0.012 | K01 | 4.0 | 8.0 | 10.0 | 15 | SMR7,5 124K63K01L4 BULK |
| 0.015 | K01 | 4.0 | 8.0 | 10.0 | 10 | SMR7,5 154K63K01L4 BULK |
| 0.018 | K01 | 4.0 | 8.0 | 10.0 | 10 | SMR7,5 184K63K01L4 BULK |
| 0.022 | K01 | 4.0 | 8.0 | 10.0 | 10 | SMR7,5 224K63K01L4 BULK |
| 0.027 | K01 | 4.0 | 8.0 | 10.0 | 10 | SMR7,5 274K63K01L4 BULK |
| 0.033 | K03 | 5.0 | 11.0 | 10.0 | 10 | SMR7,5 334K63K03L4 BULK |
| 0.039 | K03 | 5.0 | 11.0 | 10.0 | 10 | SMR7,5 394K63K03L4 BULK |
| 0.047 | K03 | 5.0 | 11.0 | 10.0 | 10 | SMR7,5 474K63K03L4 BULK |
| 0.056 | K03 | 5.0 | 11.0 | 10.0 | 10 | SMR7,5 564K63K03L4 BULK |
| 0.068 | K04 | 6.0 | 12.0 | 10.5 | 10 | SMR7,5 684K63K04L4 BULK |
| 0.082 | K04 | 6.0 | 12.0 | 10.5 | 10 | SMR7,5 824K63K04L4 BULK |

LEAD SPACING 10 MM

| | | | | | | |
|--------|-----|-----|-----|------|----|------------------------|
| 0.0027 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 272K63A01L4 BULK |
| 0.0033 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 332K63A01L4 BULK |
| 0.0039 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 392K63A01L4 BULK |
| 0.0047 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 472K63A01L4 BULK |
| 0.0056 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 562K63A01L4 BULK |
| 0.0068 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 682K63A01L4 BULK |
| 0.0082 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 822K63A01L4 BULK |
| 0.010 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 103K63A01L4 BULK |
| 0.012 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 123K63A01L4 BULK |
| 0.015 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 153K63A01L4 BULK |
| 0.018 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 183K63A01L4 BULK |
| 0.022 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 223K63A01L4 BULK |
| 0.027 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 273K63A01L4 BULK |
| 0.033 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 333K63A01L4 BULK |
| 0.039 | A01 | 4.0 | 9.0 | 13.0 | 15 | SMR10 393K63A01L4 BULK |
| 0.047 | A01 | 4.0 | 9.0 | 13.0 | 15 | SMR10 473K63A01L4 BULK |
| 0.056 | A01 | 4.0 | 9.0 | 13.0 | 15 | SMR10 563K63A01L4 BULK |
| 0.068 | A01 | 4.0 | 9.0 | 13.0 | 15 | SMR10 683K63A01L4 BULK |
| 0.082 | A01 | 4.0 | 9.0 | 13.0 | 10 | SMR10 823K63A01L4 BULK |
| 0.10 | A01 | 4.0 | 9.0 | 13.0 | 10 | SMR10 104K63A01L4 BULK |
| 0.12 | A01 | 4.0 | 9.0 | 13.0 | 10 | SMR10 124K63A01L4 BULK |
| 0.15 | A01 | 4.0 | 9.0 | 13.0 | 10 | SMR10 154K63A01L4 BULK |

ARTICLE TABLE

| Capacitance µF | Box code | Max dimensions in mm | | | Max dU/dt V/µs | Article code | | | | | | | |
|-----------------------------|----------|----------------------|------|------|-------------------|--------------------------|----------------------------|----------|----------------------|------|------|-------------------|--------------------------|
| | | B | H | L | | | Capacitance µF | Box code | Max dimensions in mm | | | Max dU/dt V/µs | Article code |
| 63 VDC/40 VAC | | | | | | | 100 VDC/63 VAC | | | | | | |
| LEAD SPACING 10MM | | | | | | | LEAD SPACING 5 MM | | | | | | |
| 0.18 | A01 | 4.0 | 9.0 | 13.0 | 10 | SMR10 184K63A01L4 BULK | 0.015 | J01 | 2.5 | 6.5 | 7.2 | 15 | SMR5 153K100J01L4 BULK |
| 0.22 | A01 | 4.0 | 9.0 | 13.0 | 10 | SMR10 224K63A01L4 BULK | 0.018 | J01 | 2.5 | 6.5 | 7.2 | 15 | SMR5 183K100J01L4 BULK |
| 0.27 | A01 | 4.0 | 9.0 | 13.0 | 8 | SMR10 274K63A01L4 BULK | 0.022 | J01 | 2.5 | 6.5 | 7.2 | 15 | SMR5 223K100J01L4 BULK |
| 0.33 | A01 | 4.0 | 9.0 | 13.0 | 8 | SMR10 334K63A01L4 BULK | 0.027 | J01 | 2.5 | 6.5 | 7.2 | 15 | SMR5 273K100J01L4 BULK |
| 0.39 | A01 | 4.0 | 9.0 | 13.0 | 8 | SMR10 394K63A01L4 BULK | 0.033 | J01 | 2.5 | 6.5 | 7.2 | 15 | SMR5 333K100J01L4 BULK |
| 0.47 | A02 | 4.5 | 10.5 | 13.0 | 8 | SMR10 474K63A02L4 BULK | 0.039 | J01 | 2.5 | 6.5 | 7.2 | 15 | SMR5 393K100J01L4 BULK |
| 0.56 | A02 | 4.5 | 10.5 | 13.0 | 8 | SMR10 564K63A02L4 BULK | 0.047 | J02 | 3.5 | 8.0 | 7.2 | 15 | SMR5 473K100J02L4 BULK |
| 0.68 | A03 | 5.0 | 11.0 | 13.0 | 8 | SMR10 684K63A03L4 BULK | 0.056 | J03 | 4.5 | 9.0 | 7.2 | 15 | SMR5 563K100J03L4 BULK |
| 0.82 | A04 | 6.0 | 12.0 | 13.0 | 8 | SMR10 824K63A04L4 BULK | 0.068 | J03 | 4.5 | 9.0 | 7.2 | 15 | SMR5 683K100J03L4 BULK |
| 1.0 | A04 | 6.0 | 12.0 | 13.0 | 8 | SMR10 105K63A04L4 BULK | 0.082 | J03 | 4.5 | 9.0 | 7.2 | 15 | SMR5 823K100J03L4 BULK |
| LEAD SPACING 15 MM | | | | | | | 0.10 | J03 | 4.5 | 9.0 | 7.2 | 15 | SMR5 104K100J03L4 BULK |
| 0.68 | B04 | 5.5 | 10.5 | 18.0 | 8 | SMR15 684K63B04L4 BULK | 0.12 | J04 | 5.0 | 10.0 | 7.2 | 15 | SMR5 124K100J04L4 BULK |
| 0.82 | B04 | 5.5 | 10.5 | 18.0 | 8 | SMR15 824K63B04L4 BULK | 0.15 | J05 | 6.0 | 11.0 | 7.2 | 15 | SMR5 154K100J05L4 BULK |
| 1.0 | B05 | 5.5 | 12.5 | 18.0 | 8 | SMR15 105K63B05L4 BULK | 0.18 | J05 | 6.0 | 11.0 | 7.2 | 15 | SMR5 184K100J05L4 BULK |
| 1.2 | B10 | 6.5 | 12.5 | 18.0 | 6 | SMR15 125K63B10L4 BULK | 0.22 | J06 | 7.2 | 13.0 | 7.2 | 15 | SMR5 224K100J06L4 BULK |
| 1.5 | B10 | 6.5 | 12.5 | 18.0 | 6 | SMR15 155K63B10L4 BULK | 0.27 | J06 | 7.2 | 13.0 | 7.2 | 15 | SMR5 274K100J06L4 BULK |
| 1.8 | B06 | 7.5 | 14.5 | 18.0 | 6 | SMR15 185K63B06L4 BULK | 0.33 | J06 | 7.2 | 13.0 | 7.2 | 15 | SMR5 334K100J06L4 BULK |
| 2.2 | B12 | 8.0 | 15.0 | 18.0 | 6 | SMR15 225K63B12L4 BULK | LEAD SPACING 7.5 MM | | | | | | |
| 2.7 | B11 | 8.5 | 16.0 | 18.0 | 6 | SMR15 275K63B11L4 BULK | 0.0010 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 102K100K01L4 BULK |
| 3.3 | B14 | 9.5 | 17.5 | 18.0 | 6 | SMR15 335K63B14L4 BULK | 0.0012 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 122K100K01L4 BULK |
| LEAD SPACING 22.5 MM | | | | | | | 0.0015 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 152K100K01L4 BULK |
| 2.7 | D13 | 6.5 | 14.5 | 26.0 | 3 | SMR22.5 275K63D13L4 TRAY | 0.0018 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 182K100K01L4 BULK |
| 3.3 | D17 | 7.0 | 16.5 | 26.0 | 3 | SMR22.5 335K63D17L4 TRAY | 0.0022 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 222K100K01L4 BULK |
| 3.9 | D14 | 8.0 | 16.0 | 26.0 | 3 | SMR22.5 395K63D14L4 TRAY | 0.0027 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 272K100K01L4 BULK |
| 4.7 | D15 | 9.0 | 18.5 | 26.0 | 3 | SMR22.5 475K63D15L4 TRAY | 0.0033 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 332K100K01L4 BULK |
| 5.6 | D15 | 9.0 | 18.5 | 26.0 | 3 | SMR22.5 565K63D15L4 TRAY | 0.0039 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 392K100K01L4 BULK |
| 6.8 | D18 | 10.5 | 19.0 | 26.0 | 3 | SMR22.5 685K63D18L4 TRAY | 0.0047 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 472K100K01L4 BULK |
| 8.2 | D16 | 11.0 | 21.5 | 26.0 | 3 | SMR22.5 825K63D16L4 TRAY | 0.0056 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 562K100K01L4 BULK |
| LEAD SPACING 27.5 MM | | | | | | | 0.0068 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 682K100K01L4 BULK |
| 10.0 | F12 | 11.5 | 22.5 | 31.5 | 2 | SMR27,5 106K63F12L4 TRAY | 0.0082 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 822K100K01L4 BULK |
| 12.0 | F13 | 14.5 | 24.5 | 31.5 | 2 | SMR27,5 126K63F13L4 TRAY | 0.010 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 103K100K01L4 BULK |
| 15.0 | F13 | 14.5 | 24.5 | 31.5 | 2 | SMR27,5 156K63F13L4 TRAY | 0.012 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 123K100K01L4 BULK |
| 18.0 | F14 | 17.5 | 28.0 | 31.5 | 2 | SMR27,5 186K63F14L4 TRAY | 0.015 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 153K100K01L4 BULK |
| 22.0 | F14 | 17.5 | 28.0 | 31.5 | 2 | SMR27,5 226K63F14L4 TRAY | 0.018 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 183K100K01L4 BULK |
| 100 VDC/63 VAC | | | | | | | 0.022 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 223K100K01L4 BULK |
| LEAD SPACING 5 MM | | | | | | | 0.027 | K01 | 4.0 | 8.0 | 10.0 | 20 | SMR7,5 273K100K01L4 BULK |
| 0.0010 | J01 | 2.5 | 6.5 | 7.2 | 40 | SMR5 102K100J01L4 BULK | 0.033 | K01 | 4.0 | 8.0 | 10.0 | 20 | SMR7,5 333K100K01L4 BULK |
| 0.0012 | J01 | 2.5 | 6.5 | 7.2 | 40 | SMR5 122K100J01L4 BULK | 0.039 | K01 | 4.0 | 8.0 | 10.0 | 20 | SMR7,5 393K100K01L4 BULK |
| 0.0015 | J01 | 2.5 | 6.5 | 7.2 | 40 | SMR5 152K100J01L4 BULK | 0.047 | K01 | 4.0 | 8.0 | 10.0 | 20 | SMR7,5 473K100K01L4 BULK |
| 0.0018 | J01 | 2.5 | 6.5 | 7.2 | 40 | SMR5 182K100J01L4 BULK | 0.056 | K01 | 4.0 | 8.0 | 10.0 | 15 | SMR7,5 563K100K01L4 BULK |
| 0.0022 | J01 | 2.5 | 6.5 | 7.2 | 40 | SMR5 222K100J01L4 BULK | 0.068 | K01 | 4.0 | 8.0 | 10.0 | 15 | SMR7,5 683K100K01L4 BULK |
| 0.0027 | J01 | 2.5 | 6.5 | 7.2 | 40 | SMR5 272K100J01L4 BULK | 0.082 | K01 | 4.0 | 8.0 | 10.0 | 15 | SMR7,5 823K100K01L4 BULK |
| 0.0033 | J01 | 2.5 | 6.5 | 7.2 | 40 | SMR5 332K100J01L4 BULK | 0.10 | K01 | 4.0 | 8.0 | 10.0 | 15 | SMR7,5 104K100K01L4 BULK |
| 0.0039 | J01 | 2.5 | 6.5 | 7.2 | 40 | SMR5 392K100J01L4 BULK | 0.12 | K01 | 4.0 | 8.0 | 10.0 | 15 | SMR7,5 124K100K01L4 BULK |
| 0.0047 | J01 | 2.5 | 6.5 | 7.2 | 20 | SMR5 472K100J01L4 BULK | 0.15 | K03 | 5.0 | 11.0 | 10.0 | 15 | SMR7,5 154K100K03L4 BULK |
| 0.0056 | J01 | 2.5 | 6.5 | 7.2 | 20 | SMR5 562K100J01L4 BULK | 0.18 | K03 | 5.0 | 11.0 | 10.0 | 15 | SMR7,5 184K100K03L4 BULK |
| 0.0068 | J01 | 2.5 | 6.5 | 7.2 | 20 | SMR5 682K100J01L4 BULK | 0.22 | K03 | 5.0 | 11.0 | 10.0 | 15 | SMR7,5 224K100K03L4 BULK |
| 0.0082 | J01 | 2.5 | 6.5 | 7.2 | 20 | SMR5 822K100J01L4 BULK | 0.27 | K03 | 5.0 | 11.0 | 10.0 | 15 | SMR7,5 274K100K03L4 BULK |
| 0.010 | J01 | 2.5 | 6.5 | 7.2 | 20 | SMR5 103K100J01L4 BULK | 0.33 | K04 | 6.0 | 12.0 | 10.5 | 15 | SMR7,5 334K100K04L4 BULK |
| 0.012 | J01 | 2.5 | 6.5 | 7.2 | 15 | SMR5 123K100J01L4 BULK | 0.39 | K04 | 6.0 | 12.0 | 10.5 | 15 | SMR7,5 394K100K04L4 BULK |
| LEAD SPACING 10 MM | | | | | | | 0.47 | K04 | 6.0 | 12.0 | 10.5 | 15 | SMR7,5 474K100K04L4 BULK |
| 0.0027 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 272K100A01L4 BULK | | | | | | | |
| 0.0033 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 332K100A01L4 BULK | | | | | | | |
| 0.0039 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 392K100A01L4 BULK | | | | | | | |
| 0.0047 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 472K100A01L4 BULK | | | | | | | |

ARTICLE TABLE

Capaci- Box Max dimen- Max
tance code sions in mm dU/dt
µF B H L V/µs Article code

Capaci- Box Max dimen- Max
tance code sions in mm dU/dt
µF B H L V/µs Article code

100 VDC/63 VAC

250 VDC/160 VAC

LEAD SPACING 10 MM

LEAD SPACING 5 MM

| | | | | | | |
|--------|-----|-----|------|------|----|-------------------------|
| 0.0056 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 562K100A01L4 BULK |
| 0.0068 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 682K100A01L4 BULK |
| 0.0082 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 822K100A01L4 BULK |
| 0.010 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 103K100A01L4 BULK |
| 0.012 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 123K100A01L4 BULK |
| 0.015 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 153K100A01L4 BULK |
| 0.018 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 183K100A01L4 BULK |
| 0.022 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 223K100A01L4 BULK |
| 0.027 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 273K100A01L4 BULK |
| 0.033 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 333K100A01L4 BULK |
| 0.039 | A01 | 4.0 | 9.0 | 13.0 | 15 | SMR10 393K100A01L4 BULK |
| 0.047 | A01 | 4.0 | 9.0 | 13.0 | 15 | SMR10 473K100A01L4 BULK |
| 0.056 | A01 | 4.0 | 9.0 | 13.0 | 15 | SMR10 563K100A01L4 BULK |
| 0.068 | A01 | 4.0 | 9.0 | 13.0 | 15 | SMR10 683K100A01L4 BULK |
| 0.082 | A01 | 4.0 | 9.0 | 13.0 | 10 | SMR10 823K100A01L4 BULK |
| 0.10 | A01 | 4.0 | 9.0 | 13.0 | 10 | SMR10 104K100A01L4 BULK |
| 0.12 | A01 | 4.0 | 9.0 | 13.0 | 10 | SMR10 124K100A01L4 BULK |
| 0.15 | A01 | 4.0 | 9.0 | 13.0 | 10 | SMR10 154K100A01L4 BULK |
| 0.18 | A01 | 4.0 | 9.0 | 13.0 | 10 | SMR10 184K100A01L4 BULK |
| 0.22 | A01 | 4.0 | 9.0 | 13.0 | 10 | SMR10 224K100A01L4 BULK |
| 0.27 | A02 | 4.5 | 10.5 | 13.0 | 10 | SMR10 274K100A02L4 BULK |
| 0.33 | A03 | 5.0 | 11.0 | 13.0 | 10 | SMR10 334K100A03L4 BULK |
| 0.39 | A03 | 5.0 | 11.0 | 13.0 | 10 | SMR10 394K100A03L4 BULK |
| 0.47 | A04 | 6.0 | 12.0 | 13.0 | 10 | SMR10 474K100A04L4 BULK |
| 0.56 | A04 | 6.0 | 12.0 | 13.0 | 10 | SMR10 564K100A04L4 BULK |

| | | | | | | |
|--------|-----|-----|------|-----|----|------------------------|
| 0.0010 | J01 | 2.5 | 6.5 | 7.2 | 40 | SMR5 102K250J01L4 BULK |
| 0.0012 | J01 | 2.5 | 6.5 | 7.2 | 40 | SMR5 122K250J01L4 BULK |
| 0.0015 | J01 | 2.5 | 6.5 | 7.2 | 40 | SMR5 152K250J01L4 BULK |
| 0.0018 | J01 | 2.5 | 6.5 | 7.2 | 40 | SMR5 182K250J01L4 BULK |
| 0.0022 | J01 | 2.5 | 6.5 | 7.2 | 40 | SMR5 222K250J01L4 BULK |
| 0.0027 | J01 | 2.5 | 6.5 | 7.2 | 40 | SMR5 272K250J01L4 BULK |
| 0.0033 | J01 | 2.5 | 6.5 | 7.2 | 40 | SMR5 332K250J01L4 BULK |
| 0.0039 | J01 | 2.5 | 6.5 | 7.2 | 40 | SMR5 392K250J01L4 BULK |
| 0.0047 | J01 | 2.5 | 6.5 | 7.2 | 20 | SMR5 472K250J01L4 BULK |
| 0.0056 | J01 | 2.5 | 6.5 | 7.2 | 20 | SMR5 562K250J01L4 BULK |
| 0.0068 | J01 | 2.5 | 6.5 | 7.2 | 20 | SMR5 682K250J01L4 BULK |
| 0.0082 | J01 | 2.5 | 6.5 | 7.2 | 20 | SMR5 822K250J01L4 BULK |
| 0.010 | J01 | 2.5 | 6.5 | 7.2 | 20 | SMR5 103K250J01L4 BULK |
| 0.012 | J01 | 2.5 | 6.5 | 7.2 | 20 | SMR5 123K250J01L4 BULK |
| 0.015 | J02 | 3.5 | 8.0 | 7.2 | 20 | SMR5 153K250J02L4 BULK |
| 0.018 | J02 | 3.5 | 8.0 | 7.2 | 20 | SMR5 183K250J02L4 BULK |
| 0.022 | J02 | 3.5 | 8.0 | 7.2 | 20 | SMR5 223K250J02L4 BULK |
| 0.027 | J02 | 3.5 | 8.0 | 7.2 | 20 | SMR5 273K250J02L4 BULK |
| 0.033 | J03 | 4.5 | 9.0 | 7.2 | 20 | SMR5 333K250J03L4 BULK |
| 0.039 | J03 | 4.5 | 9.0 | 7.2 | 20 | SMR5 393K250J03L4 BULK |
| 0.047 | J03 | 4.5 | 9.0 | 7.2 | 20 | SMR5 473K250J03L4 BULK |
| 0.056 | J04 | 5.0 | 10.0 | 7.2 | 20 | SMR5 563K250J04L4 BULK |
| 0.068 | J05 | 6.0 | 11.0 | 7.2 | 20 | SMR5 683K250J05L4 BULK |
| 0.082 | J05 | 6.0 | 11.0 | 7.2 | 20 | SMR5 823K250J05L4 BULK |
| 0.10 | J06 | 7.2 | 13.0 | 7.2 | 20 | SMR5 104K250J06L4 BULK |
| 0.12 | J06 | 7.2 | 13.0 | 7.2 | 20 | SMR5 124K250J06L4 BULK |

LEAD SPACING 15 MM

LEAD SPACING 7.5 MM

| | | | | | | |
|------|-----|-----|------|------|---|-------------------------|
| 0.27 | B04 | 5.5 | 10.5 | 18.0 | 8 | SMR15 274K100B04L4 BULK |
| 0.33 | B04 | 5.5 | 10.5 | 18.0 | 8 | SMR15 334K100B04L4 BULK |
| 0.39 | B04 | 5.5 | 10.5 | 18.0 | 8 | SMR15 394K100B04L4 BULK |
| 0.47 | B04 | 5.5 | 10.5 | 18.0 | 8 | SMR15 474K100B04L4 BULK |
| 0.56 | B05 | 5.5 | 12.5 | 18.0 | 8 | SMR15 564K100B05L4 BULK |
| 0.68 | B10 | 6.5 | 12.5 | 18.0 | 8 | SMR15 684K100B10L4 BULK |
| 0.82 | B06 | 7.5 | 14.5 | 18.0 | 8 | SMR15 824K100B06L4 BULK |
| 1.0 | B06 | 7.5 | 14.5 | 18.0 | 8 | SMR15 105K100B06L4 BULK |
| 1.2 | B12 | 8.0 | 15.0 | 18.0 | 8 | SMR15 125K100B12L4 BULK |
| 1.5 | B11 | 8.5 | 16.0 | 18.0 | 8 | SMR15 155K100B11L4 BULK |
| 1.8 | B14 | 9.5 | 17.5 | 18.0 | 8 | SMR15 185K100B14L4 BULK |

| | | | | | | |
|--------|-----|-----|------|------|----|--------------------------|
| 0.0010 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 102K250K01L4 BULK |
| 0.0012 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 122K250K01L4 BULK |
| 0.0015 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 152K250K01L4 BULK |
| 0.0018 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 182K250K01L4 BULK |
| 0.0022 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 222K250K01L4 BULK |
| 0.0027 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 272K250K01L4 BULK |
| 0.0033 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 332K250K01L4 BULK |
| 0.0039 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 392K250K01L4 BULK |
| 0.0047 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 472K250K01L4 BULK |
| 0.0056 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 562K250K01L4 BULK |
| 0.0068 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 682K250K01L4 BULK |
| 0.0082 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 822K250K01L4 BULK |
| 0.010 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 103K250K01L4 BULK |
| 0.012 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 123K250K01L4 BULK |
| 0.015 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 153K250K01L4 BULK |
| 0.018 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 183K250K01L4 BULK |
| 0.022 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 223K250K01L4 BULK |
| 0.027 | K01 | 4.0 | 8.0 | 10.0 | 20 | SMR7,5 273K250K01L4 BULK |
| 0.033 | K01 | 4.0 | 8.0 | 10.0 | 20 | SMR7,5 333K250K01L4 BULK |
| 0.039 | K01 | 4.0 | 8.0 | 10.0 | 20 | SMR7,5 393K250K01L4 BULK |
| 0.047 | K01 | 4.0 | 8.0 | 10.0 | 20 | SMR7,5 473K250K01L4 BULK |
| 0.056 | K03 | 5.0 | 11.0 | 10.0 | 20 | SMR7,5 563K250K03L4 BULK |
| 0.068 | K03 | 5.0 | 11.0 | 10.0 | 20 | SMR7,5 683K250K03L4 BULK |
| 0.082 | K03 | 5.0 | 11.0 | 10.0 | 20 | SMR7,5 823K250K03L4 BULK |
| 0.10 | K03 | 5.0 | 11.0 | 10.0 | 20 | SMR7,5 104K250K03L4 BULK |
| 0.12 | K04 | 6.0 | 12.0 | 10.5 | 20 | SMR7,5 124K250K04L4 BULK |
| 0.15 | K04 | 6.0 | 12.0 | 10.5 | 20 | SMR7,5 154K250K04L4 BULK |

LEAD SPACING 22.5 MM

| | | | | | | |
|-----|-----|------|------|------|---|---------------------------|
| 1.5 | D13 | 6.5 | 14.5 | 26.0 | 4 | SMR22,5 155K100D13L4 TRAY |
| 1.8 | D17 | 7.0 | 16.5 | 26.0 | 4 | SMR22,5 185K100D17L4 TRAY |
| 2.2 | D14 | 8.0 | 16.0 | 26.0 | 4 | SMR22,5 225K100D14L4 TRAY |
| 2.7 | D15 | 9.0 | 18.5 | 26.0 | 4 | SMR22,5 275K100D15L4 TRAY |
| 3.3 | D18 | 10.5 | 19.0 | 26.0 | 4 | SMR22,5 335K100D18L4 TRAY |
| 3.9 | D18 | 10.5 | 19.0 | 26.0 | 4 | SMR22,5 395K100D18L4 TRAY |
| 4.7 | D16 | 11.0 | 21.5 | 26.0 | 4 | SMR22,5 475K100D16L4 TRAY |

LEAD SPACING 27.5 MM

| | | | | | | |
|------|-----|------|------|------|---|---------------------------|
| 5.6 | F12 | 11.5 | 22.5 | 31.5 | 3 | SMR27,5 565K100F12L4 TRAY |
| 6.8 | F13 | 14.5 | 24.5 | 31.5 | 3 | SMR27,5 685K100F13L4 TRAY |
| 8.2 | F13 | 14.5 | 24.5 | 31.5 | 3 | SMR27,5 825K100F13L4 TRAY |
| 10.0 | F14 | 17.5 | 28.0 | 31.5 | 3 | SMR27,5 106K100F14L4 TRAY |
| 12.0 | F14 | 17.5 | 28.0 | 31.5 | 3 | SMR27,5 126K100F14L4 TRAY |

ARTICLE TABLE

| Capacitance µF | Box code | Max dimensions in mm | | | Max dU/dt V/µs | Article code | Capacitance µF | Box code | Max dimensions in mm | | | Max dU/dt V/µs | Article code | | |
|-----------------------------|----------|----------------------|------|------|-------------------|----------------------------|-------------------|----------------------------|----------------------|-----|------|-------------------|--------------|---------------------|------|
| | | B | H | L | | | | | B | H | L | | | | |
| 250 VDC/160 VAC | | | | | | 400 VDC/200 VAC | | | | | | | | | |
| LEAD SPACING 10 MM | | | | | | LEAD SPACING 5 MM | | | | | | | | | |
| 0.0027 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 272K250A01L4 | BULK | 0.0010 | J01 | 2.5 | 6.5 | 7.2 | 40 | SMR5 102K400J01L4 | BULK |
| 0.0033 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 332K250A01L4 | BULK | 0.0012 | J01 | 2.5 | 6.5 | 7.2 | 40 | SMR5 122K400J01L4 | BULK |
| 0.0039 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 392K250A01L4 | BULK | 0.0015 | J01 | 2.5 | 6.5 | 7.2 | 40 | SMR5 152K400J01L4 | BULK |
| 0.0047 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 472K250A01L4 | BULK | 0.0018 | J01 | 2.5 | 6.5 | 7.2 | 40 | SMR5 182K400J01L4 | BULK |
| 0.0056 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 562K250A01L4 | BULK | 0.0022 | J01 | 2.5 | 6.5 | 7.2 | 40 | SMR5 222K400J01L4 | BULK |
| 0.0068 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 682K250A01L4 | BULK | 0.0027 | J01 | 2.5 | 6.5 | 7.2 | 40 | SMR5 272K400J01L4 | BULK |
| 0.0082 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 822K250A01L4 | BULK | 0.0033 | J01 | 2.5 | 6.5 | 7.2 | 40 | SMR5 332K400J01L4 | BULK |
| 0.010 | A01 | 4.0 | 9.0 | 13.0 | 15 | SMR10 103K250A01L4 | BULK | 0.0039 | J01 | 2.5 | 6.5 | 7.2 | 40 | SMR5 392K400J01L4 | BULK |
| 0.012 | A01 | 4.0 | 9.0 | 13.0 | 15 | SMR10 123K250A01L4 | BULK | 0.0047 | J02 | 3.5 | 8.0 | 7.2 | 40 | SMR5 472K400J02L4 | BULK |
| 0.015 | A01 | 4.0 | 9.0 | 13.0 | 15 | SMR10 153K250A01L4 | BULK | 0.0056 | J02 | 3.5 | 8.0 | 7.2 | 40 | SMR5 562K400J02L4 | BULK |
| 0.018 | A01 | 4.0 | 9.0 | 13.0 | 15 | SMR10 183K250A01L4 | BULK | 0.0068 | J02 | 3.5 | 8.0 | 7.2 | 40 | SMR5 682K400J02L4 | BULK |
| 0.022 | A01 | 4.0 | 9.0 | 13.0 | 15 | SMR10 223K250A01L4 | BULK | 0.0082 | J02 | 3.5 | 8.0 | 7.2 | 40 | SMR5 822K400J02L4 | BULK |
| 0.027 | A01 | 4.0 | 9.0 | 13.0 | 15 | SMR10 273K250A01L4 | BULK | 0.010 | J02 | 3.5 | 8.0 | 7.2 | 40 | SMR5 103K400J02L4 | BULK |
| 0.033 | A01 | 4.0 | 9.0 | 13.0 | 15 | SMR10 333K250A01L4 | BULK | 0.012 | J02 | 3.5 | 8.0 | 7.2 | 40 | SMR5 123K400J02L4 | BULK |
| 0.039 | A01 | 4.0 | 9.0 | 13.0 | 15 | SMR10 393K250A01L4 | BULK | 0.015 | J03 | 4.5 | 9.0 | 7.2 | 40 | SMR5 153K400J03L4 | BULK |
| 0.047 | A01 | 4.0 | 9.0 | 13.0 | 15 | SMR10 473K250A01L4 | BULK | 0.018 | J03 | 4.5 | 9.0 | 7.2 | 40 | SMR5 183K400J03L4 | BULK |
| 0.056 | A01 | 4.0 | 9.0 | 13.0 | 15 | SMR10 563K250A01L4 | BULK | 0.022 | J04 | 5.0 | 10.0 | 7.2 | 40 | SMR5 223K400J04L4 | BULK |
| 0.068 | A01 | 4.0 | 9.0 | 13.0 | 15 | SMR10 683K250A01L4 | BULK | 0.027 | J04 | 5.0 | 10.0 | 7.2 | 40 | SMR5 273K400J04L4 | BULK |
| 0.082 | A02 | 4.5 | 10.5 | 13.0 | 15 | SMR10 823K250A02L4 | BULK | 0.033 | J05 | 6.0 | 11.0 | 7.2 | 40 | SMR5 333K400J05L4 | BULK |
| 0.10 | A02 | 4.5 | 10.5 | 13.0 | 15 | SMR10 104K250A02L4 | BULK | 0.039 | J05 | 6.0 | 11.0 | 7.2 | 40 | SMR5 393K400J05L4 | BULK |
| 0.12 | A03 | 5.0 | 11.0 | 13.0 | 15 | SMR10 124K250A03L4 | BULK | 0.047 | J06 | 7.2 | 13.0 | 7.2 | 40 | SMR5 473K400J06L4 | BULK |
| 0.15 | A04 | 6.0 | 12.0 | 13.0 | 15 | SMR10 154K250A04L4 | BULK | 0.056 | J06 | 7.2 | 13.0 | 7.2 | 40 | SMR5 563K400J06L4 | BULK |
| 0.18 | A04 | 6.0 | 12.0 | 13.0 | 15 | SMR10 184K250A04L4 | BULK | LEAD SPACING 7.5 MM | | | | | | | |
| LEAD SPACING 15 MM | | | | | | LEAD SPACING 10 MM | | | | | | | | | |
| 0.10 | B04 | 5.5 | 10.5 | 18.0 | 10 | SMR15 104K250B04L4 | BULK | 0.0010 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 102K400K01L4 | BULK |
| 0.12 | B04 | 5.5 | 10.5 | 18.0 | 10 | SMR15 124K250B04L4 | BULK | 0.0012 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 122K400K01L4 | BULK |
| 0.15 | B04 | 5.5 | 10.5 | 18.0 | 10 | SMR15 154K250B04L4 | BULK | 0.0015 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 152K400K01L4 | BULK |
| 0.18 | B05 | 5.5 | 12.5 | 18.0 | 10 | SMR15 184K250B05L4 | BULK | 0.0018 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 182K400K01L4 | BULK |
| 0.22 | B10 | 6.5 | 12.5 | 18.0 | 10 | SMR15 224K250B10L4 | BULK | 0.0022 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 222K400K01L4 | BULK |
| 0.27 | B06 | 7.5 | 14.5 | 18.0 | 10 | SMR15 274K250B06L4 | BULK | 0.0027 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 272K400K01L4 | BULK |
| 0.33 | B06 | 7.5 | 14.5 | 18.0 | 10 | SMR15 334K250B06L4 | BULK | 0.0033 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 332K400K01L4 | BULK |
| 0.39 | B12 | 8.0 | 15.0 | 18.0 | 10 | SMR15 394K250B12L4 | BULK | 0.0039 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 392K400K01L4 | BULK |
| 0.47 | B11 | 8.5 | 16.0 | 18.0 | 10 | SMR15 474K250B11L4 | BULK | 0.0047 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 472K400K01L4 | BULK |
| 0.56 | B14 | 9.5 | 17.5 | 18.0 | 10 | SMR15 564K250B14L4 | BULK | 0.0056 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 562K400K01L4 | BULK |
| LEAD SPACING 22.5 MM | | | | | | LEAD SPACING 7.5 MM | | | | | | | | | |
| 0.47 | D13 | 6.5 | 14.5 | 26.0 | 8 | SMR22.5 474K250D13L4 | TRAY | 0.0068 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 682K400K01L4 | BULK |
| 0.56 | D17 | 7.0 | 16.5 | 26.0 | 8 | SMR22.5 564K250D17L4 | TRAY | 0.0082 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 822K400K01L4 | BULK |
| 0.68 | D17 | 7.0 | 16.5 | 26.0 | 8 | SMR22.5 684K250D17L4 | TRAY | 0.010 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 103K400K01L4 | BULK |
| 0.82 | D15 | 9.0 | 18.5 | 26.0 | 8 | SMR22.5 824K250D15L4 | TRAY | 0.012 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 123K400K01L4 | BULK |
| 1.0 | D15 | 9.0 | 18.5 | 26.0 | 8 | SMR22.5 105K250D15L4 | TRAY | 0.015 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 153K400K01L4 | BULK |
| 1.2 | D18 | 10.5 | 19.0 | 26.0 | 8 | SMR22.5 125K250D18L4 | TRAY | 0.018 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 183K400K01L4 | BULK |
| 1.5 | D16 | 11.0 | 21.5 | 26.0 | 8 | SMR22.5 155K250D16L4 | TRAY | 0.022 | K01 | 4.0 | 8.0 | 10.0 | 30 | SMR7,5 223K400K01L4 | BULK |
| LEAD SPACING 27.5 MM | | | | | | LEAD SPACING 10 MM | | | | | | | | | |
| 1.5 | F11 | 10.5 | 20.5 | 31.5 | 6 | SMR27,5 155K250F11L4 | TRAY | 0.0027 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 272K400A01L4 | BULK |
| 1.8 | F11 | 10.5 | 20.5 | 31.5 | 6 | SMR27,5 185K250F11L4 | TRAY | 0.0033 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 332K400A01L4 | BULK |
| 2.2 | F12 | 11.5 | 22.5 | 31.5 | 6 | SMR27,5 225K250F12L4 | TRAY | 0.0039 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 392K400A01L4 | BULK |
| 2.7 | F13 | 14.5 | 24.5 | 31.5 | 6 | SMR27,5 275K250F13L4 | TRAY | 0.0047 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 472K400A01L4 | BULK |
| 3.3 | F14 | 17.5 | 28.0 | 31.5 | 6 | SMR27,5 335K250F14L4 | TRAY | 0.0068 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 682K400A01L4 | BULK |
| 3.9 | F14 | 17.5 | 28.0 | 31.5 | 6 | SMR27,5 395K250F14L4 | TRAY | 0.0082 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 822K400A01L4 | BULK |
| LEAD SPACING 27.5 MM | | | | | | LEAD SPACING 10 MM | | | | | | | | | |
| 0.010 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 103K400A01L4 | BULK | 0.010 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 103K400A01L4 | BULK |
| 0.012 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 123K400A01L4 | BULK | 0.012 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 123K400A01L4 | BULK |
| 0.015 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 153K400A01L4 | BULK | 0.015 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 153K400A01L4 | BULK |
| 0.018 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 183K400A01L4 | BULK | 0.018 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 183K400A01L4 | BULK |

ARTICLE TABLE

Capaci- Box Max dimen- Max
tance code sions in mm dU/dt
 μF B H L $\text{V}/\mu\text{s}$ Article code

400 VDC/200 VAC

LEAD SPACING 10 MM

| | | | | | | |
|-------|-----|-----|------|------|----|------------------------|
| 0.022 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 223K400A01L4BULK |
| 0.027 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 273K400A01L4BULK |
| 0.033 | A01 | 4.0 | 9.0 | 13.0 | 25 | SMR10 333K400A01L4BULK |
| 0.039 | A02 | 4.5 | 10.5 | 13.0 | 25 | SMR10 393K400A02L4BULK |
| 0.047 | A03 | 5.0 | 11.0 | 13.0 | 25 | SMR10 473K400A03L4BULK |
| 0.056 | A03 | 5.0 | 11.0 | 13.0 | 25 | SMR10 563K400A03L4BULK |
| 0.068 | A04 | 6.0 | 12.0 | 13.0 | 25 | SMR10 683K400A04L4BULK |
| 0.082 | A04 | 6.0 | 12.0 | 13.0 | 25 | SMR10 823K400A04L4BULK |

LEAD SPACING 15 MM

| | | | | | | |
|-------|-----|-----|------|------|----|------------------------|
| 0.047 | B04 | 5.5 | 10.5 | 18.0 | 15 | SMR15 473K400B04L4BULK |
| 0.056 | B04 | 5.5 | 10.5 | 18.0 | 15 | SMR15 563K400B04L4BULK |
| 0.068 | B04 | 5.5 | 10.5 | 18.0 | 15 | SMR15 683K400B04L4BULK |
| 0.082 | B05 | 5.5 | 12.5 | 18.0 | 15 | SMR15 823K400B05L4BULK |
| 0.10 | B10 | 6.5 | 12.5 | 18.0 | 15 | SMR15 104K400B10L4BULK |
| 0.12 | B06 | 7.5 | 14.5 | 18.0 | 15 | SMR15 124K400B06L4BULK |
| 0.15 | B06 | 7.5 | 14.5 | 18.0 | 15 | SMR15 154K400B06L4BULK |
| 0.18 | B12 | 8.0 | 15.0 | 18.0 | 15 | SMR15 184K400B12L4BULK |
| 0.22 | B11 | 8.5 | 16.0 | 18.0 | 15 | SMR15 224K400B11L4BULK |
| 0.27 | B14 | 9.5 | 17.5 | 18.0 | 15 | SMR15 274K400B14L4BULK |

ARTICLE TABLE

Capaci- Box Max dimen- Max
tance code sions in mm dU/dt
 μF B H L $\text{V}/\mu\text{s}$ Article code

400 VDC/200 VAC

LEAD SPACING 22.5 MM

| | | | | | | |
|------|-----|------|------|------|----|--------------------------|
| 0.15 | D13 | 6.5 | 14.5 | 26.0 | 10 | SMR22,5 154K400D13L4TRAY |
| 0.18 | D13 | 6.5 | 14.5 | 26.0 | 10 | SMR22,5 184K400D13L4TRAY |
| 0.22 | D13 | 6.5 | 14.5 | 26.0 | 10 | SMR22,5 224K400D13L4TRAY |
| 0.27 | D17 | 7.0 | 16.5 | 26.0 | 10 | SMR22,5 274K400D17L4TRAY |
| 0.33 | D14 | 8.0 | 16.0 | 26.0 | 10 | SMR22,5 334K400D14L4TRAY |
| 0.39 | D15 | 9.0 | 18.5 | 26.0 | 10 | SMR22,5 394K400D15L4TRAY |
| 0.47 | D15 | 9.0 | 18.5 | 26.0 | 10 | SMR22,5 474K400D15L4TRAY |
| 0.56 | D18 | 10.5 | 19.0 | 26.0 | 10 | SMR22,5 564K400D18L4TRAY |
| 0.68 | D16 | 11.0 | 21.5 | 26.0 | 10 | SMR22,5 684K400D16L4TRAY |

LEAD SPACING 27.5 MM

| | | | | | | |
|------|-----|------|------|------|---|--------------------------|
| 0.47 | F11 | 10.5 | 20.5 | 31.5 | 8 | SMR27,5 474K400F11L4TRAY |
| 0.56 | F11 | 10.5 | 20.5 | 31.5 | 8 | SMR27,5 564K400F11L4TRAY |
| 0.68 | F11 | 10.5 | 20.5 | 31.5 | 8 | SMR27,5 684K400F11L4TRAY |
| 0.82 | F12 | 11.5 | 22.5 | 31.5 | 8 | SMR27,5 824K400F12L4TRAY |
| 1.0 | F12 | 11.5 | 22.5 | 31.5 | 8 | SMR27,5 105K400F12L4TRAY |
| 1.2 | F13 | 14.5 | 24.5 | 31.5 | 8 | SMR27,5 125K400F13L4TRAY |
| 1.5 | F14 | 17.5 | 28.0 | 31.5 | 8 | SMR27,5 155K400F14L4TRAY |
| 1.8 | F14 | 17.5 | 28.0 | 31.5 | 8 | SMR27,5 185K400F14L4TRAY |

CQ92M

RoHS
Compliant

- Polyester film/foil capacitor
- According to IEC 60384-11

TYPICAL APPLICATIONS

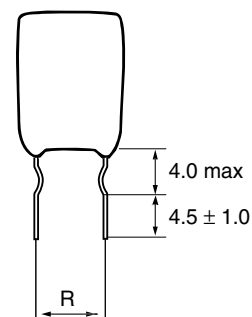
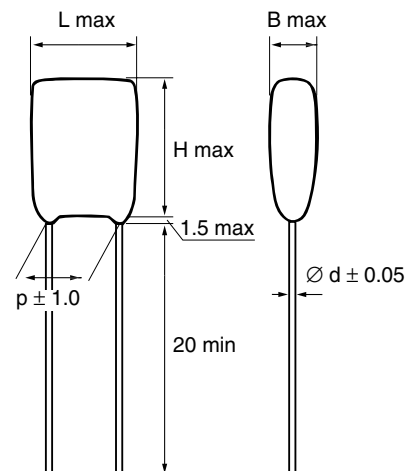
Coupling and decoupling.

CONSTRUCTION

Capacitor with polyester film and metal foil electrodes. Radial leads of tinned wire are electrically welded to the electrodes. Coated with epoxy resin.

TECHNICAL DATA

| | | |
|----------------------------------|---|----------------|
| Rated voltage U_R , VDC | 50 | 100 |
| Rated voltage U_R , VAC | 30 | 63 |
| Capacitance, μF | 0.001 -0.47 | 0.001 -0.47 |
| Capacitance tolerance | $\pm 10\%$, $\pm 5\%$ | |
| Temperature range | -40 ... +85°C | |
| Climatic category | IEC 60068-1, 40/085/21 DIN 40040, GPD | |
| Test voltage | 2.5 x U_R VDC for 2s | |
| Dissipation factor, $\tan\delta$ | at +20°C: $\tan\delta \leq 0.8\%$ at 1 kHz. | |
| Insulation resistance | Measured at +20°C, according to IEC 60384-11. Minimum values between terminals: 30 000 M Ω C \leq 0.33 μF 10 000 M Ω C > 0.33 μF | |



Lead diameter

d = 0.5 mm for C \leq 0.12 μF and
d = 0.6 mm for C > 0.12 μF

ENVIRONMENTAL TEST DATA

| | | |
|----------------|------------------|--|
| Damp heat test | Test conditions: | T = +40°C, RH = 93%, t = 21 days. |
| | Test criteria: | $\Delta C/C \leq 5\%$, $\tan\delta$ after test $\leq 1.0\%$ (1kHz) IR after test 9000 M Ω . |
| Endurance test | Test conditions: | T = +85°C, U = 1.4 x U_R , t = 1000 h. |
| | Test criteria: | $\Delta C/C \leq 5\%$, $\tan\delta \leq 1.0\%$ (1kHz) IR after test 5000 M Ω . |

MARKING

- Capacitance
- Tolerance
- Rated voltage

ORDERING INFORMATION

See article table and pages 11 to 15 for options and article code construction.

ARTICLE TABLE

| Capacitance μF | Max dimensions in mm | | | | | Quantity per package | | Article code |
|--|----------------------|------|------|------|-----|----------------------|------|--------------------|
| | B | H | L | p | R | Bulk | Ammo | |
| 50 VDC/30 VAC & 100VDC/63 VAC | | | | | | | | |
| 0.0010 | 3.0 | 11.0 | 5.6 | 3.5 | 5.0 | 1000 | 2000 | CQ92M 102K100 TA16 |
| 0.0015 | 3.0 | 11.0 | 5.6 | 3.5 | 5.0 | 1000 | 2000 | CQ92M 152K100 TA16 |
| 0.0022 | 3.0 | 11.0 | 5.6 | 3.5 | 5.0 | 1000 | 2000 | CQ92M 222K100 TA16 |
| 0.0033 | 3.0 | 11.0 | 5.6 | 3.5 | 5.0 | 1000 | 2000 | CQ92M 332K100 TA16 |
| 0.0047 | 3.0 | 11.0 | 5.6 | 3.5 | 5.0 | 1000 | 2000 | CQ92M 472K100 TA16 |
| 0.0068 | 3.5 | 12.0 | 6.0 | 3.5 | 5.0 | 1000 | 2000 | CQ92M 682K100 TA16 |
| 0.010 | 3.5 | 12.0 | 6.5 | 3.5 | 5.0 | 1000 | 2000 | CQ92M 103K100 TA16 |
| 0.015 | 3.5 | 13.0 | 6.5 | 4.0 | 5.0 | 1000 | 2000 | CQ92M 153K100 TA16 |
| 0.022 | 4.0 | 13.0 | 7.0 | 5.0 | 5.0 | 1000 | 2000 | CQ92M 223K100 TA16 |
| 0.033 | 4.5 | 13.5 | 8.0 | 5.0 | 5.0 | 1000 | 2000 | CQ92M 333K100 TA16 |
| 0.047 | 4.5 | 14.0 | 9.0 | 5.0 | 5.0 | 1000 | 1000 | CQ92M 473K100 TA16 |
| 0.068 | 5.0 | 14.0 | 10.0 | 7.5 | 5.0 | 500 | 1000 | CQ92M 683K100 TA16 |
| 0.10 | 6.0 | 14.0 | 11.0 | 7.5 | 5.0 | 500 | 1000 | CQ92M 104K100 TA16 |
| 0.15 | 7.0 | 17.0 | 12.0 | 7.5 | 5.0 | 500 | | CQ92M 154K100 |
| 0.22 | 8.0 | 18.0 | 13.5 | 10.0 | 5.0 | 500 | | CQ92M 224K100 |
| 0.33 | 8.5 | 21.0 | 15.0 | 10.0 | 7.5 | 500 | | CQ92M 334K100 |
| 0.47 | 10.0 | 21.0 | 18.0 | 10.0 | 7.5 | 500 | | CQ92M 474K100 |

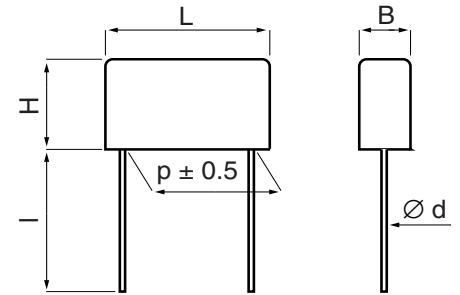
PME261

RoHS
Compliant

- General purpose AC/DC
- Metallized paper

- IEC Publ. 166 Type 1
- High dU/dt capability.
- Excellent self-healing properties. Ensures long life even when subjected to frequent overvoltages.
- Good resistance to ionisation due to impregnated dielectric.

- Approved according to SE-MIL-QPL.
- The capacitors meet the most stringent IEC humidity class, 56 days.
- The impregnated paper ensures excellent stability giving outstanding reliability properties, especially in applications having continuous operation.



TYPICAL APPLICATIONS

For general use in DC and low frequency pulse applications.

CONSTRUCTION

Multi-layer metallized paper. Encapsulated and impregnated in self-extinguishing material meeting the requirements of UL 94V-0.

d = 0.6 for p = 10.2
0.8 for p = 15.2 and 20.3
1.0 for p = 25.4

l = standard: 30 +5/-0 mm
option: short leads, tolerance +0/-1 mm (standard 6 mm, code R06)
Other lead lengths on request.

TECHNICAL DATA

| | PME261 K | PME261 E | PME261 J |
|----------------------------------|--|-----------------------------------|-----------------------------------|
| Rated voltage U_R , VAC | 220 | 300 | 500 |
| Rated voltage U_R , VDC | 400 | 630 | 1000 |
| Capacitance range, μF | 0.0082 - 1.0 | 0.001 - 0.15 | 0.001 - 0.1 |
| Capacitance tolerance | — ± 10% code K ± 5% code J | ± 20% code M ± 10% code K — | ± 20% code M ± 10% code K — |
| Temperature range | AC application -40 to +70°C DC application -40 to +100°C | | |
| Climatic category | IEC 40/070/56 | | |
| Dissipation factor | ≤ 1.3 % at 1 kHz | | |
| Insulation resistance | C ≤ 0.33 μF 12000 M Ω C > 0.33 μF 4000 s PME261 K measured at 100 VDC after 60 s, +23°C PME261 E and J measured at 500 VDC after 60 s, +23°C | | |

ENVIRONMENTAL TEST DATA

| | | | |
|-----------------------------|---------------------------|---|--|
| Vibration | IEC 60068-2-6 Test Fc | 3 directions at 2 hour each 10 – 500 Hz at 0.75 mm or 98 m/s ² | No visible damage No open or short circuit |
| Bump | IEC 60068-2-29 Test Eb | 4000 bumps at 390 m/s ² | No visible damage No open or short circuit |
| Solderability | IEC 60068-2-20 Test Ta | Solder globule method | Wetting time for d ≤ 0.8 < 1 s for d > 0.8 < 1.5 s |
| Passive flammability | IEC 60695-2-2 | | |
| Humidity | IEC 60068-2-3 Test Ca | +40°C and 90 – 95% R.H. | 56 days |

MARKING

- RIFA
- RIFA article code
- Rated capacitance
- Rated voltage AC/DC
- MP, for metallized paper
- Climatic category according to IEC 60068-, appendix A
- Manufacturing code (year, month)

ORDERING INFORMATION

The article code for the standard part is given in the article table.
For other options, see page 12.

ARTICLE TABLE

| Capacitance μF | Max dimensions in mm | | | | Quantity per package | | | Weight g | Max dU/dt V/ μs | Article code |
|------------------------------------|-------------------------|------|------|------|----------------------|------------|----------------------|-------------|----------------------------------|------------------|
| | B | H | L | p | R30 pcs | R06 pcs | reel taped pcs | | | |
| 220 VAC / 400 VDC PME261 K | | | | | | | | | | |
| LEAD SPACING 10.2 MM | | | | | | | | | | |
| 0.0082 | 3.9 | 7.5 | 13.5 | 10.2 | 1000 | 2000 | 700 | 0.7 | 2000 | PME261KA4820KR30 |
| 0.010 | 3.9 | 7.5 | 13.5 | 10.2 | 1000 | 2000 | 700 | 0.7 | 2000 | PME261KA5100KR30 |
| 0.015 | 5.1 | 10.5 | 13.5 | 10.2 | 800 | 1600 | 600 | 1.2 | 2000 | PME261KA5150KR30 |
| 0.022 | 5.1 | 10.5 | 13.5 | 10.2 | 800 | 1600 | 600 | 1.2 | 2000 | PME261KA5220KR30 |
| LEAD SPACING 15.2 MM | | | | | | | | | | |
| 0.033 | 5.2 | 10.5 | 18.5 | 15.2 | 500 | 1000 | 600 | 1.7 | 1600 | PME261KB5330KR30 |
| 0.047 | 5.2 | 10.5 | 18.5 | 15.2 | 500 | 1000 | 600 | 1.7 | 1300 | PME261KB5470KR30 |
| 0.068 | 7.3 | 13.0 | 18.5 | 15.2 | 400 | 800 | 400 | 3.0 | 1100 | PME261KB5680KR30 |
| 0.10 | 7.3 | 13.0 | 18.5 | 15.2 | 400 | 800 | 400 | 3.0 | 850 | PME261KB6100KR30 |
| LEAD SPACING 20.3 MM | | | | | | | | | | |
| 0.15 | 7.6 | 14.0 | 24.0 | 20.3 | 250 | 1500 | 250 | 4.0 | 700 | PME261KC6150KR30 |
| 0.22 | 8.4 | 14.0 | 24.0 | 20.3 | 200 | 1500 | 250 | 4.5 | 560 | PME261KC6220KR30 |
| 0.33 | 11.3 | 16.5 | 24.0 | 20.3 | 150 | 1000 | 180 | 7.0 | 430 | PME261KC6330KR30 |
| LEAD SPACING 25.4 MM | | | | | | | | | | |
| 0.47 | 10.6 | 17.3 | 30.5 | 25.4 | 100 | 1000 | | 8.0 | 370 | PME261KE6470KR30 |
| 0.68 | 15.3 | 22.0 | 30.5 | 25.4 | 75 | 600 | | 15.0 | 300 | PME261KE6680KR30 |
| 1.0 | 15.3 | 22.0 | 30.5 | 25.4 | 75 | 600 | | 15.0 | 220 | PME261KE7100KR30 |
| 300 VAC / 630 VDC PME261 E | | | | | | | | | | |
| LEAD SPACING 10.2 MM | | | | | | | | | | |
| 0.0010 | 3.9 | 7.5 | 13.5 | 10.2 | 1000 | 2000 | 700 | 0.7 | 2000 | PME261EA4100MR30 |
| 0.0015 | 3.9 | 7.5 | 13.5 | 10.2 | 1000 | 2000 | 700 | 0.7 | 2000 | PME261EA4150MR30 |
| 0.0022 | 3.9 | 7.5 | 13.5 | 10.2 | 1000 | 2000 | 700 | 0.7 | 2000 | PME261EA4220MR30 |
| 0.0033 | 3.9 | 7.5 | 13.5 | 10.2 | 1000 | 2000 | 700 | 0.7 | 2000 | PME261EA4330MR30 |
| 0.0047 | 3.9 | 7.5 | 13.5 | 10.2 | 1000 | 2000 | 700 | 0.7 | 2000 | PME261EA4470MR30 |
| 0.0068 | 3.9 | 7.5 | 13.5 | 10.2 | 1000 | 2000 | 700 | 0.7 | 2000 | PME261EA4680MR30 |
| 0.010 | 5.1 | 10.5 | 13.5 | 10.2 | 800 | 1600 | 600 | 1.2 | 2000 | PME261EA5100KR30 |
| 0.015 | 5.1 | 10.5 | 13.5 | 10.2 | 800 | 1600 | 600 | 1.2 | 2000 | PME261EA5150KR30 |
| LEAD SPACING 15.2 MM | | | | | | | | | | |
| 0.022 | 5.2 | 10.5 | 18.5 | 15.2 | 500 | 1000 | 600 | 1.7 | 2000 | PME261EB5220KR30 |
| 0.033 | 5.2 | 10.5 | 18.5 | 15.2 | 500 | 1000 | 600 | 1.7 | 2000 | PME261EB5330KR30 |
| 0.047 | 7.3 | 13.0 | 18.5 | 15.2 | 400 | 800 | 400 | 3.0 | 1600 | PME261EB5470KR30 |
| 0.068 | 7.3 | 13.0 | 18.5 | 15.2 | 400 | 800 | 400 | 3.0 | 1200 | PME261EB5680KR30 |
| LEAD SPACING 20.3 MM | | | | | | | | | | |
| 0.10 | 7.6 | 14.0 | 24.0 | 20.3 | 250 | 1500 | 250 | 4.0 | 900 | PME261EC6100KR30 |
| 0.15 | 9.0 | 15.0 | 24.0 | 20.3 | 200 | 1200 | 250 | 5.0 | 650 | PME261EC6150KR30 |
| 500 VAC / 1000 VDC PME261 J | | | | | | | | | | |
| LEAD SPACING 10.2 MM | | | | | | | | | | |
| 0.0010 | 3.9 | 7.5 | 13.5 | 10.2 | 1000 | 2000 | 700 | 0.7 | 2000 | PME261JA4100MR30 |
| 0.0015 | 3.9 | 7.5 | 13.5 | 10.2 | 1000 | 2000 | 700 | 0.7 | 2000 | PME261JA4150MR30 |
| 0.0022 | 3.9 | 7.5 | 13.5 | 10.2 | 1000 | 2000 | 700 | 0.7 | 2000 | PME261JA4220MR30 |
| 0.0033 | 3.9 | 7.5 | 13.5 | 10.2 | 1000 | 2000 | 700 | 0.7 | 2000 | PME261JA4330MR30 |
| 0.0047 | 5.1 | 10.5 | 13.5 | 10.2 | 800 | 1600 | 600 | 1.2 | 2000 | PME261JA4470MR30 |
| 0.0068 | 5.1 | 10.5 | 13.5 | 10.2 | 800 | 1600 | 600 | 1.2 | 2000 | PME261JA4680MR30 |
| LEAD SPACING 15.2 MM | | | | | | | | | | |
| 0.010 | 5.2 | 10.5 | 18.5 | 15.2 | 500 | 1000 | 600 | 1.7 | 2000 | PME261JB5100KR30 |
| 0.015 | 5.2 | 10.5 | 18.5 | 15.2 | 500 | 1000 | 600 | 1.7 | 2000 | PME261JB5150KR30 |
| 0.022 | 7.3 | 13.0 | 18.5 | 15.2 | 400 | 800 | 400 | 3.0 | 2000 | PME261JB5220KR30 |
| 0.033 | 7.8 | 13.5 | 18.5 | 15.2 | 400 | 800 | 400 | 3.3 | 2000 | PME261JB5330KR30 |
| LEAD SPACING 20.3 MM | | | | | | | | | | |
| 0.047 | 7.6 | 14.0 | 24.0 | 20.3 | 250 | 1500 | 250 | 4.0 | 2000 | PME261JC5470KR30 |
| 0.068 | 9.0 | 15.0 | 24.0 | 20.3 | 200 | 1200 | 250 | 5.0 | 1400 | PME261JC5680KR30 |
| 0.10 | 11.3 | 16.5 | 24.0 | 20.3 | 150 | 1000 | 180 | 7.0 | 950 | PME261JC6100KR30 |