

Polyester (PET) Film and Foil Capacitors for Pulse Applications in PCM 5 mm

Special Features

- Pulse duty construction
- According to RoHS 2002/95/EC

Typical Applications

For general DC-applications e.g.

- Coupling
- Decoupling

Construction

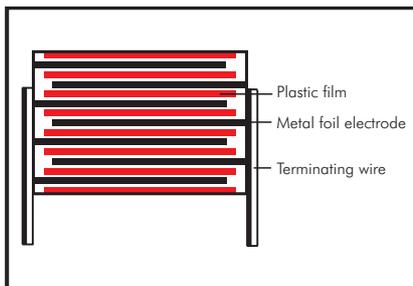
Dielectric:

Polyethylene-terephthalate (PET) film

Capacitor electrodes:

Metal foil

Internal construction:



Encapsulation:

Solvent-resistant, flame-retardent plastic case with epoxy resin seal, UL 94 V-0

Terminations:

Tinned wire.

Marking:

Colour: Red. Marking: Silver.

Epoxy resin seal: Yellow.

Electrical Data

Capacitance range:

220 pF to 0.047 μ F (E12-values on request)

Rated voltages:

100 VDC, 250 VDC, 400 VDC

Capacitance tolerances:

$\pm 20\%$, $\pm 10\%$, $\pm 5\%$

Operating temperature range:

-55° C to $+100^{\circ}$ C

Test specifications:

In accordance with IEC 60384-11 and EN 130 100

Climatic test category:

55/100/56 in accordance with IEC

Insulation resistance at $+20^{\circ}$ C:

$\geq 3 \times 10^4$ M Ω

(mean value: 8×10^5 M Ω)

Measuring voltage: 100 V/1 min.

Test voltage: $2 U_r$, 2 sec.

Maximum pulse rise time:

1000 V/ μ sec for pulses equal to the rated voltage

Dissipation factors at $+20^{\circ}$ C: $\tan \delta$

at f	$C \leq 0.047 \mu\text{F}$
1 kHz	$\leq 7 \times 10^{-3}$
10 kHz	$\leq 15 \times 10^{-3}$
100 kHz	$\leq 20 \times 10^{-3}$

Voltage derating:

A voltage derating factor of 1.25 % per K must be applied from $+85^{\circ}$ C for DC voltages and from $+75^{\circ}$ C for AC voltages.

Reliability:

Operational life > 300 000 hours

Failure rate < 5 fit ($0.5 \times U_r$ and 40° C)

Mechanical Tests

Pull test on leads:

10 N in direction of leads according to IEC 60068-2-21

Vibration:

6 hours at 10 ... 2000 Hz and 0.75 mm displacement amplitude or 10 g in accordance with IEC 60068-2-6

Low air density:

1 kPa = 10 mbar in accordance with IEC 60068-2-13

Bump test:

4000 bumps at 390 m/sec² in accordance with IEC 60068-2-29

Packing

Available taped and reeled.

Detailed taping information and graphs at the end of the catalogue.

For further details and graphs please refer to Technical Information.