



Film Capacitor

Metallized polypropylene Film Capacitor

Series/Type: B32676E
Ordering code: B32676E3565K
Date: 2017-11-08
Version: a

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Applications

- Frequency converters
- Industrial and high-end power supplies
- Solar inverters

Climatic

- Max. operating temperature: 105°C (case)
- Climatic category (IEC 60068-1): 40/105/56

Construction

- Dielectric: polypropylene (PP)
- Wound capacitor technology
- plastic case (UL 94 V-0)
- Epoxy resin sealing

Features

- Excellent self-healing properties
- Over-voltage capability
- Optimized electrical contact
- High frequency ripple current
- High reliability
- Long useful life

Terminals

- Parallel wire leads
- Lead-free tinned

Marking

- Manufacturer's logo
- Lot number, series number
- Rated capacitance (coded)
- Cap. Tolerance (code letter)
- Rated voltage
- Date of manufacture (coded)

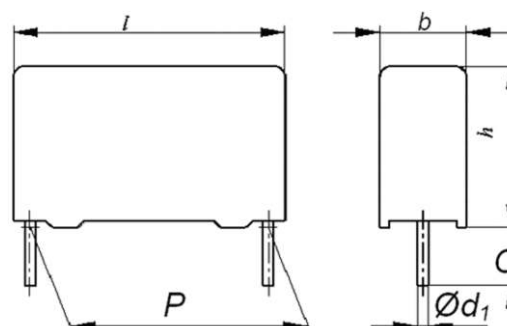
Delivery mode

- Bulk (untaped)
- MOQ: 4PU (4x345pcs)

Dimensions

- Lead spacing (P): 37.5 ± 0.4 mm
- Width max. (b): 14.0 mm
- Height max. (h): 25.0 mm
- Length max. (l): 42.0 mm
- Lead diameter(ϕ d1): 1.0 ± 0.05 mm
- Lead length(C): 6 - 1 mm

Drawing



Technical data (reference standard: IEC61071)

Operation temperature range	Max. operating temperature $T_{op, max}$	+105 °C
	Upper category temperature T_{max}	+105 °C
	Lower category temperature T_{min}	-40 °C
Rated Capacitance C	5.6 μ F	
Capacitance tolerance	$\pm 10\%$ (K)	
Continuous operating voltage V_{op} at 70°C	450 V DC	
Continuous operating voltage V_{op} at 85°C	300 V DC	
DC test voltage	1.5 V_R , 10 s	
DC test voltage terminal to case (10s)	2110 V AC, 50 Hz	
Pulse handling capability dV/dt value	22 V/ μ s	
ESR at 10 kHz, 70°C (typical value)	13.8 m Ω	
Max. rated current at 10 kHz, 70°C	7.5 Amps	
Maximum Peak current (Amps)	C (μ F) x dV/dt (V/ μ s)	
Insulation resistance R_{ins} at 20 °C, rel. humidity $\leq 65\%$ (minimum as-delivered values)	1.8 G Ω	
Damp heat test Limit values after damp Heat test	56 days/40°C/93% relative humidity	
	Capacitance change $ \Delta C/C $	$\leq 5\%$
	Dissipation factor change $\Delta \tan \delta$	$\leq 5 \cdot 10^{-3}$ (at 1 kHz)
	Insulation resistance R_{ins} or time constant $\tau = C_R \cdot R_{ins}$	$\geq 50\%$ of minimum as-delivered values
Reliability Failure rate λ Service life t_{SL}	1 fit ($\leq 1 \cdot 10^{-9}/h$) at 0.5 $\cdot V_R$, 40 °C 200 000 h at 1.0 $\cdot V_R$, 85 °C For conversion to other operating conditions and temperatures, refer to chapter "Quality, 2 Reliability".	

Cautions and warnings

- Do not exceed the upper category temperature (UCT).
- Do not apply any mechanical stress to the capacitor terminals.
- Avoid any compressive, tensile or flexural stress.
- Do not move the capacitor after it has been soldered to the PC board.
- Do not pick up the PC board by the soldered capacitor.
- Do not place the capacitor on a PC board whose PTH hole spacing differs from the specified lead spacing.
- Do not exceed the specified time or temperature limits during soldering.
- Avoid external energy inputs, such as fire or electricity.
- Avoid overload of the capacitors.

The table below summarizes the safety instructions that must always be observed. A detailed description can be found in the relevant sections of the chapters "General technical information" and "Mounting guidelines".

Topic	Safety information	Reference chapter "General technical information"
Storage conditions	Make sure that capacitors are stored within the specified range of time, temperature and humidity conditions.	4.5 "Storage conditions"
Flammability	Avoid external energy, such as fire or electricity (passive flammability), avoid overload of the capacitors (active flammability) and consider the flammability of materials.	5.3 "Flammability"
Resistance to vibration	Do not exceed the tested ability to withstand vibration. The capacitors are tested to IEC 60068-2-6. EPCOS offers film capacitors specially designed for operation under more severe vibration regimes such as those found in automotive applications. Consult our catalog "Film Capacitors for Automotive Electronics".	5.2 "Resistance to vibration"
Topic	Safety information	Reference chapter "Mounting guidelines"
Soldering	Do not exceed the specified time or temperature limits during soldering.	1 "Soldering"
Cleaning	Use only suitable solvents for cleaning capacitors.	2 "Cleaning"
Embedding of capacitors in finished assemblies	When embedding finished circuit assemblies in plastic resins, chemical and thermal influences must be taken into account. Caution: Consult us first, if you also wish to embed other uncoated component types!	3 "Embedding of capacitors in finished assemblies"

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