



## Film Capacitor

Metallized Polyphenylensulfid Film Capacitor (MKS)

**Series/Type:** B32354A3xxx  
**Ordering code:** B32354A3225K  
Date: 2012-01-30  
Version: Preliminary

**Typical applications**

- Oil well

**Climatic**

- Max. Operating temperature: 150°C
- Climatic category (IEC 60068-1): 55/150/56

**Construction**

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

**Features**

- High temperature withstand ability
- High contact reliability

**Terminals**

- Parallel wire leads
- Lead-free tinned

**Marking**

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

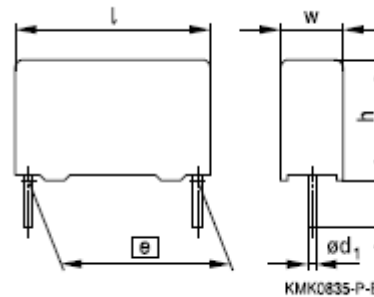
**Dimensions**

- Lead spacing (e):            27.5 ± 0.4 mm
- Width max. (w):            12.5 mm
- Height max. (h):            21.5 mm
- Length max. (l):            31.5 mm
- Lead diameter (Ød<sub>1</sub>):    0.8 ± 0.05 mm

**Delivery mode**

- Bulk (untapped)

**Dimensional drawing**



Dimensions in mm

**Electrical Characteristics**

■ Rated Capacitance C	2.2 uF
■ Capacitance tolerance	± 10%(K)
■ Rated DC voltage $U_{r_{dc}}$	250 V
■ Rated AC voltage $U_{r_{ac}}$ (50-60Hz)	160 Vac
■ Climatic category according to IEC 68-1	55/150/56
■ Lower category temperature $T_{min}$	-55°C
■ Upper category temperature $T_{max}$	+125°C
■ Max. operating temperature:	+150°C
■ Pulse handling capability (dV/dt)	8 V/μs
■ Pulse characteristic $K_0$	4000 V <sup>2</sup> /μs
■ Loss factor (tan δ) @ 20°C, 1kHz	1.2x 10 <sup>-3</sup>
■ Isolation resistance $R_{is}$ @ 20°C, 100V, relative humidity ≤ 65%	5.0 GΩ
■ Category voltage $V_C$ (continuous operation with $V_{dc}$ or $V_{AC}$ at $f \leq 1$ kHz)	

$T_A \leq 125 \text{ °C}:$	$V_C = 1.0V_{R,DC} \text{ or } 1.0V_{R,AC}$
$125\text{°C} < T_A \leq 150 \text{ °C}:$	$V_C = V_{R,DC} \cdot (175 - T_A) / 50$
	$V_{C,rms} = V_{rms} \cdot (175 - T_A) / 50$

## Cautions and warning

- 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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