



Film Capacitor

Metallized polyester Film Capacitor

Series/Type: B32529
Ordering code: B32529C0184J289
Date: 2020-28-12
Version: 2

Applications

- Blocking
- Coupling, decoupling
- Bypassing
- RFI for automotive

Climatic

- Max. operating temperature: 125 °C
- Climatic category (IEC 60068-1): 55/125/56

Features

- High pulse strength
- High contact reliability
- RoHS – compatible

Construction

- Dielectric: polyethylene terephthalate (Polyester)
- Plastic case (UL 94 V-0)
- Epoxy resin sealing

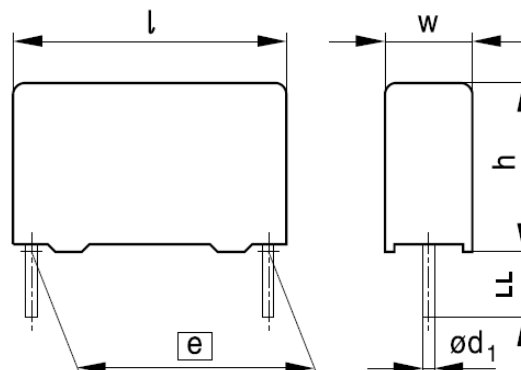
Terminals

- Parallel wire leads, 2 pin version, tinned

Delivery mode

- Ammo pack

Drawing



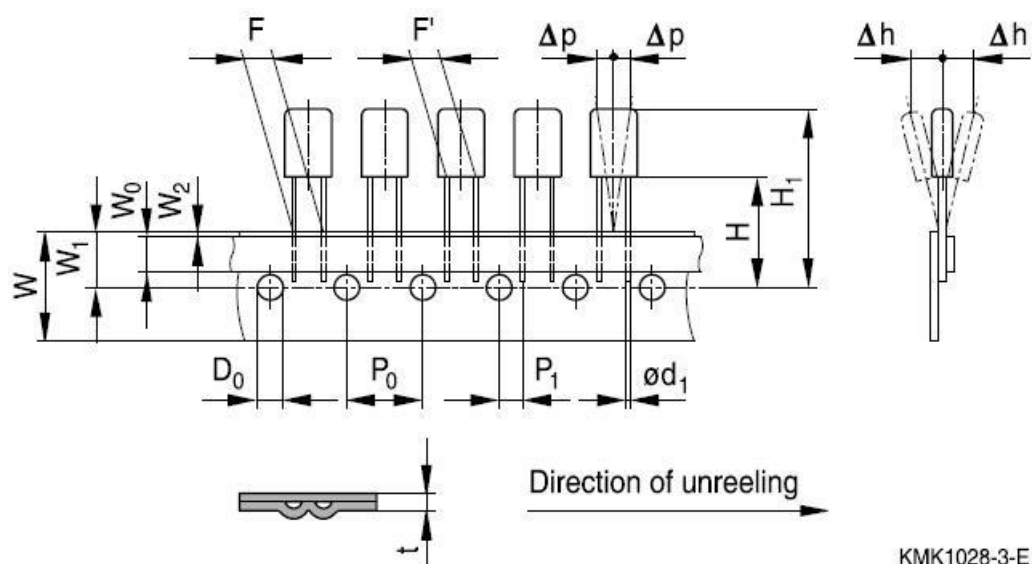
Dimensions

- Lead spacing (e): 5.0 ± 0.4 mm
- Width max. (w): 2.5 mm
- Height max. (h): 6.5 mm
- Length max. (l): 7.3 mm
- Lead diameter ($\varnothing d_1$): 0.5 ± 0.05 mm

Technical data

All data given at T = 20 °C, unless otherwise specified.

Rated Temperature	+85°C		
Operation temperature range: $T_{max}^{op} = T_{amb} + T_{self-heating}$	Upper Category Temperature	T_{max}	+125 °C
	Maximum Operating Temperature	T_{max}^{op}	+125 °C
	Lower Category Temperature	T_{min}	-55 °C
Rated Capacitance C	180 nF		
Capacitance tolerance	± 5 % (J)		
Rated Voltage V_R	63 V DC		
Rated Voltage V_{RMS} (at f ≤ 60 Hz)	40 V AC		
Dissipation factor tan δ (in 10 ⁻³) at 20 °C (upper limit values)	8 (at 1 kHz) 15 (at 10 kHz)		
Insulation resistance R_{ins} at 50 V DC, 20 °C, rel. humidity ≤ 65%	> 3750 MΩ		
DC test voltage (Terminal to terminal), duration	1.4 · V_R , 2 s		
Maximum Pulse Handling Capability	250 V/μs		
Pulse characteristic K_0	30000 V ² /μs		

Taping and packing
Taping

Tape dimensions

Symbol	$\varnothing d_1$	D_0	F	F'	H	H_1	P_0	P_1
Dimension (mm)	0.5	4.0	5.0	5.0	18.5	32.2	12.7	3.8
Tolerance (mm)	± 0.05	± 0.2	$+0.6/-0.1$	± 0.4	± 0.5	max.	$\pm 0.2^*)$	± 0.7

Symbol	W	W_0	W_1	W_2	t	Δh	Δp
Dimension (mm)	18.0	6.0	9.0	0.5	0.7	0	0
Tolerance (mm)	± 0.5	± 0.5	± 0.5	$+2.5$	± 0.2	± 2.0	± 1.3

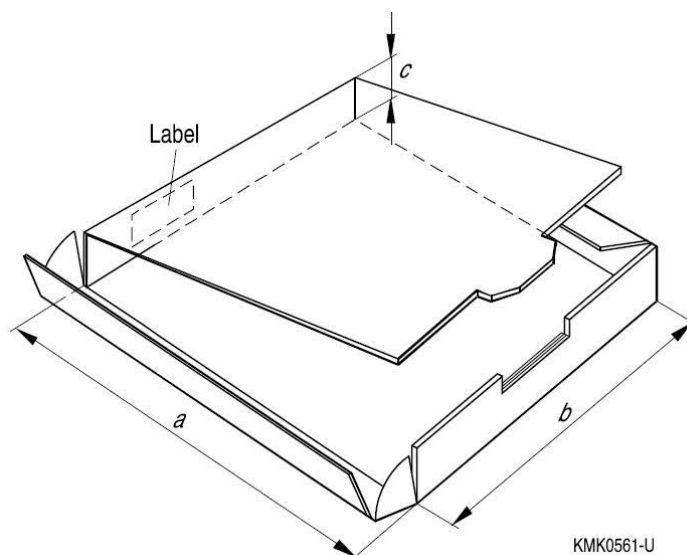
*) ± 1 per 20 x P_0

Packing

Ammo pack:

Dim. approx.	
a mm	340
b mm	340
c mm	50

Packing unit: 3200 pieces



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. TDK 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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Important notes

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