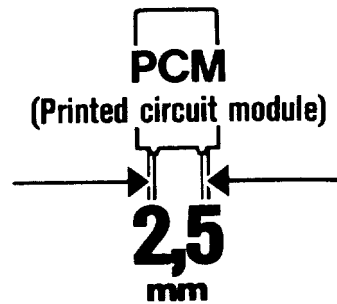


WIMA MKS 02



Sub-miniature capacitors
PCM 2.5 mm

Metallized polyester capacitors



149-102 → 149-116

- CECC approval
Certificate No. 30 401-049
- Ideally suited for decoupling up to
high-frequency ranges
- Available taped and reeled



Technical Data

Dielectric: Polyethylene terephthalate film

Capacitor electrodes: Vacuum-deposited aluminium

Encapsulation: Flame-retardent plastic case (material code KR 4015 WU/UL 94 V-0) with epoxy resin seal
Colour Red

Class of application: FME in accordance with DIN 40040

Temperature range: -55°C to +100°C

Test specifications: In accordance with CECC 30400 and IEC 384-2

Test category: 55/100/21 in accordance with IEC

Insulation resistance at +20°C:

Capacitance $\leq 0.33 \mu\text{F}$ $\geq 3.75 \times 10^3$ megohms
Capacitance $> 0.33 \mu\text{F}$ ≥ 1250 sec (megohms $\times \mu\text{F}$)
in accordance with CECC 30400 and IEC 384-2
Measuring voltage 10 V/1 min

Capacitance tolerance: $\pm 20\%$, closer tolerances on request

Temperature characteristics: See graph page 5

Dissipation factors at +20°C:

at f	$C \leq 0.1 \mu\text{F}$	$0.1 \mu\text{F} < C \leq 0.47 \mu\text{F}$
1 kHz	$\leq 8 \times 10^{-3}$	$\leq 8 \times 10^{-3}$
10 kHz	$\leq 20 \times 10^{-3}$	$\leq 25 \times 10^{-3}$
100 kHz	$\leq 30 \times 10^{-3}$	-

Maximum pulse rise time:

50 VDC 5 V/microsecond
63 VDC 7.5 V/microsecond
for pulses equal to the rated voltage

Test voltage: 1.6 Vr, 2 sec

Pulse test: Based on DIN specifications

Vibration: 6 hours at 10 2000 Hz and 0.75 mm displacement amplitude or 10 g in accordance with IEC 68-2-6

Low air density: 1 kPa = 10 mbar in accordance with IEC 68-2-13.

Bump test: 4000 bumps at 390 m/sec² in accordance with IEC 68-2-29

Voltage derating: A voltage derating factor of 125% per degree C must be applied from +85°C for DC voltages and from +75°C for AC voltages

Graphs page 5

Impedance behavior as for WIMA MKS 022, page 11

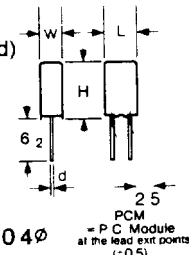
General Data

Capacitance	50 VDC/30 VAC*				63 VDC/40 VAC*			
	W	H	L	PCM**	W	H	L	PCM**
1000 pF					2.5	7	4.6	2.5
1500 "					2.5	7	4.6	2.5
2200 "					2.5	7	4.6	2.5
3300 "					2.5	7	4.6	2.5
4700 "					2.5	7	4.6	2.5
6800 "					2.5	7	4.6	2.5
0.01 μF					2.5	7	4.6	2.5
0.015 "					2.5	7	4.6	2.5
0.022 "					2.5	7	4.6	2.5
0.033 "					2.5	7	4.6	2.5
0.047 "					2.5	7	4.6	2.5
0.068 "					3	7.5	4.6	2.5
0.01 μF					3	7.5	4.6	2.5
0.15 "	3	7.5	4.6	2.5*				
0.22 "	3	7.5	4.6	2.5*				
0.33 "	3.8	9	4.6	2.5*				
0.47 "	4.6	9.5	4.6	2.5*				

* AC voltage $f = 50 \text{ Hz}$,
 $14 \times V_{\text{rms}} + V_{\text{DC}} \leq V_{\text{DC}} (\text{rated})$

** PCM = Printed circuit module
= lead spacing

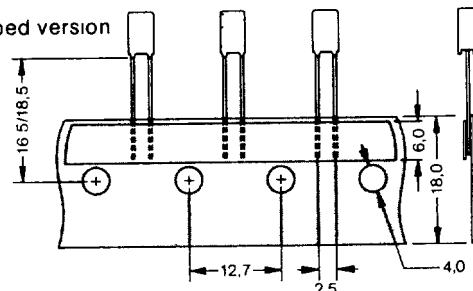
* CECC mark certification under preparation



Dims in mm

$d = 0.4 \phi$

Taped version



For further details see page 6

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