

WIMA MKI 2

PCM

5

Metallized polyphenylene-sulphide capacitors in PCM 5 mm

■ Ideally suited for temperatures up to +140° C. ■ Very constant capacitance value with temperature.
 ■ Low dissipation factor (tan δ). ■ Low dielectric absorption. ■ In virtue of high temperature resistance ideally suited for automotive applications under the hood as well as for sensory equipment in hot media. ■ Available taped and reeled.

Technical Data

Dielectric: Polyphenylene-sulphide film.

Capacitor electrodes: Vacuum-deposited aluminium.

Encapsulation: Flame-retardant plastic case, UL 94 V-O, with epoxy resin seal. Colour: Black. Marking: Silver.

Temperature range: -55° C to +140° C.

Test category: 55/140/56 in accordance with IEC.

Insulation resistance at +20° C:

$C \leq 0.33 \mu\text{F}$: $\geq 1 \times 10^4$ megohms

(mean value: 3×10^4 megohms)

$C = 0.47 \mu\text{F}$: ≥ 3000 sec (megohms $\times \mu\text{F}$)

(mean value: 6000 sec)

Measuring voltage: 50 V/1 min.

Dissipation factors at +20° C: tan δ

at f	$C \leq 0.1 \mu\text{F}$	$0.1 \mu\text{F} < C \leq 0.47 \mu\text{F}$
1 kHz	$\leq 15 \times 10^{-4}$	$\leq 20 \times 10^{-4}$
10 kHz	$\leq 20 \times 10^{-4}$	$\leq 25 \times 10^{-4}$
100 kHz	$\leq 50 \times 10^{-4}$	-

Maximum pulse rise time:

Capacitance μF	Pulse rise time V/ μsec	
	max. operation	test
0.01 ... 0.022	35	350
0.033 ... 0.068	20	200
0.1 ... 0.47	15	150

for pulses equal to the rated voltage.

Capacitance tolerances: $\pm 20\%$, $\pm 10\%$ ($\pm 5\%$ available subject to special enquiry).

Temperature characteristics: See graph page 6.

Test voltage: 1.6 Vr, 2 sec.

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 0.75 % per K must be applied from +125° C for DC voltages and from +110° C for AC voltages.

General Data

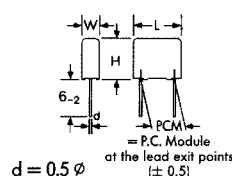
Capacitance	63 VDC / 40 VAC*				100 VDC / 63 VAC*			
	W	H	L	PCM**	W	H	L	PCM**
0.01 μF	3	7.5	7.2	5	3	7.5	7.2	5
0.015 "	3	7.5	7.2	5	3	7.5	7.2	5
0.022 "	3	7.5	7.2	5	3	7.5	7.2	5
0.033 "	3	7.5	7.2	5	3	7.5	7.2	5
0.047 "	3	7.5	7.2	5	3	7.5	7.2	5
0.068 "	3	7.5	7.2	5	3	7.5	7.2	5
0.1 μF	3	7.5	7.2	5	3	7.5	7.2	5
0.15 "	3.5	8.5	7.2	5				
0.22 "	4.5	9.5	7.2	5				
0.33 "	5	10	7.2	5				
0.47 "	5.5	11.5	7.2	5				

* AC voltage: $f \leq 400$ Hz; $1.4 \times V_{\text{rms}} + \text{VDC} \leq \text{VDC (rated)}$

** PCM = Printed circuit module = lead spacing

▨ New voltage range

Dims. in mm.



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