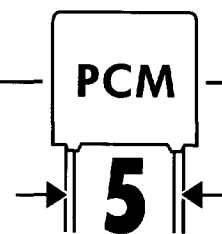


WIMA MKI 2

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 ($\tan \delta$). ■ 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-0, 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:

Ur	U _{test}	$C \leq 0.33 \mu F$	$0.33 \mu F < C \leq 2.2 \mu F$
50 VDC	10 V	$\geq 5 \times 10^3 M\Omega$ Mean value: $3 \times 10^4 M\Omega$	$\geq 1000 \text{ sec } (M\Omega \times \mu F)$ Mean value: 3000 sec
63 VDC	50 V	$\geq 1 \times 10^4 M\Omega$ Mean value: $5 \times 10^4 M\Omega$	$\geq 3000 \text{ sec } (M\Omega \times \mu F)$ Mean value: 6000 sec
$\geq 100 \text{ VDC}$	100 V	$\geq 1 \times 10^4 M\Omega$ Mean value: $5 \times 10^4 M\Omega$	-

Measuring time: 1 min.

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

Temperature characteristics: See graph page 6.

Dissipation factors at +20° C: $\tan \delta$

at f	$C \leq 0.1 \mu F$	$0.1 \mu F < C \leq 1.0 \mu F$	$C > 1.0 \mu F$
1 kHz	$\leq 15 \times 10^{-4}$	$\leq 20 \times 10^{-4}$	$\leq 25 \times 10^{-4}$
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/ μ sec max. operation/test			
	50 VDC	63 VDC	100 VDC	250 VDC
0.01 ... 0.022	-	35/350	35/350	50/500
0.033 ... 0.068	-	20/200	20/200	40/400
0.1 ... 0.47	-	15/150	15/150	40/400
0.68 ... 1.0	10/100	12/120	12/120	-
1.5 ... 2.2	6/60	8/80	-	-

for pulses equal to the rated voltage.

Test voltage: 1.6 Ur, 2 sec.

Vibration: 6 hours at 10...2000 Hz and 0.75 mm displacement amplitude or 10 g in accordance with IEC 60068-2-6

Low air density: 1 kPa = 10 mbar in accordance with IEC 60068-2-13.

Bump test: 4000 bumps at 390 m/sec² in accordance with IEC 60068-2-29.

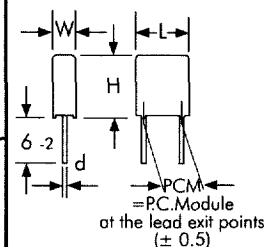
Voltage derating: Decrease of permissible voltage versus rated voltage by 1% as from +100° C, and 2% as from +125° C per 1 K at AC and DC voltage operation.

Graphs see page 6.

General Data

Capacitance	50 VDC/30 VAC*				63 VDC/40 VAC*				100 VDC/63 VAC*				250 VDC/160 VAC*			
	W	H	L	PCM**	W	H	L	PCM**	W	H	L	PCM**	W	H	L	PCM**
0.01 μF					3	7.5	7.2	5	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	3	7.5	7.2	5
0.022 "					3	7.5	7.2	5	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	3	7.5	7.2	5
0.047 "					3	7.5	7.2	5	3	7.5	7.2	5	3.5	8.5	7.2	5
0.068 "					3	7.5	7.2	5	3	7.5	7.2	5	4.5	9.5	7.2	5
0.1 μF					3	7.5	7.2	5	3	7.5	7.2	5	5	10	7.2	5
0.15 "					3.5	8.5	7.2	5	3.5	8.5	7.2	5	7.2	13	7.2	5
0.22 "					4.5	9.5	7.2	5	4.5	9.5	7.2	5	7.2	13	7.2	5
0.33 "					5	10	7.2	5	5	10	7.2	5				
0.47 "					5.5	11.5	7.2	5	5.5	11.5	7.2	5				
0.68 "					5.5	11.5	7.2	5	7.2	13	7.2	5				
1.0 μF	5.5	11.5	7.2	5	7.2	13	7.2	5								
1.5 "	7.2	13	7.2	5	8.5	14	7.2	5								
2.2 "	7.2	13	7.2	5												

Dims. in mm.



$d = 0.5 \phi$

Taped version
see page 92.

* AC voltage: $f \leq 400 \text{ Hz}$; $1.4 \times U_{rms} + U_{DC} \leq U_r$

** PCM=Printed circuit module=lead spacing

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