

WIMA MKS 3

Metallized polyester capacitors in PCM 7.5 mm

PCM

7.5

■ 1000 pF to 2.2 µF PCM 7.5 mm. ■ For general applications. ■ Alternative to PCM 5 mm with possibility to be placed across wiring path. ■ Available taped and reeled.

Technical Data

Dielectric: Polyethylene terephthalate film.

Capacitor electrodes: Vacuum-deposited aluminium.

Encapsulation: Flame-retardant plastic case, UL 94 V-0, with epoxy resin seal. Colour: Red. Marking: Black.

Temperature range: - 55° C to + 100° C.

Test specifications: In accordance with IEC 60384-2 and EN 130 400 (u.prep.).

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

Insulation resistance at + 20° C:

U_r	U_{test}	$C \leq 0.33 \mu F$	$0.33 \mu F < C \leq 2.2 \mu F$
50 VDC	10 V	—	$\geq 1500 \text{ sec } (M\Omega \times \mu F)$ Mean value: 4500 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	$\geq 1.5 \times 10^4 M\Omega$ Mean value: $1 \times 10^5 M\Omega$	$\geq 5000 \text{ sec } (M\Omega \times \mu F)$ Mean value: 10 000 sec

In accordance with IEC 60384-2 and EN 130 400 (u.prep.).
Measuring time: 1 min.

Capacitance tolerances: $\pm 20\%$, $\pm 10\%$, $\pm 5\%$.

Temperature characteristics: See graph page 5.

General Data

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	$\leq 8 \times 10^{-3}$	$\leq 8 \times 10^{-3}$	$\leq 10 \times 10^{-3}$
10 kHz	$\leq 15 \times 10^{-3}$	$\leq 15 \times 10^{-3}$	—
100 kHz	$\leq 30 \times 10^{-3}$	—	—

Maximum pulse rise time:

Capacitance pF/µF	Pulse rise time V/µsec max. operation/test					
	50 VDC	63 VDC	100 VDC	250 VDC	400 VDC	630 VDC
1000 ... 6800	—	—	—	60/600	60/600	60/600
0.01 ... 0.022	—	—	30/300	30/300	60/600	60/600
0.033 ... 0.068	—	15/150	15/150	20/200	60/600	60/600
0.1 ... 0.15	—	10/100	15/150	15/150	—	—
0.22 ... 1.0	8/80	8/80	10/100	12/120	—	—
1.5 ... 2.2	6/60	—	—	—	—	—

for pulses equal to the rated voltage.

Test voltage: 1.6 U_r , 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.

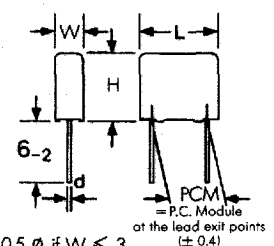
Low air density: 1 kPa = 10 mbar in accordance with IEC 60068-2-13.

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

Voltage derating: A voltage derating factor of 1.25 % per K must be applied from + 85° C for DC voltages and from + 75° C for AC voltages.

Capacitance	50 VDC/30 VAC*				63 VDC/40 VAC*				100 VDC/63 VAC*				250 VDC/160 VAC*				400 VDC/200 VAC*				630 VDC/220 VAC*			
	W	H	L	PCM	W	H	L	PCM	W	H	L	PCM	W	H	L	PCM	W	H	L	PCM	W	H	L	PCM
1000 pF																					2.5	7	10	7.5
1500 "																					2.5	7	10	7.5
2200 "																	2.5	7	10	7.5	2.5	7	10	7.5
3300 "																	2.5	7	10	7.5	2.5	7	10	7.5
4700 "																	2.5	7	10	7.5	2.5	7	10	7.5
6800 "													2.5	7	10	7.5	3	8.5	10	7.5	3	8.5	10	7.5
0.01 µF													2.5	7	10	7.5	3	8.5	10	7.5	3	8.5	10	7.5
0.015 "													2.5	7	10	7.5	4	9	10	7.5	4	9	10	7.5
0.022 "									2.5	7	10	7.5	3	8.5	10	7.5	4.5	9.5	10.3	7.5	4.5	9.5	10.3	7.5
0.033 "									2.5	7	10	7.5	3	8.5	10	7.5	5	10.5	10.3	7.5	5	10.5	10.3	7.5
0.047 "									2.5	7	10	7.5	3	8.5	10	7.5	5.7	12.5	10.3	7.5	5.7	12.5	10.3	7.5
0.068 "					2.5	7	10	7.5	3	8.5	10	7.5	4	9	10	7.5								
0.1 µF					2.5	7	10	7.5	3	8.5	10	7.5	5	10.5	10.3	7.5								
0.15 "					2.5	7	10	7.5	3	8.5	10	7.5	5	10.5	10.3	7.5								
0.22 "					3	8.5	10	7.5	4	9	10	7.5	5	10.5	10.3	7.5								
0.33 "					4	9	10	7.5	4.5	9.5	10.3	7.5	5.7	12.5	10.3	7.5								
0.47 "					4.5	9.5	10.3	7.5	5	10.5	10.3	7.5												
0.68 "					5	10.5	10.3	7.5	5.7	12.5	10.3	7.5												
1.0 µF	4.5	9.5	10.3	7.5	5.7	12.5	10.3	7.5	5.7	12.5	10.3	7.5												
1.5 "	5	10.5	10.3	7.5																				
2.2 "	5.7	12.5	10.3	7.5																				

Dims. in mm.



* AC voltage: $f = 50 \text{ Hz}$; $1.4 \times U_{rms} + U_{DC} \leq U_r$

** PCM = Printed circuit module = lead spacing

Taped version see page 92.

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