

WIMA MKP 3

PCM

7.5

Metallized polypropylene capacitors in PCM 7.5 mm

- Extremely low dissipation factor ($\tan \delta$)
- Constantly negative TK_C .
- Suitable for "sample and hold" circuits because of low dielectric absorption.
- Suitable for applications in high frequencies.
- Available taped and reeled.

Technical Data

Dielectric: Polypropylene 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 $+100^\circ\text{C}$.

Test specifications: In accordance with IEC 60384-16 and CECC 31 200.

Insulation resistance: at $+20^\circ\text{C}$:

$\geq 1 \times 10^5$ megohms (mean value; 5×10^5 megohms)

In accordance with IEC 60384-16 and CECC 31 200.

Measuring voltage: 100 V/1 min.

Dissipation factors at $+20^\circ\text{C}$; $\tan \delta$

at f	$C \leq 0.1 \mu\text{F}$	$C > 0.1 \mu\text{F}$
1 kHz	$\leq 0.4 \times 10^{-3}$	$\leq 0.5 \times 10^{-3}$
10 kHz	$\leq 0.6 \times 10^{-3}$	$\leq 0.8 \times 10^{-3}$
100 kHz	$\leq 2.5 \times 10^{-3}$	—

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

Temperature characteristics: See graph page 6.

Maximum pulse rise time:

Capacitance $\mu\text{F} / \mu\text{F}$	Pulse rise time V/ μsec max. operation/test			
	250 VDC	400 VDC	630 VDC	1000 VDC
1000 ... 6800	—	55/550	60/600	65/650
0.01 ... 0.022	45/450	45/450	50/500	55/550
0.033 ... 0.068	25/250	30/300	35/350	40/400
0.1 ... 0.15	15/150	17/170	20/200	22/220

for pulses equal to the rated voltage.

Test voltage: $1.6 V_r$, 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/sec^2 in accordance with IEC 60068-2-29.

Dielectric absorption: 0.05%

Voltage derating: A voltage derating factor of 1.35% per K must be applied from $+85^\circ\text{C}$ for DC voltages and from $+75^\circ\text{C}$ for AC voltages

Graphs see page 6.

General Data

Capacitance	250 VDC / 160 VAC*				400 VDC / 220 VAC*				630 VDC / 280 VAC*				1000 VDC / 400 VAC*			
	W	H	L	PCM	W	H	L	PCM	W	H	L	PCM	W	H	L	PCM
1000 μF									2.5	7	10	7.5	2.5	7	10	7.5
1500 μF									2.5	7	10	7.5	2.5	7	10	7.5
2200 μF									2.5	7	10	7.5	3	8.5	10	7.5
3300 μF					2.5	7	10	7.5	3	8.5	10	7.5	4	9	10	7.5
4700 μF					2.5	7	10	7.5	3	8.5	10	7.5	4.5	9.5	10.3	7.5
6800 μF					2.5	7	10	7.5	3	8.5	10	7.5	5	10.5	10.3	7.5
0.01 μF					2.5	7	10	7.5	3	8.5	10	7.5	5.7	12.5	10.3	7.5
0.015 μF	2.5	7	10	7.5	3	8.5	10	7.5	4	9	10	7.5				
0.022 μF	2.5	7	10	7.5	4	9	10	7.5	4.5	9.5	10.3	7.5				
0.033 μF	3	8.5	10	7.5	4.5	9.5	10.3	7.5	5	10.5	10.3	7.5				
0.047 μF	4	9	10	7.5	5	10.5	10.3	7.5	5.7	12.5	10.3	7.5				
0.068 μF	4	9	10	7.5	5.7	12.5	10.3	7.5								
0.1 μF	4.5	9.5	10.3	7.5												
0.15 μF	5	10.5	10.3	7.5												

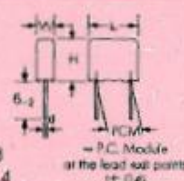
* AC voltage: $f \leq 400 \text{ Hz}$; $1.4 \times V_{\text{rms}} + \text{VDC} \leq \text{VDC (rated)}$

** PCM = Printed circuit module
= lead spacing

Dims in mm.

Taped version see page 88.

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$d = 0.5 \phi$ if $W \leq 3$
 $d = 0.7 \phi$ if $W \geq 4$

PCM Module
at the lead exit points
(t: 0.4)