WIMA MKS 02



Metallized polyester capacitors in PCM 2.5 mm

Ideally suited for decoupling up to high-frequency ranges. Very advantageous volume/capacitance ratio. Wide capacitance range with smallest box sizes. PCM 2.5 mm technology with low self-inductance for low damping applications. Available taped and reeled.

Technical Data

Dielectric: Polyethylene terephthalate film.
Capacitor electrodes: Vacuum-deposited aluminium.
Encapsulation: Flame retardent plastic case, UL 94 V-0, with epoxy resin seal.
Colour: Red. Marking: White.
Temperature range: -55° C to +100° C.
Test specifications: In accordance with IEC 60384-2 and EN 130400 (u. prep.).
Test category: 55/100/21 in accordance with IEC.
Insulation resistance at +20° C**:**

U_r	U_{test}	C <= 0.33 µF	0.33µF<C<=1.5µF
16 VDC	10 V	>= 3.75 x 10^3 MOhms Mean value:1x10^4 MOhms	>= 1250 sec (MOhms x µF) Mean value: 3000 sec
50 VDC	10 V	>= 3.75 x 10^3 MOhms Mean value:1x10^4 MOhms	>= 1250 sec (MOhms x µF) Mean value: 3000 sec
63 VDC	50 V	>= 1 x 10^4 MOhms Mean value:2x10^4 MOhms	-
100VDC	100V	>= 1.5 x 10^4 MOhms Mean value:3x10^4 MOhms	-

In accordance with IEC 60384-2 and EN 130400 (u. prep.).
Measuring time: 1 min.
Capacitance tolerances: +/-20%, +/-10%, (+/-5% available subject to special enquiry).
Test voltage: 1.6 Vr, 2 sec.
Dissipation factors at +20° C: tan delta

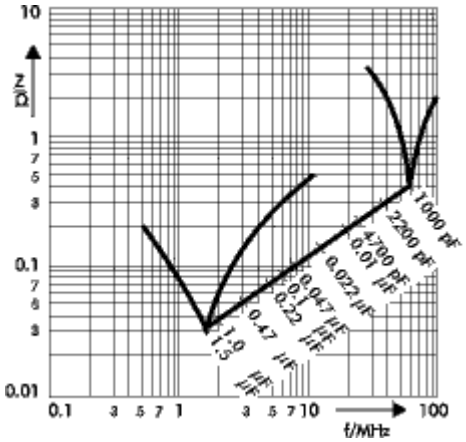
at f	C <= 0.1 µF	0.1 µF < C <= 1.5 µF
1 kHz 10 kHz 100 kHz	<= 8 x 10^{-3} <= 15 x 10^{-3} <= 25 x 10^{-3}	<= 8 x 10^{-3} <=15 x 10^{-3} -

Maximum pulse rise time:

Capacitance pF/µF	Pulse rise time V/µsec	
	max. operation	test
1000...2200	175	1750
3300...6800	100	1000
0.01...0.022	50	500
0.033...0.068	30	300
0.1...0.33	20	200
0.47 ...1.0	15	150
1.5	12	120

for pulses equal to the rated voltage.
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.
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.

Impedance change with frequency (general guide)



Capaci-tance	16 VDC/ 10 VAC*				50 VDC/ 30 VAC*				63 VDC/ 40 VAC*				100 VDC/ 63 VAC*			
	W	H	L	PCM**	W	H	L	PCM**	W	H	L	PCM**	W	H	L	PCM**
1000pF	2.5	5.5	4.6	2.5					2.5	7	4.6	2.5	2.5	7	4.6	2.5
1500 "	2.5	5.5	4.6	2.5					2.5	7	4.6	2.5	2.5	7	4.6	2.5
2200 "	2.5	5.5	4.6	2.5					2.5	7	4.6	2.5	2.5	7	4.6	2.5
3300 "	2.5	5.5	4.6	2.5					2.5	7	4.6	2.5	2.5	7	4.6	2.5
4700 "	2.5	5.5	4.6	2.5					2.5	7	4.6	2.5	2.5	7	4.6	2.5
6800 "	2.5	5.5	4.6	2.5					2.5	7	4.6	2.5	2.5	7	4.6	2.5
0.01µF	2.5	5.5	4.6	2.5					2.5	7	4.6	2.5				
0.015 "	2.5	5.5	4.6	2.5					2.5	7	4.6	2.5				
0.022 "	2.5	5.5	4.6	2.5					2.5	7	4.6	2.5				
0.033 "	2.5	5.5	4.6	2.5					2.5	7	4.6	2.5				
0.047 "	2.5	5.5	4.6	2.5					2.5	7	4.6	2.5				
0.068 "	2.5	5.5	4.6	2.5					3	7.5	4.6	2.5				
0.1 µF	2.5	5.5	4.6	2.5					3	7.5	4.6	2.5				
0.15 "	3	7.5	4.6	2.5	3	7.5	4.6	2.5								
0.22 "	3	7.5	4.6	2.5	3	7.5	4.6	2.5								
0.33 "	3.8	8.5	4.6	2.5	3.8	8.5	4.6	2.5								
0.47 "	4.6	9	4.6	2.5	4.6	9	4.6	2.5								
0.68 "	4.6	9	4.6	2.5	4.6	9	4.6	2.5								
1.0 µF	5.5	10	4.6	2.5	5.5	10	4.6	2.5								
1.5 "	5.5	10	4.6	2.5												

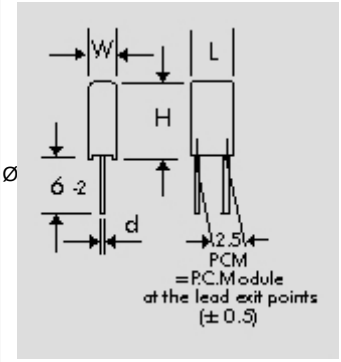
* AC voltage: f = 50 Hz;
1.4 x Urms + UDC <= Ur

**PCM = Printed circuit module
= lead spacing.

Dims. in mm

d = 0.4

Ø



Rights reserved to amend design data
without prior notification.