

# 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 retardant 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:**

### 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

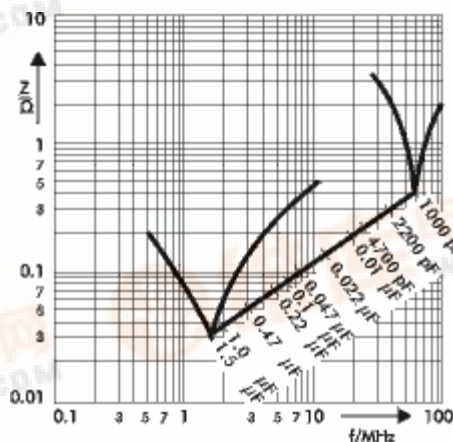
Ur	Utest	C <= 0.33 μF	0.33μF < C <= 1.5μF
16 VDC	10 V	>= 3.75 x 10 <sup>3</sup> MOhms Mean value: 1x10 <sup>4</sup> MOhms	>= 1250 sec (MOhms x μF) Mean value: 3000 sec
50 VDC	10 V	>= 3.75 x 10 <sup>3</sup> MOhms Mean value: 1x10 <sup>4</sup> MOhms	>= 1250 sec (MOhms x μF) Mean value: 3000 sec
63 VDC	50 V	>= 1 x 10 <sup>4</sup> MOhms Mean value: 2x10 <sup>4</sup> MOhms	-
100VDC	100V	>= 1.5 x 10 <sup>4</sup> MOhms Mean value: 3x10 <sup>4</sup> MOhms	-

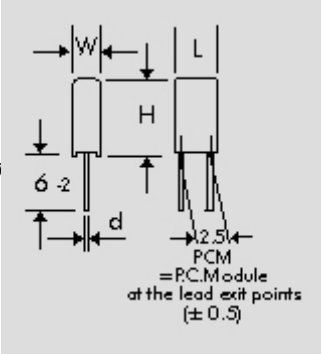
for pulses equal to the rated voltage.  
**Vibration:** 6 hours at 10...2000 Hz and 0.75 mm displacement amplitude or 10 g in accordance with IEC 60068-2-6.  
**Low air density:** 1 kPa = 10 mbar in accordance with IEC 60068-2-13.  
**Bump test:** 4000 bumps at 390 m/sec<sup>2</sup> in accordance with 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.

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	<= 8 x 10 <sup>-3</sup>	<= 8 x 10 <sup>-3</sup>
10 kHz	<= 15 x 10 <sup>-3</sup>	<= 15 x 10 <sup>-3</sup>
100 kHz	<= 25 x 10 <sup>-3</sup>	-

Impedance change with frequency (general guide)



Capacitance	16 VDC/ 10 VAC*				50 VDC/ 30 VAC*				63 VDC/ 40 VAC*				100 VDC/ 63 VAC*				* AC voltage: f = 50 Hz; 1.4 x Urms + UDC <= Ur
	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	**PCM = Printed circuit module = lead spacing.  Dims. in mm  d = 0.4  
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													

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