# WIMA MKP-X2

Metallized Polypropylene (PP) RFI-Capacitors Class X2 PCM 7.5 mm to 27.5 mm

### **Special Features**

- Reliable self-healing
- High degree of interference suppression due to good attenuation and low ESR
- According to RoHS 2002/95/EC

#### **Typical Applications**

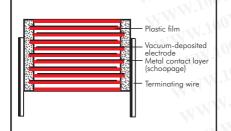
Class X2 RFI applications to meet EMC regulations

- Capacitors connected to the mains between phase and neutral or phase conductors
- Installation category II in accordance with IEC 60664, pulse peak voltage ≤ 2.5 kV

### Construction

#### **Dielectric:**

Polypropylene (PP) film Capacitor electrodes: Vacuum-deposited Internal construction:



#### **Encapsulation:**

Solvent-resistant, flame-retardent plastic case with epoxy resin seal, UL 94 V-0 **Terminations:** 

Tinned wire.

# Marking:

Colour: Red. Marking: Black.

勝 特 力 材 料 886-3-5753170 胜特力电子(上海) 86-21-54151736 胜特力电子(深圳) 86-755-83298787 Http://www.100y.com.tw

**Test specifications:** 

Test voltage:

**Reliability:** 

In accordance with DIN EN 132400

Maximum pulse rise time:

100 V/ $\mu$ sec at U<sub>pp</sub> = 390 V

C ≤ 1.0 µF: 2200 VDC, 2 sec.

C > 1.0 µF: 1800 VDC, 2 sec.

Operating life > 300 000 hours

Failure rate < 2 fit (0.5 x U<sub>r</sub> and 40°



### **Electrical Data**

**Capacitance range:** 1000 pF to 2.2 µF **Rated voltages:** 275 VAC

**Capacitance tolerances:** ±20%, ±10%

**Operating temperature range:** -55° C to +105° C **Climatic test category:** 

55/105/56/B in accordance with IEC **Insulation resistance** at +20° C:  $C \le 0.33 \ \mu\text{F} \ge 15 \times 10^3 \ M\Omega$   $C > 0.33 \ \mu\text{F} \ge 5000 \ \text{sec} \ (M\Omega \times \mu\text{F})$ Measuring voltage: 100 V/1 min.

**Dissipation factors** at  $+ 20^{\circ}$  C: tan  $\delta$ 

Ī	at f	C ≤ 0.1 µF	0.1 µF < C ≤ 1.0 µF	C > 1.0 µF
N	1 kHz	≤ 10 x 10 <sup>-4</sup>	≤ 20 x 10 <sup>-4</sup>	≤ 30 x 10 <sup>-4</sup>
	10 kHz	≤ 20 x 10 <sup>-4</sup>	$\leq 60 \times 10^{-4}$	100 ×
1	100 kHz	≤ 90 x 10 <sup>-4</sup>	NT-TW	VVV - 1005

# Approvals:

Approvuis.				
Country	Authority	Specification	Symbol	Approval-No.
Germany	VDE	DIN EN 132400 IEC 60384-14/2	10	40003472
USA/Canada	UL	UL 1414 (250 VAC) C 22.2 No. 1 (250 VAC)	ca us 250~	E 134915
USA/Canada	UL	UL 1283 (305 VAC) C 22.2 No. 8 (305 VAC)	c, , us 305~	E 100438

#### **Mechanical Tests**

#### **Pull test on leads:**

10 N in direction of leads according to IEC 60068-2-21

# 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:

1kPa = 10 mbar in accordance with IEC 60068-2-13

# **Bump test:**

4000 bumpst at 390 m/sec<sup>2</sup> in accordance with IEC 60068-2-29

Available taped and reeled up to and

Packing

including case size 15 x 26 x 31.5 / PCM 27.5 mm.

Detailed taping information and graphs at the end of the catalogue.

For further details and graphs please refer to Technical Information.

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# Continuation

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## **General Data**

Capacitance			275 VAC*				
1002	W	H.		PCM**			
1000 pF	4	9	10	7.5			
1500 ″	4	9 001	10	7.5			
2200 "	4	9	10	7.5			
3300 ″	4	9	10	7.5			
4700 "	4	9	10	7.5			
6800 ″	4	9	10	7.5			
0.01 µF	4	9	10	7.5*			
WWW.1	C <sup>0</sup> 5	YOU WWW	13	10*			
0.015 "	4	9	10	7.5*			
N. N.	5	11 100	13	10*▲			
0.022 "	.C4	9	10	7.5*			
VVI	5	11	13	10			
0.033 ″	5	10.5	10.3	7.5*▲			
WW	5	11 11 11	13	10*▲			
0.047 ″	5.7	12.5	10.3	7.5*▲			
	6	12.5	13	10*▲			
0.068 ″	6	12.5	13	10▲			
0.1 µF <	8	12	13	10*▲			
	5 0	11	18 00	15*			
	6	12.5	18	15*▲			
0.15 ″	6	12.5	18	15*▲			
	7	14	18	15*▲			
0.22 ″	9	14	18	15*			
	8	15	18	15*▲			
0.33 ″	Vin Miller	14	18,005.00	15*			
	9	16	18	15*▲			
0.47 ″	8.5	18.5	26.5	22.5*▲			
	10.5	19	26.5	22.5*▲			
0.68 ″	10.5	19	26.5	22.5*▲			
	11	21	26.5	22.5*▲			
1.0 µF	11	21	26.5	22.5*▲			
	13	24	31.5	27.5*▲			
1.5 ″	15	26	31.5	27.5			
2.2 "	17	29	31.5	27.5			

 $d = 0.7 \phi$  if PCM < 15

\* f = 50/60 Hz

\*\* PCM = Printed circuit module = lead spacing

Certified for 250 VAC in accordance with UL/CSA.

▲ Additionally certified for 305 VAC in accordance with UL/CSA.

\* On ordering please state the required <u>PCM</u> and <u>box size</u>. If not specified, smaller PCM or box size will be booked.

Dims. in mm.

Taped version see page 100.

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