# WIMA MP 3-X2







### Metallized paper RFI capacitors in accordance with IEC 60384-14/2 and EN 132 400 class X2

- Particularly high reliability against active and passive flammability.
- Problem-free clearing.
- For temperatures up to 110° C.
- High disruptive test and DC strength.
- Good attenuation and low ESR for high degree of interference suppression.
- Available taped and reeled up to and including PCM 22.5 mm.

#### **Technical Data**

**Dielectric:** Paper, epoxy resin impregnated. **Capacitor electrodes:** Vacuum-deposited. **Encapsulation:** Flame-retardent epoxy resin

UL 94 V-0, metal foil.

Temperature range: -40° C to +110° C
Test specifications: In accordance with

DIN EN 132 400.

Test category: 40/110/56/C in accordance with IEC.

Insulation resistance at +20° C: C <= 0.33 uF: >= 12 x 10<sup>3</sup> megohms

 $C > 0.33 \mu F$ : >= 4000 sec (megohms x  $\mu F$ )

In accordance with DIN EN 132 400. Measuring voltage: 100 V/1 min.

**Dissipation factor:** tan delta  $\leq$  13 x 10<sup>-3</sup>

at 1 kHz and +20° C.

Capacitance tolerance: +/- 20%. Maximum pulse rise time:

Capacitance pF/µF	Pulse rise time V/µsec max. operation		
1000	1000		
1500	600		
22004700	450		
68000.022	300		
0.0330.047 0.0681.0	200 100		

in accordance with DIN EN 132 400. **Test voltage:** 2700 VDC, 2 sec.

#### **General Data**

Capacitance	250 VAC*				275 VAC*			
	W	Н	L	PCM**	W	Н	L	PCM**
1000 pF	4	8.5	13.5	10	4	8.5	13.5	10
1500 "	4	8.5	13.5	10	4	8.5	13.5	10
2200 "	4	8.5	13.5	10	4	8.5	13.5	10
3300 "	4	8.5	13.5	10	4	8.5	13.5	10
4700 " 6800 "	5 5	10 13	13.5 19	10 15	5 5	10 13	13.5 19	10 15
0.01 μF	5	13	19	15	5	13	19	15
0.015 "	5	13	19	15	5	13	19	15
0.022 "	5	13	19	15	5	13	19	15
0.033 "	6	14	19	15	6	14	19	15
0.047 " 0.068 "	7 8	15 17	19 19	15 15	7 8	15 17	19 19	15 15
0.1 μF	10	18	19	15*	10	18	19	15*
	8	20	28	22.5*	8	20	28	22.5*
0.15 "	8	20	28	22.5	8	20	28	22.5
0.22 "	10	22	28	22.5	10	22	28	22.5
0.33 "	12	24	28	22.5	12	24	28	22.5
0.47 " 0.68 "	13 15	25 26	33 33	27.5 27.5	13 15	25 26	33 33	27.5 27.5
1.0 µF	20	32	33	27.5	20	32	33	27.5

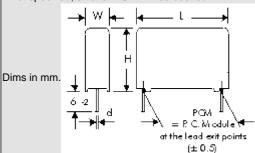
\* f = 50 Hz;

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

Also available in E12-values.

Upon request with long leads either: 35-2 mm max. or insulated: 40 mm max., bare ends 9 mm.

\* On ordering please state the required <u>PCM</u> (lead spacing).
If not specified, smaller PCM will be booked.



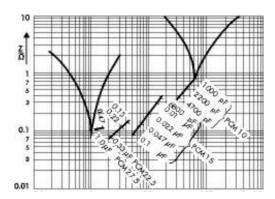
d = 0.7 Ø if PCM 10

d = 0.8 Ø if PCM >= 15

Rights reserved to amend design data without prior notification

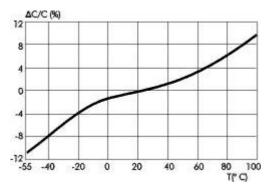
MP 3-X2 Approvals							
Country	Authority	Specification	Approval No.				
Germany	VDE	DIN EN 132 400	89749				
		IEC 60384-14/2					
USA	UL	UL 1283	E 100438 (M)				
		UL 478	E 100438 (M)				
Canada	CSA	C 22.2 No. 8	LR 93312-1				

Impedance change with frequency (general guide)

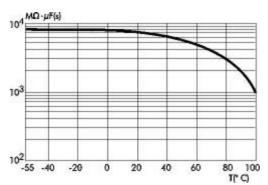


# WIMA MP 3

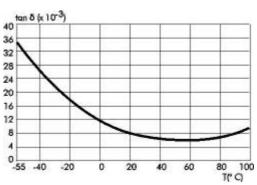
### Typical graphs of metallized paper RFI capacitors



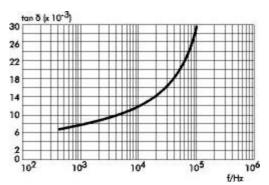
Capacitance change with temperature (f=1 kHz) (general guide)



Insulation resistance change with temperature (general guide)



Dissipation factor change with temperature (f=1 kHz) (general guide)



Dissipation factor change with frequency (general guide)