

WIMA MP 3-Y2



**Metallized Paper (MP)
RFI-Capacitors Class Y2
PCM 10 mm and 15 mm**

勝特力材料 886-3-5753170
勝特力电子(上海) 86-21-54151736
勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

Special Features

- Particularly high reliability against active and passive flammability
- Excellent self-healing as well as high voltage strength
- High degree of interference suppression due to good attenuation and low ESR
- For temperatures up to +110° C
- According to RoHS 2002/95/EC

Typical Applications

Class Y2 RFI applications to meet EMC regulations

- Capacitors connected to the mains between phase or neutral and earthed casing
- By-passing of the basic or supplementary insulation, pulse peak voltage ≤ 5 kV

Construction

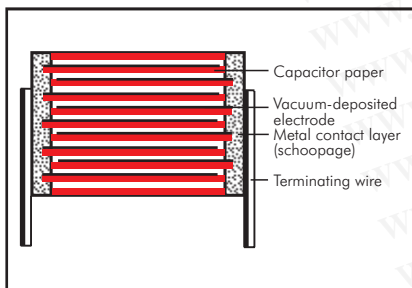
Dielectric:

Paper, epoxy resin impregnated

Capacitor electrodes:

Vacuum-deposited

Internal construction:



Encapsulation:

Self-extinguishing epoxy resin, UL 94 V-0, metal foil

Terminations:

Tinned wire.

Marking:

Marking: Black on Silver.

Electrical Data

Capacitance range:

1000 pF to 0.022 μ F (E12-values on request)

Rated voltages:

250 VAC

Capacitance tolerances:

$\pm 20\%$

Operating temperature range:

-40° C to +110° C

Climatic test category:

40/110/56/C in accordance with IEC

Insulation resistance at +20° C:

$\geq 12 \times 10^3$ M Ω

Measuring voltage: 100 V/1 min.

Dissipation factors:

$\tan \delta \leq 13 \times 10^{-3}$ at 1 kHz and +20° C

Test specifications:

In accordance with DIN EN 132400

Approvals:

Country	Authority	Specification	Symbol	Approval-No.
Germany	VDE	DIN EN 132400 IEC 60384-14/2		87455
USA	UL	UL 1283		E 100438
Canada	CSA	C 22.2 No. 8		LR 93312-1

Maximum pulse rise time:

Capacitance pF/ μ F	Pulse rise time V/ μ sec max. operation
1000	1000
1500	600
2200 ... 4700	450
6800 ... 0.022	300

for pulses equal to the rated voltage,

$U_{pp} = 355$ V

Test voltage: 2700 VDC, 2 sec.

Reliability:

Operating life > 300000 hours

Failure rate < 1 fit (0.5 x U_r and 40° C)

Packing

Available taped and reeled.

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

For further details and graphs please refer to Technical Information.

Continuation

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General Data

Capacitance	W	H	L	PCM**
1000 pF	4	8.5	13.5	10
1500 „	4	8.5	13.5	10
2200 „	4	8.5	13.5	10
3300 „	4	8.5	13.5	10
4700 „	5	10	13.5	10
6800 „	5	13	19	15
0.01 µF	5	13	19	15
0.015 „	6	14	19	15
0.022 „	7	15	19	15

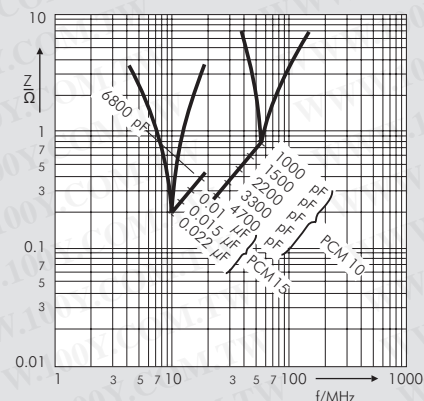
* $f = 50/60$ Hz

** PCM = Printed circuit module = lead spacing

Upon request with long leads 35-2 mm max.

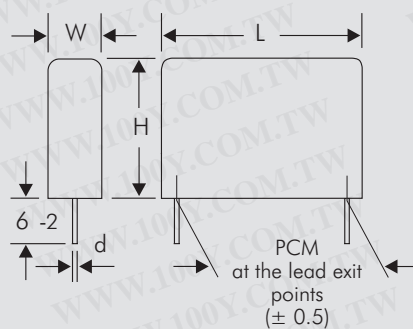
Dims. in mm.

Taped version see page 100.



Impedance change with frequency
(general guide)

$d = 0.7 \phi$ if PCM 10
 $d = 0.8 \phi$ if PCM 15



Rights reserved to amend design data without prior notification.

Typical Graphs of Metallized Paper RFI Capacitors

valid for:

MP 3-X2

MP 3-X1

MP 3-Y2

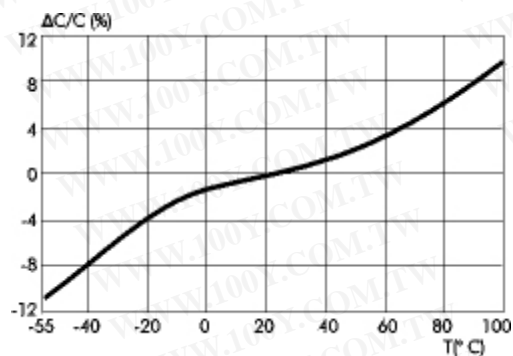
MP 3R-Y2

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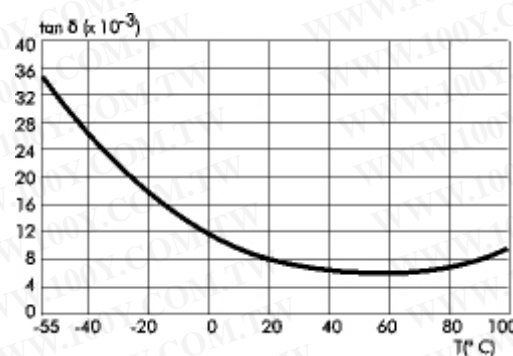
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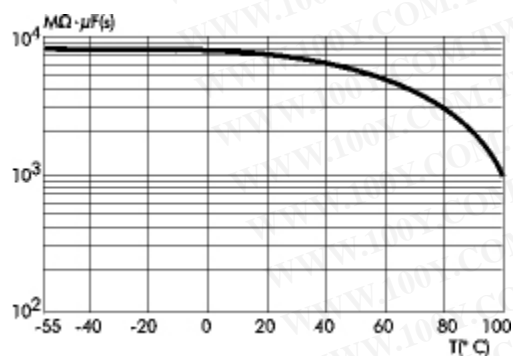
[Http://www.100y.com.tw](http://www.100y.com.tw)



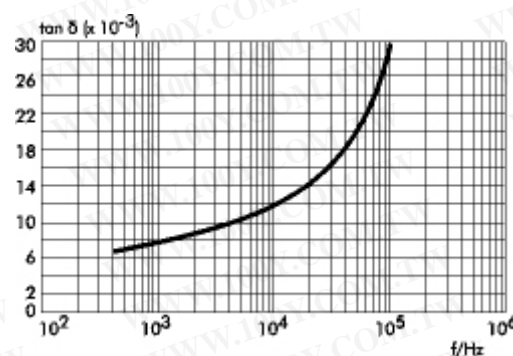
Capacitance change with temperature
(f=1 kHz) (general guide)



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



Insulation resistance change with temperature
(general guide)



Dissipation factor change with frequency
(general guide)

Recommendation for Processing and Application of Through-Hole Capacitors

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Soldering Process

A preheating of through-hole WIMA capacitors is allowed for temperatures $T_{\max} < 100^{\circ}\text{C}$.

In practice a preheating duration of $t < 5 \text{ min.}$ has been proven to be best.

Single wave soldering:

Soldering bath temperature: $T < 260^{\circ}\text{C}$

Immersion time: $t < 5 \text{ sec}$

Double wave soldering:

Soldering bath temperature $T < 260^{\circ}\text{C}$

Immersion time: $2 \times t < 3 \text{ sec}$

Wave Soldering

Temperature/time graph for the maximum permissible solder bath temperature for the wave soldering of through-hole WIMA capacitors.

