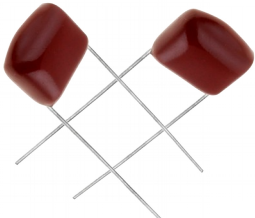


## Dimension Lists ( mm ) Diagram

MPEM Metallized Polyester Film Capacitor				 Product image					
Type	Cap ( $\mu$ F )	Rated Voltage	Capacitance Tolerance	W $\pm$ 1	H $\pm$ 1	T $\pm$ 1	P $\pm$ 1	Lmin	$\Phi$ d
100VDC									
MPEM-100NR7.5/100	0.1 $\mu$ F	100V	J	9.5	6.8	3.5	7.5	25	0.4
MPEM-220NR7.5/100	0.22 $\mu$ F	100V	J	9.5	8.4	5.1	7.5	25	0.4
MPEM-220NR10/100	0.22 $\mu$ F	100V	J	12	8.8	3.9	10	25	0.6
MPEM-330NR7.5/100	0.33 $\mu$ F	100V	J	9.5	9	4.1	7.5	25	0.4
MPEM-330NR10/100	0.33 $\mu$ F	100V	J	12	8.8	3.9	10	25	0.6
MPEM-470NR7.5/100	0.47 $\mu$ F	100V	J	9.5	10.9	6.8	7.5	25	0.4
MPEM-470NR10/100	0.47 $\mu$ F	100V	J	12	9.6	6.3	10	25	0.6
MPEM-470NR15/100	0.47 $\mu$ F	100V	J	17	9.3	4.4	15	25	0.8
MPEM-680NR7.5/100	0.68 $\mu$ F	100V	J	10.5	9.3	6.4	7.5	25	0.4
MPEM-680NR10/100	0.68 $\mu$ F	100V	J	12	11	6.8	10	25	0.6
MPEM-820NR10/100	0.82 $\mu$ F	100V	J	12	11.4	6.5	10	25	0.6
MPEM-820NR15/100	0.82 $\mu$ F	100V	J	17	10.9	6	15	25	0.8
MPEM-1UR10/100	1 $\mu$ F	100V	J	12	7.3	12.2	10	25	0.6
MPEM-2U2R15/100	2.2 $\mu$ F	100V	J	17	16.2	9.7	15	25	0.8
MPEM-3U3R20/100	3.3 $\mu$ F	100V	J	22	17.4	9.3	20	25	0.8
MPEM-3U3R25/100	3.3 $\mu$ F	100V	J	27	16.1	8	25	25	0.8
MPEM-4U7R20/100	4.7 $\mu$ F	100V	J	22	19.6	11.5	20	25	0.8
MPEM-4U7R25/100	4.7 $\mu$ F	100V	J	27	18	9.9	25	25	0.8
MPEM-6U8R27.5/100	6.8 $\mu$ F	100V	J	29	20	12.5	27.5	22	0.8
MPEM-10UR25/100	10 $\mu$ F	100V	J	27	23.5	15.4	25	25	0.8

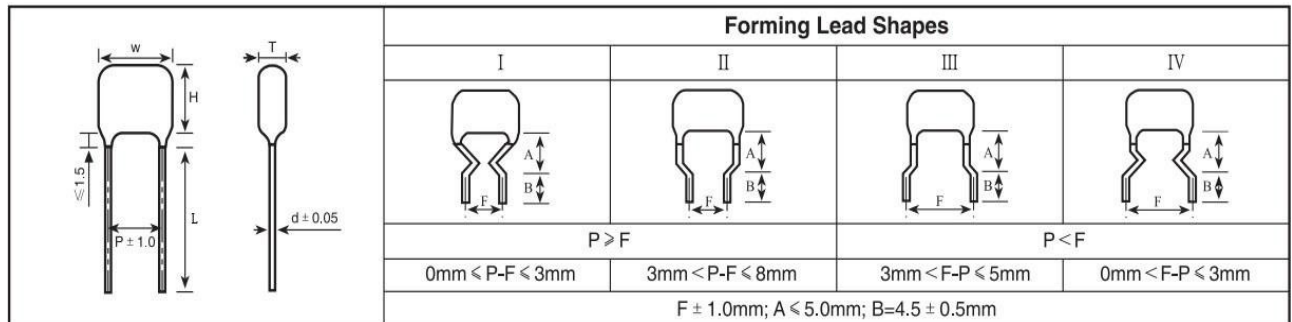
MPEM-10UR27.5/100	10uF	100V	J	29	22.8	14.8	27.5	25	0.8
250VDC									
MPEM-100NR7.5/250	0.1uF	250V	J	9.5	8.5	4.3	7.5	25	0.6
MPEM-680NR20/250	0.68uF	250V	J	22	12	7.1	20	25	0.6
MPEM-820NR20/250	0.82uF	250V	J	22	12.7	7.8	20	25	0.6
MPEM-1UR15/250	1uF	250V	J	17	11.6	6.7	15	25	0.8
MPEM-1UR20/250	1uF	250V	J	21.5	12	7	20	25	0.8
MPEM-2U2R20/250	2.2uF	250V	J	22	14.4	7.9	20	25	0.8
MPEM-3U3R20/250	3.3uF	250V	J	22	16.8	8.7	20	25	0.8
MPEM-3U3R27.5/250	3.3uF	250V	J	29	18.7	10.7	27.5	25	0.8
MPEM-4U7R27.5/250	4.7uF	250V	J	29	19.1	11	27.5	25	0.8
MPEM-4U7R31/250	4.7uF	250V	J	33	20.3	12.1	31	25	0.8
MPEM-6U8R31/250	6.8uF	250V	J	33	22.8	14.6	31	25	0.8
MPEM-10UR31/250	10uF	250V	J	33	29	18.5	31	25	0.8
400VDC									
MPEM-2N2R10/400	0.0022uF	400V	J	12	7	3.7	10	25	0.6
MPEM-3N3R10/400	0.0033uF	400V	J	12	7.3	3.9	10	25	0.6
MPEM-4N7R10/400	0.0047uF	400V	J	12	7.4	4	10	25	0.6
MPEM-6N8R7.5/400	0.0068uF	400V	J	9.5	6.7	3.4	7.5	25	0.4
MPEM-6N8R10/400	0.0068uF	400V	J	12	9	4.1	10	25	0.6
MPEM-10NR7.5/400	0.01uF	400V	J	9.5	8	3.9	7.5	25	0.4
MPEM-10NR10/400	0.01uF	400V	J	12	8.4	5	10	25	0.6
MPEM-22NR7.5/400	0.022uF	400V	J	9.5	8	3.8	7.5	25	0.4
MPEM-22NR10/400	0.022uF	400V	J	12	8	3.8	10	25	0.6
MPEM-33NR7.5/400	0.033uF	400V	J	9.5	8.8	3.9	7.5	25	0.4
MPEM-33NR10/400	0.033uF	400V	J	12	8.9	4	10	25	0.6
MPEM-47NR7.5/400	0.047uF	400V	J	9.5	8.4	4.2	7.5	25	0.4
MPEM-47NR10/400	0.047uF	400V	J	12	8.6	3.7	10	25	0.6
MPEM-68NR7.5/400	0.068uF	400V	J	9.5	9.1	4.2	7.5	25	0.4
MPEM-68NR10/400	0.068uF	400V	J	12	9.5	4.5	10	25	0.6
MPEM-220NR10/400	0.22uF	400V	J	12	8.4	5.1	10	25	0.6



## Metallized Polyester Film Capacitor Type : MPEM

Are non-inductively wound with metallized polyester film as dielectric/electrode with copper-clad steel leads and epoxy resin coating.

### Outline Drawing



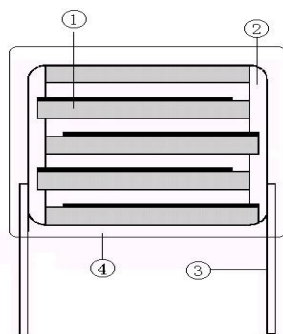
### ◆ Features :

- High moisture resistance
- Good solder ability
- Non-inductive construction and self-healing property
- Space-Saving small size

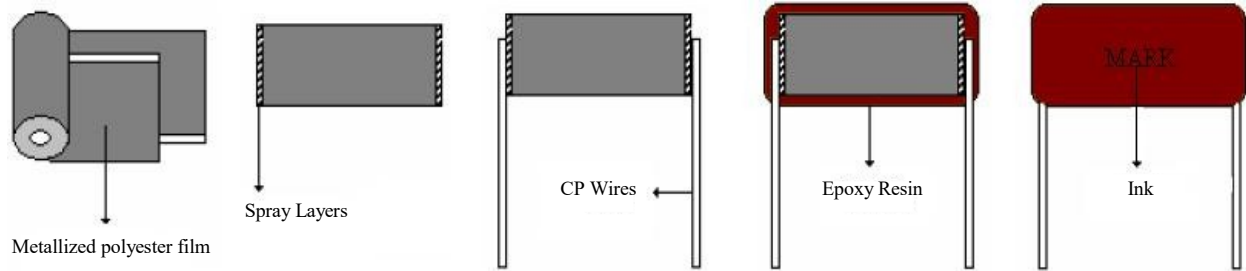
### ◆ Typical Applications :

- Suitable for blocking ,by-pass and coupling of DC and single to VHF range.
- Widely used in filter ,noise suppression and low pulse circuits.
- Color TV, acoustics, CFL&HID lamps and ballast, telephone, computer, pabx, fax, and instrument table, controller board for home appliance( hair drier, soymilkgrinder, cooker, icebox, airconditioner), torch, power supply,

### structure chart :



- ① Metallized polyester film
- ② Spray Layers
- ③ CP Wires
- ④ Epoxy Resin



### Specification :

Reference Standards:	GB7335-87(China)IEC60 384-1(International Electric Committee) GB7332-87(China)														
Rated Voltage( $U_R$ ):	100VDC ; 250VDC ; 400VDC ; 630VDC														
温度范围 : Operation Temperature Range:	-55°C - +100°C														
Capacitance Range :	MER : 0.001 $\mu$ F – 10 $\mu$ F														
Capacitance Tolerance Range :	J( $\pm 5\%$ ) ; K( $\pm 10\%$ ) ; M ( $\pm 20\%$ )														
Dielectric :	Polyester Film														
Dissipation Factor Tan $\delta$ :	<table border="1"> <thead> <tr> <th>KHz</th> <th><math>C \leq 1 \mu F</math></th> <th><math>&gt; 1 \mu F</math></th> </tr> </thead> <tbody> <tr> <td>1</td> <td><math>\leq 1.0\%</math></td> <td><math>\leq 1.0\%</math></td> </tr> <tr> <td>10</td> <td><math>\leq 1.5\%</math></td> <td><math>\leq 1.5\%</math></td> </tr> <tr> <td>50</td> <td><math>\leq 2.2\%</math></td> <td><math>\leq 2.5\%</math></td> </tr> </tbody> </table>			KHz	$C \leq 1 \mu F$	$> 1 \mu F$	1	$\leq 1.0\%$	$\leq 1.0\%$	10	$\leq 1.5\%$	$\leq 1.5\%$	50	$\leq 2.2\%$	$\leq 2.5\%$
KHz	$C \leq 1 \mu F$	$> 1 \mu F$													
1	$\leq 1.0\%$	$\leq 1.0\%$													
10	$\leq 1.5\%$	$\leq 1.5\%$													
50	$\leq 2.2\%$	$\leq 2.5\%$													
Insulation Resistance: Between Terminals: $20 \pm 5^\circ\text{C}$ 1Min	50VDC For $U_R \leq 100\text{VDC}$ ; 100VDC For $U_R > 100\text{VDC}$ 50VDC : $C \leq 0.33 \mu\text{F}$ $\geq 7500 \text{M}\Omega$ $> 0.33 \mu\text{F}$ $\geq 1250 \text{M}\Omega \cdot \text{S}$ 100VDC : $C \leq 0.33 \mu\text{F}$ $\geq 10000 \text{M}\Omega$ $> 0.33 \mu\text{F}$ $\geq 5000 \text{M}\Omega \cdot \text{S}$														
Withstand Voltage:	$2U_R(10\text{S})$														
Endurance Test:	$120 \pm 2^\circ\text{C}$ , $1.25U_R$ , 1,000Hours														

Life. Test Conditions:

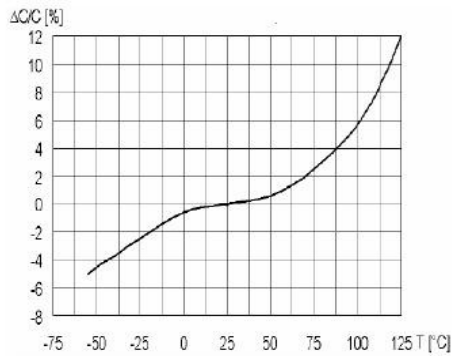
Capacitance Drift:  $\leq \pm 5\%$  of The Initial Value

Dissipation Factor

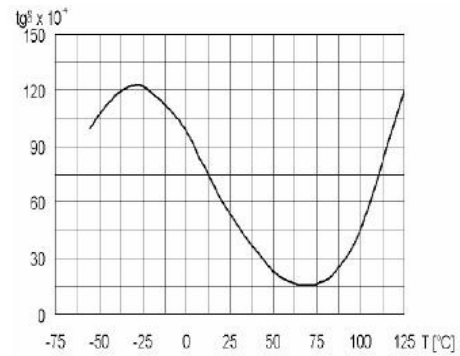
$C \leq 1 \mu F \leq 5\%$  ( 10KHz )

$C > 1 \mu F \leq 3\%$  ( 1KHz )

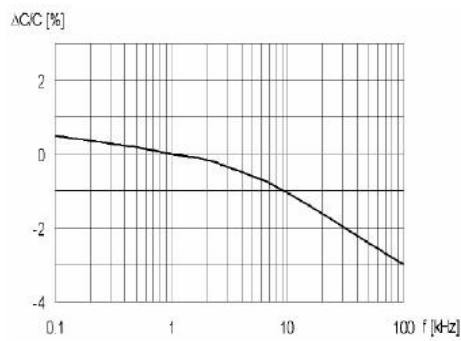
## Polyester film capacitor characteristic curve :



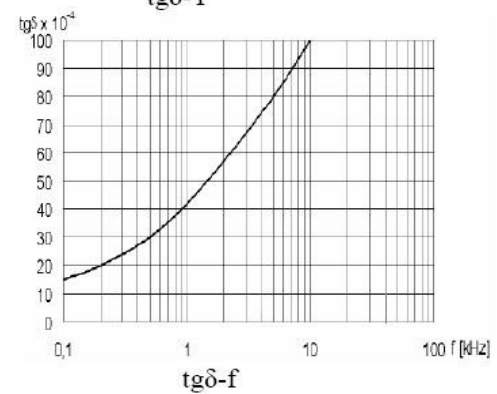
C-T



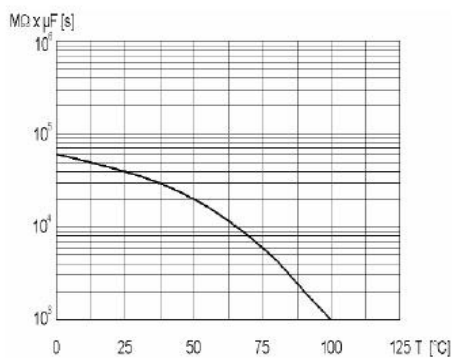
tgδ-T



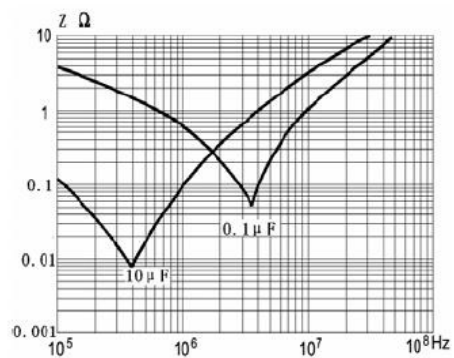
C-f



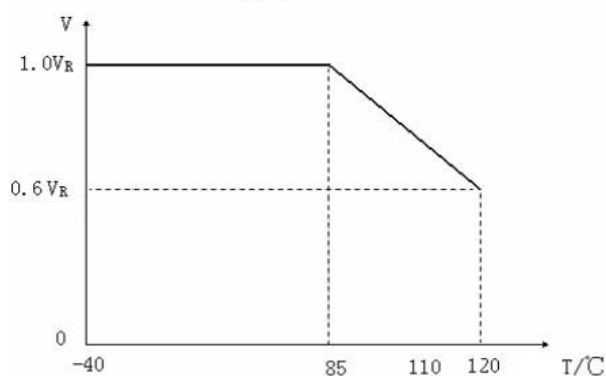
tgδ-f



R-T



Z-f



T-V