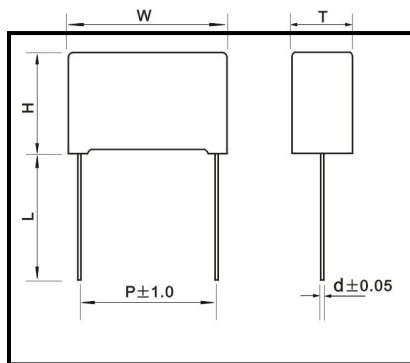


Micro miniature Metallized Polyester Film Capacitor – Box

Type: CL233X (MEM)

Are non-inductively wound with metallized polyester film as dielectric/electrode with copper-clad steel leads and encapsulated in a plastic case sealed with epoxy resin.

◆ Outline Drawing:



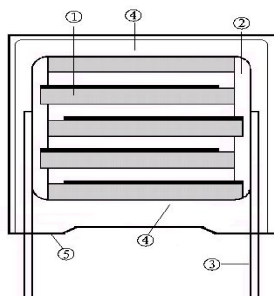
◆ Features:

- High reliability
- Excellent active and passive flame resistant abilities.
- Little volume and weight.
- Non-inductive construction and self-healing property

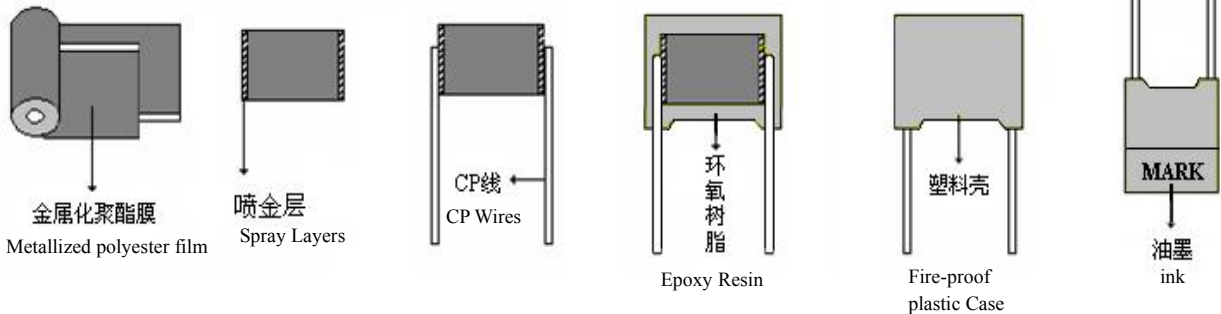
◆ Typical Applications:

- By-passing, blocking, coupling, decoupling.
- Pulse, logic, timing, oscillator, circuits.
- Interference suppression in low voltage application
(i.e. automotive)
- Remote communication, data processing, industrial instruments, automatic control system of the equipment is widely used.

◆ Structure chart:



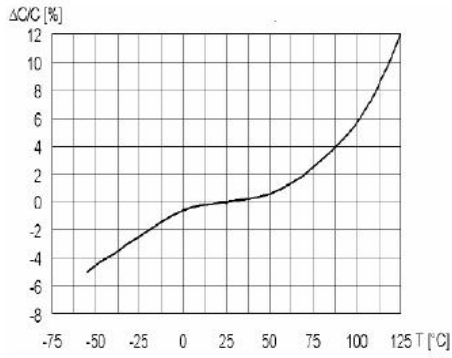
- ① Metallized Polypropylene film
- ② Spray Layers
- ③ CP Wires
- ④ Epoxy Resin
- ⑤ Fire-proof plastic Case



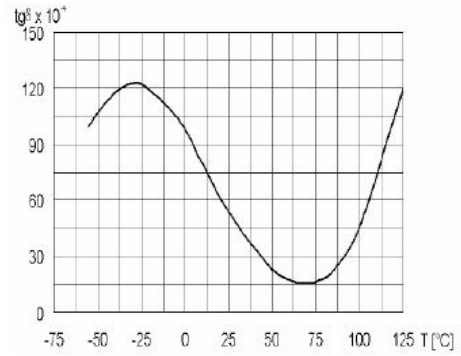
◆ **Specification:**

Reference Standards:	GB7332-87(China)														
Rated Voltage(U_R):	63VDC; 100VDC; 250VDC														
Operation Temperature Range:	-55°C - +100°C														
Capacitance Range:	MER: 0.001 μ F – 1.0 μ 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>$C \leq 1 \mu F$</th> <th>$> 1 \mu F$</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>$\leq 1.0\%$</td> <td>$\leq 1.0\%$</td> </tr> <tr> <td>10</td> <td>$\leq 1.5\%$</td> <td>$\leq 2.0\%$</td> </tr> </tbody> </table>			KHz	$C \leq 1 \mu F$	$> 1 \mu F$	1	$\leq 1.0\%$	$\leq 1.0\%$	10	$\leq 1.5\%$	$\leq 2.0\%$			
KHz	$C \leq 1 \mu F$	$> 1 \mu F$													
1	$\leq 1.0\%$	$\leq 1.0\%$													
10	$\leq 1.5\%$	$\leq 2.0\%$													
20 ± 5 °C 1Min Insulation Resistance: Between Terminals:	<table border="1"> <thead> <tr> <th colspan="2">$C > 0.33 \mu F$</th> <th colspan="2">$C \leq 0.33 \mu F$</th> </tr> <tr> <th>$U_R > 100$</th> <th>$U_R \leq 100$</th> <th>$U_R > 100$</th> <th>$U_R \leq 100$</th> </tr> </thead> <tbody> <tr> <td>2500 M $\Omega \cdot S$</td> <td>1250 M $\Omega \cdot S$</td> <td>7500 M Ω</td> <td>3750 M Ω</td> </tr> </tbody> </table>			$C > 0.33 \mu F$		$C \leq 0.33 \mu F$		$U_R > 100$	$U_R \leq 100$	$U_R > 100$	$U_R \leq 100$	2500 M $\Omega \cdot S$	1250 M $\Omega \cdot S$	7500 M Ω	3750 M Ω
$C > 0.33 \mu F$		$C \leq 0.33 \mu F$													
$U_R > 100$	$U_R \leq 100$	$U_R > 100$	$U_R \leq 100$												
2500 M $\Omega \cdot S$	1250 M $\Omega \cdot S$	7500 M Ω	3750 M Ω												
Withstand Voltage:	2 U_R (10S)														
Life. Test Conditions:	100 ± 2 °C , 1.25 U_R , 1,000Hours Capacitance Drift: $\leq \pm 5\%$ of The Initial Value Dissipation Factor $\leq 23\%$ (10KHz) of The Initial Value														

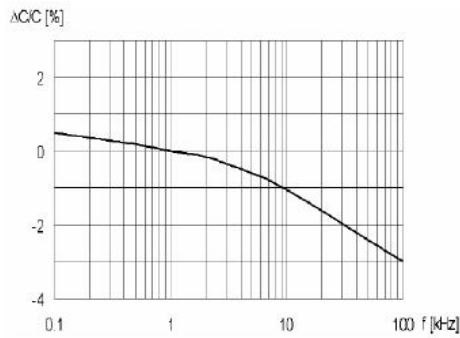
◆ Polyester film capacitor characteristic curve:



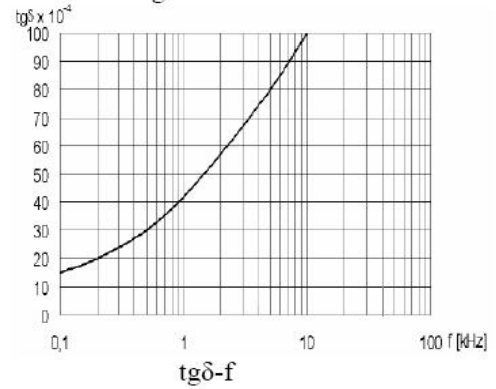
C-T



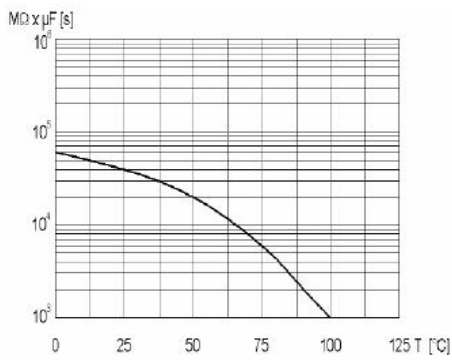
tgδ-T



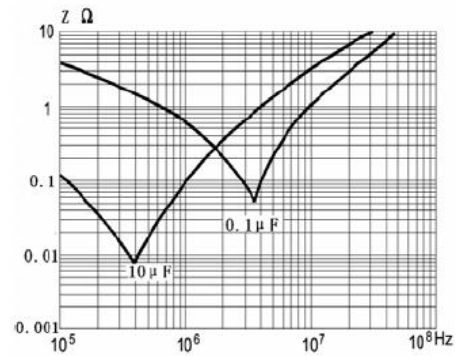
C-f



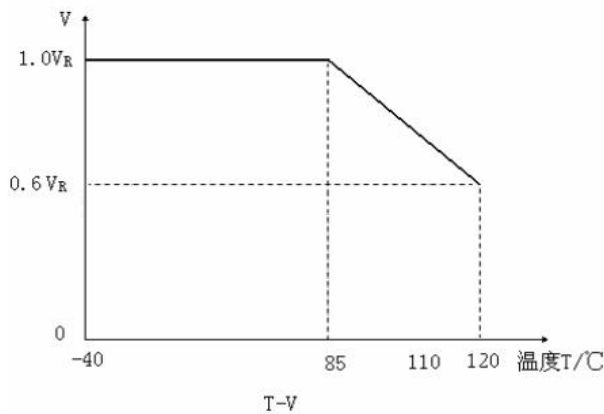
tgδ-f



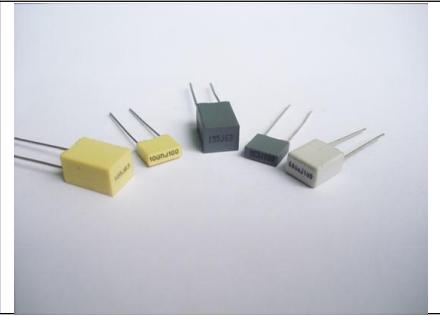
R-T



Z-f



T-V

◆ Dimension Lists (mm) Diagram
Micro miniature Metallized Polyester Film Capacitor – Box Type: CL233X


Type	Cap (μF)	Part No	Dimensions (mm)					
			W \pm 0.5	H \pm 0.5	T \pm 0.5	P \pm 0.5	Lmin	Φd
63VDC								
102	0.001	MEM102J(K)63V	7.2	2.5	6.5	5	22	0.04
122	0.0012	MEM122J(K)63V	7.2	2.5	6.5	5	22	0.04
152	0.0015	MEM152J(K)63V	7.2	2.5	6.5	5	22	0.04
182	0.0018	MEM182J(K)63V	7.2	2.5	6.5	5	22	0.04
222	0.0022	MEM222J(K)63V	7.2	2.5	6.5	5	22	0.04
272	0.0027	MEM272J(K)63V	7.2	2.5	6.5	5	22	0.04
332	0.0033	MEM332J(K)63V	7.2	2.5	6.5	5	22	0.04
392	0.0039	MEM392J(K)63V	7.2	2.5	6.5	5	22	0.04
472	0.0047	MEM472J(K)63V	7.2	2.5	6.5	5	22	0.04
562	0.0056	MEM562J(K)63V	7.2	2.5	6.5	5	22	0.04
682	0.0068	MEM682J(K)63V	7.2	2.5	6.5	5	22	0.04
822	0.0082	MEM822J(K)63V	7.2	2.5	6.5	5	22	0.04
103	0.01	MEM103J(K)63V	7.2	2.5	6.5	5	22	0.04
123	0.012	MEM123J(K)63V	7.2	2.5	6.5	5	22	0.04
153	0.015	MEM153J(K)63V	7.2	2.5	6.5	5	22	0.04
183	0.018	MEM183J(K)63V	7.2	2.5	6.5	5	22	0.04
223	0.022	MEM223J(K)63V	7.2	2.5	6.5	5	22	0.04
273	0.027	MEM273J(K)63V	7.2	2.5	6.5	5	22	0.04

333	0.033	MEM333J(K)63V	7.2	2.5	6.5	5	22	0.04
393	0.039	MEM393J(K)63V	7.2	2.5	6.5	5	22	0.04
473	0.047	MEM473J(K)63V	7.2	2.5	6.5	5	22	0.04
563	0.056	MEM563J(K)63V	7.2	2.5	6.5	5	22	0.04
683	0.068	MEM683J(K)63V	7.2	2.5	6.5	5	22	0.04
823	0.082	MEM823J(K)63V	7.2	2.5	6.5	5	22	0.04
104	0.1	MEM104J(K)63V	7.2	2.5	6.5	5	22	0.04
124	0.12	MEM124J(K)63V	7.2	2.5	6.5	5	22	0.04
154	0.15	MEM154J(K)63V	7.2	2.5	6.5	5	22	0.04
184	0.18	MEM184J(K)63V	7.2	2.5	6.5	5	22	0.04
224	0.22	MEM224J(K)63V	7.2	2.5	6.5	5	22	0.04
274	0.27	MEM274J(K)63V	7.2	2.5	6.5	5	22	0.04
334	0.33	MEM334J(K)63V	7.2	2.5	6.5	5	22	0.04
394	0.39	MEM394J(K)63V	7.2	2.5	6.5	5	22	0.04
474	0.47	MEM474J(K)63V	7.2	2.5	6.5	5	22	0.04
564	0.56	MEM564J(K)63V	7.2	2.5	6.5	5	22	0.04
684	0.68	MEM684J(K)63V	7.2	2.5	6.5	5	22	0.04
824	0.82	MEM824J(K)63V	7.2	6	11	5	22	0.05
105	1.0	MEM105J(K)63V	7.2	6	11	5	22	0.05
100VDC								
102	0.001	MEM102J(K)100V	7.2	2.5	6.5	5	22	0.04
122	0.0012	MEM122J(K)100V	7.2	2.5	6.5	5	22	0.04
152	0.0015	MEM152J(K)100V	7.2	2.5	6.5	5	22	0.04
182	0.0018	MEM182J(K)100V	7.2	2.5	6.5	5	22	0.04
222	0.0022	MEM222J(K)100V	7.2	2.5	6.5	5	22	0.04
272	0.0027	MEM272J(K)100V	7.2	2.5	6.5	5	22	0.04
332	0.0033	MEM332J(K)100V	7.2	2.5	6.5	5	22	0.04
392	0.0039	MEM392J(K)100V	7.2	2.5	6.5	5	22	0.04
472	0.0047	MEM472J(K)100V	7.2	2.5	6.5	5	22	0.04
562	0.0056	MEM562J(K)100V	7.2	2.5	6.5	5	22	0.04
682	0.0068	MEM682J(K)100V	7.2	2.5	6.5	5	22	0.04

822	0.0082	MEM822J(K)100V	7.2	2.5	6.5	5	22	0.04
103	0.01	MEM103J(K)100V	7.2	2.5	6.5	5	22	0.04
123	0.012	MEM123J(K)100V	7.2	2.5	6.5	5	22	0.04
153	0.015	MEM153J(K)100V	7.2	2.5	6.5	5	22	0.04
183	0.018	MEM183J(K)100V	7.2	2.5	6.5	5	22	0.04
223	0.022	MEM223J(K)100V	7.2	2.5	6.5	5	22	0.04
273	0.027	MEM273J(K)100V	7.2	2.5	6.5	5	22	0.04
333	0.033	MEM333J(K)100V	7.2	2.5	6.5	5	22	0.04
393	0.039	MEM393J(K)100V	7.2	2.5	6.5	5	22	0.04
473	0.047	MEM473J(K)100V	7.2	2.5	6.5	5	22	0.04
563	0.056	MEM563J(K)100V	7.2	2.5	6.5	5	22	0.04
683	0.068	MEM683J(K)100V	7.2	2.5	6.5	5	22	0.04
823	0.082	MEM823J(K)100V	7.2	3.5	7.5	5	22	0.04
104	0.1	MEM104J(K)100V	7.2	3.5	7.5	5	22	0.04
124	0.12	MEM124J(K)100V	7.2	3.5	7.5	5	22	0.04
154	0.15	MEM154J(K)100V	7.2	4.5	9.5	5	22	0.04
184	0.18	MEM184J(K)100V	7.2	4.5	9.5	5	22	0.04
224	0.22	MEM224J(K)100V	7.2	5	10	5	22	0.04
274	0.27	MEM274J(K)100V	7.2	6	11	5	22	0.05
334	0.33	MEM334J(K)100V	7.2	6	11	5	22	0.05
394	0.39	MEM394J(K)100V	7.2	6	11	5	22	0.05
474	0.47	MEM474J(K)100V	7.2	6	11	5	22	0.05
564	0.56	MEM564J(K)100V	7.2	6	11	5	22	0.05
684	0.68	MEM684J(K)100V	7.2	6	11	5	22	0.05
824	0.82	MEM824J(K)100V	7.2	6	11	5	22	0.05
105	1.0	MEM105J(K)100V	7.2	6	11	5	22	0.05
250VDC								
102	0.001	MEM102J(K)250V	7.2	2.5	6.5	5	22	0.04
122	0.0012	MEM122J(K)250V	7.2	2.5	6.5	5	22	0.04
152	0.0015	MEM152J(K)250V	7.2	2.5	6.5	5	22	0.04
182	0.0018	MEM182J(K)250V	7.2	2.5	6.5	5	22	0.04

222	0.0022	MEM222J(K)250V	7.2	2.5	6.5	5	22	0.04
272	0.0027	MEM272J(K)250V	7.2	2.5	6.5	5	22	0.04
332	0.0033	MEM332J(K)250V	7.2	2.5	6.5	5	22	0.04
392	0.0039	MEM392J(K)250V	7.2	2.5	6.5	5	22	0.04
472	0.0047	MEM472J(K)250V	7.2	2.5	6.5	5	22	0.04
562	0.0056	MEM562J(K)250V	7.2	2.5	6.5	5	22	0.04
682	0.0068	MEM682J(K)250V	7.2	2.5	6.5	5	22	0.04
822	0.0082	MEM822J(K)250V	7.2	2.5	6.5	5	22	0.04
103	0.01	MEM103J(K)250V	7.2	2.5	6.5	5	22	0.04
123	0.012	MEM123J(K)250V	7.2	2.5	6.5	5	22	0.04
153	0.015	MEM153J(K)250V	7.2	2.5	6.5	5	22	0.04
183	0.018	MEM183J(K)250V	7.2	2.5	6.5	5	22	0.04
223	0.022	MEM223J(K)250V	7.2	2.5	6.5	5	22	0.04
273	0.027	MEM273J(K)250V	7.2	3.5	6.5	5	22	0.04
333	0.033	MEM333J(K)250V	7.2	3.5	7.5	5	22	0.05
393	0.039	MEM393J(K)250V	7.2	3.5	7.5	5	22	0.05
473	0.047	MEM473J(K)250V	7.2	3.5	7.5	5	22	0.05
563	0.056	MEM563J(K)250V	7.2	3.5	7.5	5	22	0.05
683	0.068	MEM683J(K)250V	7.2	3.5	7.5	5	22	0.05
823	0.082	MEM823J(K)250V	7.2	4.5	9.5	5	22	0.05
104	0.1	MEM104J(K)250V	7.2	4.5	9.5	5	22	0.05
124	0.12	MEM124J(K)250V	7.2	5	10	5	22	0.05
154	0.15	MEM154J(K)250V	7.2	5	10	5	22	0.05
184	0.18	MEM184J(K)250V	7.2	6	11	5	22	0.05
224	0.22	MEM224J(K)250V	7.2	6	11	5	22	0.05
400VDC								
102	0.001	MEM102J(K)400V	7.2	2.5	6.5	5	22	0.04
122	0.0012	MEM122J(K)400V	7.2	2.5	6.5	5	22	0.04
152	0.0015	MEM152J(K)400V	7.2	2.5	6.5	5	22	0.04
182	0.0018	MEM182J(K)400V	7.2	2.5	6.5	5	22	0.04
222	0.0022	MEM222J(K)400V	7.2	2.5	6.5	5	22	0.04

272	0.0027	MEM272J(K)400V	7.2	2.5	6.5	5	22	0.04
332	0.0033	MEM332J(K)400V	7.2	2.5	6.5	5	22	0.04
392	0.0039	MEM392J(K)400V	7.2	3.5	7.5	5	22	0.05
472	0.0047	MEM472J(K)400V	7.2	3.5	7.5	5	22	0.05
562	0.0056	MEM562J(K)400V	7.2	3.5	7.5	5	22	0.05
682	0.0068	MEM682J(K)400V	7.2	3.5	7.5	5	22	0.05
822	0.0082	MEM822J(K)400V	7.2	4.5	9.5	5	22	0.05
103	0.01	MEM103J(K)400V	7.2	4.5	9.5	5	22	0.05
123	0.012	MEM123J(K)400V	7.2	4.5	9.5	5	22	0.05
153	0.015	MEM153J(K)400V	7.2	4.5	9.5	5	22	0.05
183	0.018	MEM183J(K)400V	7.2	5	10	5	22	0.05
223	0.022	MEM223J(K)400V	7.2	5	10	5	22	0.05
273	0.027	MEM273J(K)400V	7.2	6	11	5	22	0.05
333	0.033	MEM333J(K)400V	7.2	6	11	5	22	0.05
393	0.039	MEM393J(K)400V	7.2	6	11	5	22	0.05
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