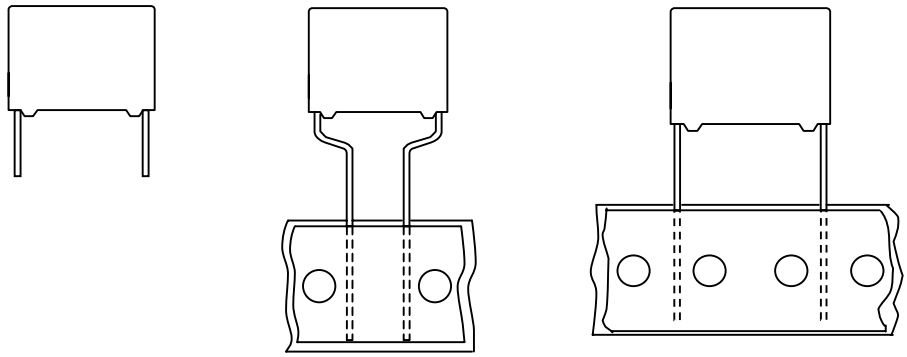
Metallized Polyester film capacitors

PCMT 468

MKT RADIAL POTTED CAPACITORS

Pitch 10.0/15.0/22.5/27.5mm
(reduced pitch ; 7.5mm)



QUICK REFERENCE DATA

Capacitance range (E24 series)	0.01 to 12μF
Capacitance tolerance	± 5%, ± 10%,
Rated voltage (DC)	100V, 250V, 400V, 630V
Climatic category	55/105/56
Temperature range	-55℃ ~ +105℃
Reference specification	IEC 60384-2
Potting & Encapsulation material	Qualified in accordance with UL94V-0

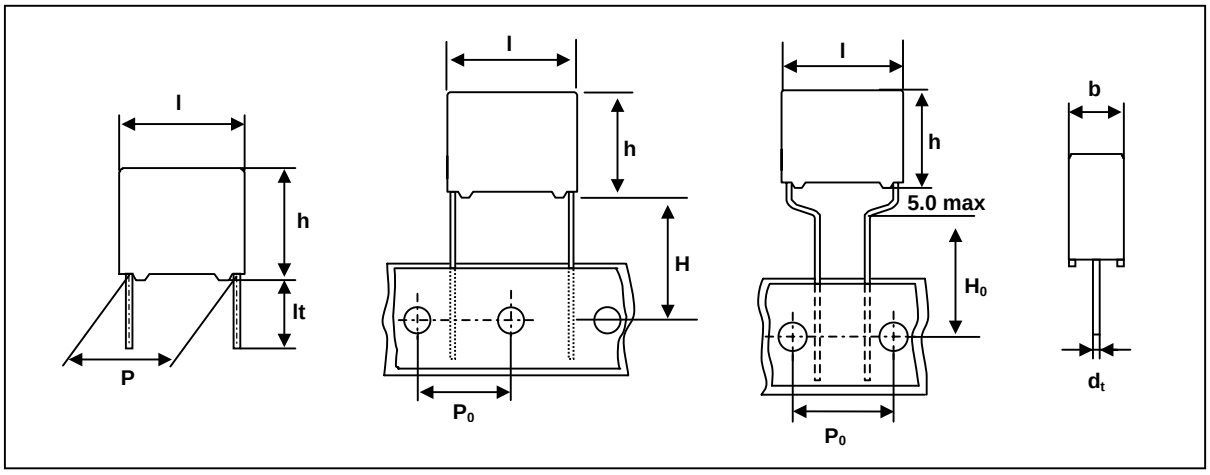
FEATURES	APPLICATIONS
. Low inductive wound cell of metallized (PETP) film	. General purpose
	. Blocking and coupling
. Supplied loose in box and ammopack	. Bypass and energy reservoir application

• Please refer to caution and warning at http://www.pilkor.co.kr/download/Introductions.pdf before using these products.

Metallized Polyester film capacitors

PCMT 468

Ordering Information



PCMT 468 (X) X X XXX

Type series

Capacitance

Code	Voltage
2	100V
4	250V
5	400V
6	630V
A	250V mini
8	400V mini
Q	630V mini

*Code	Original pitch
D	10.0mm
F	15.0mm
J	22.5mm

*** In case of overlapping the value, use the 13NC with pitch information.**

Available versions					Product (l_{max})			
Code	Packing method	C-tol.	Lead length & Height	Hole to hole (P_o)	12.5	18.0	26.0	31.0
					Pitch (P)			
2	Loose in box	± 5%	lt = 5.0±1.0mm	-	10.0	15.0	22.5	27.5
3	Loose in box	±10%	lt = 5.0±1.0mm	-	10.0	15.0	22.5	27.5
4	Loose in box	± 5%	lt = 25.0±2.0mm	-	10.0	15.0	22.5	27.5
5	Loose in box	±10%	lt = 25.0±2.0mm	-	10.0	15.0	22.5	27.5
8	Ammo packing	± 5%	H = 18.5mm	12.7mm	10.0	15.0	22.5	27.5
9	Ammo packing	±10%	H = 18.5mm	12.7mm	10.0	15.0	22.5	27.5
A	Ammo packing	± 5%	H_0 = 16.0mm	15.0mm	7.5(*)	7.5(*)	-	-
B	Ammo packing	±10%	H_0 = 16.0mm	15.0mm	7.5(*)	7.5(*)	-	-

* Reduced pitch (reduced lead spacings)

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Packaging Information

SMALLEST PACKING QUANTITIES (SPQ)	Loose in box	
	lt = 5.0 ± 1.0 mm	lt = 25.0 ± 2.0 mm
DIMENSIONS	**SPQ**	**SPQ**
4.0 x 10.0 x 12.5	2000	1200
5.0 x 11.0 x 12.5	1500	1000
6.0 x 12.0 x 12.5	1000	1000
5.0 x 11.0 x 18.0	1000	1000
6.0 x 12.0 x 18.0	1000	1000
7.0 x 13.5 x 18.0	1000	1000
8.5 x 15.0 x 18.0	1000	1000
10.0 x 16.5 x 18.0	1000	1000
11.0 x 18.5 x 18.0	1000	1000
7.0 x 16.5 x 26.0	1000	1000
8.5 x 18.0 x 26.0	500	500
10.0 x 19.5 x 26.0	500	500
13.0 x 23.0 x 26.0	500	500
11.0 x 21.0 x 31.0	500	250
13.0 x 23.0 x 31.0	250	250
15.0 x 25.0 x 31.0	250	250
18.0 x 28.0 x 31.0	200	200

Metallized Polyester film capacitors

PCMT 468

V_{Rdc} = 100V V_{Rac} = 63V~

Cap. (µF)	b x h x l (mm)	Mass (g)	CATALOGUE NUMBER PCMT 468 ..... loose in box lt = 5.0 ± 1.0 mm	
			C-tol. ± 5 %	C-tol. ± 10 %
Pitch = 10.0 ± 0.4 mm			dt = 0.6 +0.06/-0.05 mm	
0.22	4.0 x 10.0 x 12.5	0.8	PCMT 468 22224	PCMT 468 23224
0.27			PCMT 468 22274	PCMT 468 23274
0.33			PCMT 468 22334	PCMT 468 23334
0.39	5.0 x 11.0 x 12.5	0.9	PCMT 468 22394	PCMT 468 23394
0.47			PCMT 468 22474	PCMT 468 23474
0.56	6.0 x 12.0 x 12.5	1.0	PCMT 468 22564	PCMT 468 23564
0.68			PCMT 468 22684	PCMT 468 23684
0.82			PCMT 468D22824	PCMT 468D23824
1.0			PCMT 468D22105	PCMT 468D23105
1.2	5.0 x 11.0 x 12.5	0.9	PCMT 468D22125	PCMT 468D23125
1.5			PCMT 468D22155	PCMT 468D23155
1.8	6.0 x 12.0 x 12.5	1.0	PCMT 468D22185	PCMT 468D23185
2.2			PCMT 468D22225	PCMT 468D23225
Pitch = 15.0 ± 0.4 mm			dt = 0.8 +0.08/-0.05 mm	
0.82	5.0 x 11.0 x 18.0	1.2	PCMT 468 22824	PCMT 468 23824
1.0	6.0 x 12.0 x 18.0	1.4	PCMT 468 22105	PCMT 468 23105
1.2			PCMT 468 22125	PCMT 468 23125
1.5	7.0 x 13.5 x 18.0	1.9	PCMT 468 22155	PCMT 468 23155
1.8	8.5 x 15.0 x 18.0	2.6	PCMT 468 22185	PCMT 468 23185
2.2			PCMT 468 22225	PCMT 468 23225
2.7	10.0 x 16.5 x 18.0	3.1	PCMT 468F22275	PCMT 468F23275
3.3	11.0 x 18.5 x 18.0	4.1	PCMT 468F22335	PCMT 468F23335
Pitch = 22.5 ± 0.4 mm			dt = 0.8 +0.08/-0.05 mm	
2.7	7.0 x 16.5 x 26.0	3.2	PCMT 468 22275	PCMT 468 23275
3.3			PCMT 468 22335	PCMT 468 23335
3.9	8.5 x 18.0 x 26.0	4.4	PCMT 468 22395	PCMT 468 23395
4.7			PCMT 468 22475	PCMT 468 23475
5.6	10.0 x 19.5 x 26.0	5.5	PCMT 468 22565	PCMT 468 23565
6.8			PCMT 468 22685	PCMT 468 23685

Metallized Polyester film capacitors

PCMT 468

V_{Rdc} = 250V V_{Rac} = 160V~

Cap. (µF)	b x h x l (mm)	Mass (g)	CATALOGUE NUMBER PCMT 468 ..... loose in box lt = 5.0 ± 1.0 mm C-tol. ± 5 %	 C-tol. ± 10 %
Pitch = 10.0 ± 0.4 mm			dt = 0.6 +0.06/-0.05 mm	
0.1 0.12 0.15 0.18 0.22	4.0 x 10.0 x 12.5	0.8	PCMT 468 42104 PCMT 468 42124 PCMT 468 A2154 PCMT 468 A2184 PCMT 468 A2224	PCMT 468 43104 PCMT 468 43124 PCMT 468 A3154 PCMT 468 A3184 PCMT 468 A3224
0.15 0.18 0.22 0.27 0.33	5.0 x 11.0 x 12.5	0.9	PCMT 468 42154 PCMT 468 42184 PCMT 468D42224 PCMT 468D42274 PCMT 468D42334	PCMT 468 43154 PCMT 468 43184 PCMT 468D43224 PCMT 468D43274 PCMT 468D43334
0.39 0.47	6.0 x 12.0 x 12.5	1.0	PCMT 468D42394 PCMT 468D42474	PCMT 468D43394 PCMT 468D43474
Pitch = 15.0 ± 0.4 mm			dt = 0.8 +0.08/-0.05 mm	
0.22 0.27 0.33 0.39 0.47	5.0 x 11.0 x 18.0	1.2	PCMT 468 42224 PCMT 468 42274 PCMT 468 42334 PCMT 468 A2394 PCMT 468 A2474	PCMT 468 43224 PCMT 468 43274 PCMT 468 43334 PCMT 468 A3394 PCMT 468 A3474
0.39 0.47 0.56 0.68	6.0 x 12.0 x 18.0	1.4	PCMT 468 42394 PCMT 468 42474 PCMT 468 A2564 PCMT 468 A2684	PCMT 468 43394 PCMT 468 43474 PCMT 468 A3564 PCMT 468 A3684
0.56 0.68 0.82 1.0	7.0 x 13.5 x 18.0	1.9	PCMT 468 42564 PCMT 468 42684 PCMT 468 A2824 PCMT 468 A2105	PCMT 468 43564 PCMT 468 43684 PCMT 468 A3824 PCMT 468 A3105
0.82 1.0 1.2 1.5	8.5 x 15.0 x 18.0	2.6	PCMT 468 42824 PCMT 468 42105 PCMT 468F42125 PCMT 468F42155	PCMT 468 43824 PCMT 468 43105 PCMT 468F43125 PCMT 468F43155
1.8	10.0 x 16.5 x 18.0	3.1	PCMT 468FA2185	PCMT 468FA3185
2.2	11.0 x 18.5 x 18.0	4.1	PCMT 468FA2225	PCMT 468FA3225
Pitch = 22.5 ± 0.4 mm			dt = 0.8 +0.08/-0.05 mm	
1.0 1.2 1.5 1.8	7.0 x 16.5 x 26.0	3.2	PCMT 468J42105 PCMT 468 42125 PCMT 468 A2155 PCMT 468 A2185	PCMT 468J43105 PCMT 468 43125 PCMT 468 A3155 PCMT 468 A3185
1.5 1.8 2.2 2.7	8.5 x 18.0 x 26.0	4.4	PCMT 468 42155 PCMT 468 42185 PCMT 468 A2225 PCMT 468 A2275	PCMT 468 43155 PCMT 468 43185 PCMT 468 A3225 PCMT 468 A3275
2.2 2.7 3.3 3.9	10.0 x 19.5 x 26.0	5.5	PCMT 468 42225 PCMT 468 42275 PCMT 468J42335 PCMT 468JA2395	PCMT 468 43225 PCMT 468 43275 PCMT 468J43335 PCMT 468JA3395
3.9 4.7 5.6	13.0 x 23.0 x 26.0	9.7	PCMT 468J42395 PCMT 468J42475 PCMT 468JA2565	PCMT 468J43395 PCMT 468J43475 PCMT 468JA3565
Pitch = 27.5 ± 0.4 mm			dt = 0.8 +0.08/-0.05 mm	
3.3 3.9 4.7 5.6	11.0 x 21.0 x 31.0	7.8	PCMT 468 42335 PCMT 468 A2395 PCMT 468 A2475 PCMT 468 A2565	PCMT 468 43335 PCMT 468 A3395 PCMT 468 A3475 PCMT 468 A3565
3.9 4.7 5.6 6.8	13.0 x 23.0 x 31.0	10.4	PCMT 468 42395 PCMT 468 42475 PCMT 468 42565 PCMT 468 A2685	PCMT 468 43395 PCMT 468 43475 PCMT 468 43565 PCMT 468 A3685
6.8 8.2 10	15.0 x 25.0 x 31.0	12.8	PCMT 468 42685 PCMT 468 A2825 PCMT 468 A2106	PCMT 468 43685 PCMT 468 A3825 PCMT 468 A3106
12	18.0 x 28.0 x 31.0	19.6	PCMT 468 A2126	PCMT 468 A3126

Metallized Polyester film capacitors

PCMT 468

V_{Rdc} = 400V **V_{Rac} = 220V~** **mini type**

Cap. (µF)	b x h x l (mm)	Mass (g)	CATALOGUE NUMBER PCMT 468 ..... loose in box lt = 5.0 ± 1.0 mm	
			C-tol. ± 5 %	C-tol. ± 10 %
Pitch = 10.0 ± 0.4 mm			dt = 0.6 +0.06/-0.05 mm	
0.01	4.0 x 10.0 x 12.5	0.8	PCMT 468 82103	PCMT 468 83103
0.012			PCMT 468 82123	PCMT 468 83123
0.015			PCMT 468 82153	PCMT 468 83153
0.018			PCMT 468 82183	PCMT 468 83183
0.022			PCMT 468 82223	PCMT 468 83223
0.027			PCMT 468 82273	PCMT 468 83273
0.033			PCMT 468 82333	PCMT 468 83333
0.039			PCMT 468 82393	PCMT 468 83393
0.047			PCMT 468 82473	PCMT 468 83473
0.056	5.0 x 11.0 x 12.5	0.9	PCMT 468 82563	PCMT 468 83563
0.068			PCMT 468 82683	PCMT 468 83683
0.082	6.0 x 12.0 x 12.5	1.0	PCMT 468 82823	PCMT 468 83823
0.1			PCMT 468 82104	PCMT 468 83104
Pitch = 15.0 ± 0.4 mm			dt = 0.8 +0.08/-0.05 mm	
0.12	5.0 x 11.0 x 18.0	1.2	PCMT 468 82124	PCMT 468 83124
0.15			PCMT 468 82154	PCMT 468 83154
0.15	6.0 x 12.0 x 18.0	1.4	PCMT 468 52154	PCMT 468 53154
0.18			PCMT 468 82184	PCMT 468 83184
0.20			PCMT 468 82204	PCMT 468 83204
0.22			PCMT 468 82224	PCMT 468 83224
0.22	7.0 x 13.5 x 18.0	1.9	PCMT 468 52224	PCMT 468 53224
0.27			PCMT 468 82274	PCMT 468 83274
0.33			PCMT 468 82334	PCMT 468 83334
0.33	8.5 x 15.0 x 18.0	2.6	PCMT 468 52334	PCMT 468 53334
0.39			PCMT 468 82394	PCMT 468 83394
0.47			PCMT 468 82474	PCMT 468 83474
0.56	10.0 x 16.5 x 18.0		PCMT 468 82564	PCMT 468 83564
Pitch = 22.5 ± 0.4 mm			dt = 0.8 +0.08/-0.05 mm	
0.47	7.0 x 16.5 x 26.0	3.2	PCMT 468 52474	PCMT 468 53474
0.68	8.5 x 18.0 x 26.0	4.4	PCMT 468 82684	PCMT 468 83684
0.82			PCMT 468 82824	PCMT 468 83824
1.0	10.0 x 19.5 x 26.0	5.5	PCMT 468 82105	PCMT 468 83105
1.2			PCMT 468 82125	PCMT 468 83125
Pitch = 27.5 ± 0.4 mm			dt = 0.8 +0.08/-0.05 mm	
1.2	11.0 x 21.0 x 31.0	7.8	PCMT 468 52125	PCMT 468 53125
1.5			PCMT 468 82155	PCMT 468 83155
1.8			PCMT 468 82185	PCMT 468 83185
2.2	13.0 x 23.0 x 31.0	12.8	PCMT 468 82225	PCMT 468 83225
2.7			PCMT 468 82275	PCMT 468 83275
3.3	15.0 x 25.0 x 31.0	17.2	PCMT 468 82335	PCMT 468 83335
3.9			PCMT 468 82395	PCMT 468 83395
4.7	18.0 x 28.0 x 31.0	19.6	PCMT 468 82475	PCMT 468 83475

; Larger type

Metallized Polyester film capacitors

PCMT 468

V_{Rdc} = 630V **V_{Rac} = 250V~**

Cap. (µF)	b x h x l (mm)	Mass (g)	CATALOGUE NUMBER PCMT 468 ..... loose in box lt = 5.0 ± 1.0 mm	
			C-tol. ± 5 %	C-tol. ± 10 %
Pitch = 10.0 ± 0.4 mm dt = 0.6 +0.06/-0.05 mm				
0.01 0.012	4.0 x 10.0 x 12.5	0.8	PCMT 468 62103 PCMT 468 62123	PCMT 468 63103 PCMT 468 63123
0.015 0.018 0.022 0.027 0.033 0.039 0.047	5.0 x 11.0 x 12.5	0.9	PCMT 468 62153 PCMT 468 62183 PCMT 468 62223 PCMT 468 62273 PCMT 468 62333 PCMT 468 Q2393 PCMT 468DQ2473	PCMT 468 63153 PCMT 468 63183 PCMT 468 63223 PCMT 468 63273 PCMT 468 63333 PCMT 468 Q3393 PCMT 468DQ3473
0.039 0.047 0.056 0.068	6.0 x 12.0 x 12.5	1.0	PCMT 468 62393 PCMT 468 62473 PCMT 468DQ2563 PCMT 468DQ2683	PCMT 468 63393 PCMT 468 63473 PCMT 468DQ3563 PCMT 468DQ3683
Pitch = 15.0 ± 0.4 mm dt = 0.8 +0.08/-0.05 mm				
0.047 0.056 0.068	5.0 x 11.0 x 18.0	1.2	PCMT 468F62473 PCMT 468 62563 PCMT 468 Q2683	PCMT 468F63473 PCMT 468 63563 PCMT 468 Q3683
0.068 0.082 0.1	6.0 x 12.0 x 18.0	1.4	PCMT 468 62683 PCMT 468 62823 PCMT 468 Q2104	PCMT 468 63683 PCMT 468 63823 PCMT 468 Q3104
0.1 0.12 0.15	7.0 x 13.5 x 18.0	1.9	PCMT 468 62104 PCMT 468 62124 PCMT 468 Q2154	PCMT 468 63104 PCMT 468 63124 PCMT 468 Q3154
0.15 0.18	8.5 x 15.0 x 18.0	2.6	PCMT 468 62154 PCMT 468 62184	PCMT 468 63154 PCMT 468 63184
0.22 0.27	10.0 x 16.5 x 18.0	3.1	PCMT 468F62224 PCMT 468FQ2274	PCMT 468F63224 PCMT 468FQ3274
0.33 0.39	11.0 x 18.5 x 18.0	4.1	PCMT 468FQ2334 PCMT 468FQ2394	PCMT 468FQ3334 PCMT 468FQ3394
Pitch = 22.5 ± 0.4 mm dt = 0.8 +0.08/-0.05 mm				
0.22 0.27	7.0 x 16.5 x 26.0	3.2	PCMT 468 62224 PCMT 468 62274	PCMT 468 63224 PCMT 468 63274
0.33 0.39	8.5 x 18.0 x 26.0	4.4	PCMT 468 62334 PCMT 468 62394	PCMT 468 63334 PCMT 468 63394
0.47 0.56	10.0 x 19.5 x 26.0	5.5	PCMT 468 62474 PCMT 468 62564	PCMT 468 63474 PCMT 468 63564
0.68 0.82 1.0	13.0 x 23.0 x 26.0	9.7	PCMT 468JQ2684 PCMT 468JQ2824 PCMT 468JQ2105	PCMT 468JQ3684 PCMT 468JQ3824 PCMT 468JQ3105
Pitch = 27.5 ± 0.4 mm dt = 0.8 +0.08/-0.05 mm				
0.68 0.82	11.0 x 21.0 x 31.0	7.8	PCMT 468 62684 PCMT 468 Q2824	PCMT 468 63684 PCMT 468 Q3824
0.82 1.0	13.0 x 23.0 x 31.0	10.4	PCMT 468 62824 PCMT 468 Q2105	PCMT 468 63824 PCMT 468 Q3105
1.0 1.2 1.5	15.0 x 25.0 x 31.0	12.8	PCMT 468 62105 PCMT 468 Q2125 PCMT 468 Q2155	PCMT 468 63105 PCMT 468 Q3125 PCMT 468 Q3155
1.2 1.8 2.2	18.0 x 28.0 x 31.0	17.2	PCMT 468 62125 PCMT 468 Q2185 PCMT 468 Q2225	PCMT 468 63125 PCMT 468 Q3185 PCMT 468 Q3225

Metallized Polyester film capacitors

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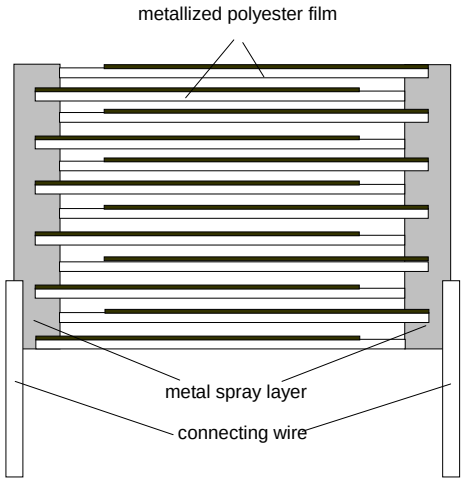
CONSTRUCTION



Description

. Low-inductive wound cell of metallized polyester film, potted in a epoxy resin in a flame-retardant polypropylene case.
. Radial leads, tin-coated.
. Small stand-off pips allow removal of solder flux etc. during cleaning of the printed-circuit board.

MOUNTING

NORMAL USE

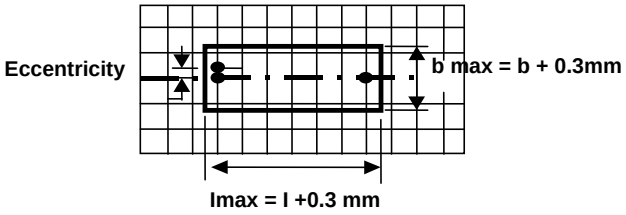
The capacitors are designed for mounting on printed-circuit boards. The capacitors packed in bandoliers are designed for mounting on printed-circuit boards by means of automatic insertion machines.

SPECIFIC METHOD OF MOUNTING OF WITHSTAND VIBRATION AND SHOCK.

In order to withstand vibration and shock tests, it must be ensured that the stand-off pips are in good contact with the printed-circuit boards.
. For l_{max} 18mm the capacitors shall be mechanically fixed by the leads.
. For larger pitches the capacitors shall be mounted in the same way and the body clamped.

SPACE REQUIREMENTS ON PRINTED-CIRCUIT BOARD

The maximum length and width of film capacitors are shown in the following drawing ;



- Eccentricity as in drawing.
  The maximum eccentricity is smaller than or equal to the lead diameter of the product concerned.

- Product height with seating plane as given by IEC 60717 as reference : $h_{max} \leq$ h+0.3mm

Metallized Polyester film capacitors

PCMT 468

STORAGE TEMPERATURRE

. Storage temperature : T_{stg} = -25 to +40°C with RH maximum 80% without condensation.

RATINGS AND CHARACTERISTICS

Unless otherwise specified, all electrical values apply at an ambient free air temperature of 23±1℃, an atmospheric pressure of 86 to 106 kPa and a relative humidity of 50±2%.
For reference testing, a conditioning period shall be applied over 96±4 hours by heating the products in a circulating air oven at the rated temperature and a relative humidity not exceeding 20%.

CHARACTERISTICS

● **Test Voltage**

. Test Voltage (between leads) : 1.6 x V_{Rdc}, 1 min (cut off current 10mA, rise time 100V/s)
. Test Voltage (between leads and case) : 2.0 x V_{Rdc}, 1 min

● **Dissipation Factor**

Rated voltage	Capacitance	Tangent of loss angle (x 10^{-4})	
		1 KHz	10 KHz
100V	0.27μF < C ≤ 1.0μF	≤ 75	≤ 130
	1.0μF < C ≤ 6.8μF	≤ 75	≤ 150
250V	C ≤ 0.1μF	≤ 75	≤ 130
	0.1μF < C ≤ 1.0μF	≤ 75	≤ 130
	1.0μF < C ≤ 12μF	≤ 75	≤ 150
400V	C ≤ 0.1μF	≤ 75	≤ 130
	0.1μF < C ≤ 1.0μF	≤ 75	≤ 130
	1.0μF < C ≤ 4.7μF	≤ 75	≤ 150
630V	C ≤ 0.1μF	≤ 75	≤ 130
	0.1μF < C ≤ 1.0μF	≤ 75	≤ 130
	1.0μF < C ≤ 2.2μF	≤ 75	≤ 150

● **Insulation Resistance**

The insulation resistance is measured after a voltage has been applied for 1 minute ±5 seconds, the voltage being 100±15V for the 100, 250 and 400V versions and 500±50V for the 630V versions.

Rated voltage	Capacitance	R between leads (MΩ)	RC between leads (sec)
100 V	C > 0.33μF	-	> 5 000 s
250V / 400V / 630V	C ≤ 0.33μF	> 30 000	-
	C > 0.33μF	-	> 10 000 s

● **Rated Voltage Pulse Load Slope $(dV/dt)_R$**

For values see specific reference data. If the pulse voltage is lower than the rated voltage, the values of the specific reference data mast be multiplied by V_{Rdc} and divided by the applied voltage.

Rated voltage	Rated pulse load(V/μs) as a function of I_{max}			
	I_{max} = 12.5mm	I_{max} = 18.0mm	I_{max} = 26.0mm	I_{max} = 31.0mm
100V	30	20	20	-
250V	120	45	20	15
400V	170	65	30	25
630V	120	90	35	30

Metallized Polyester film capacitors

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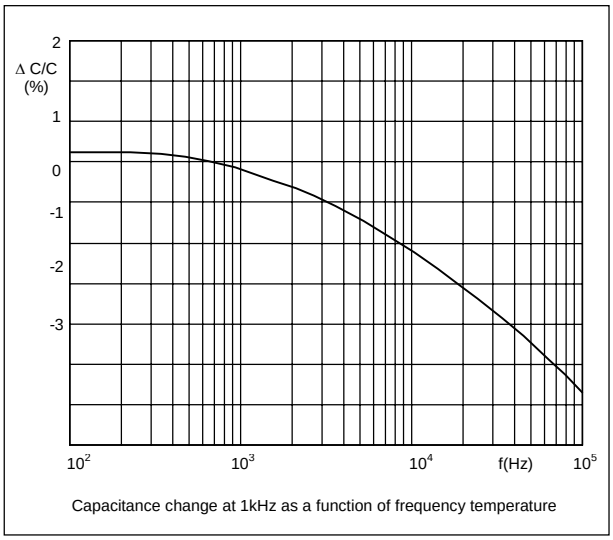
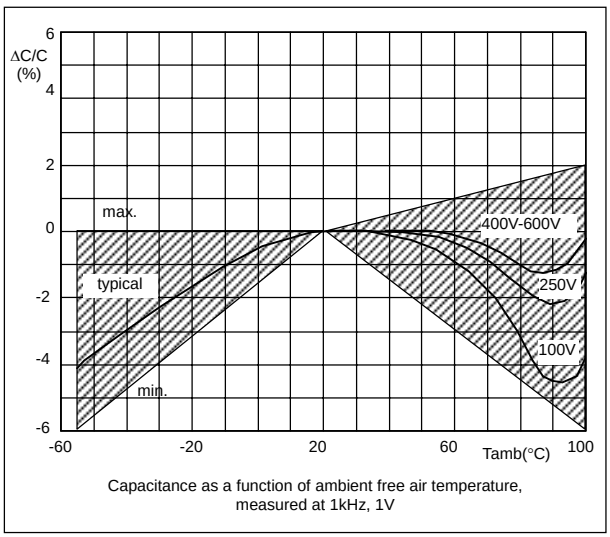
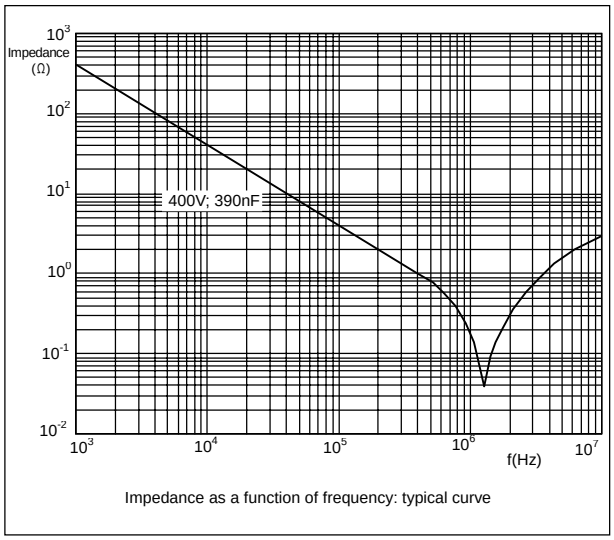
THE GRAPHS OF CHARACTERISTICS



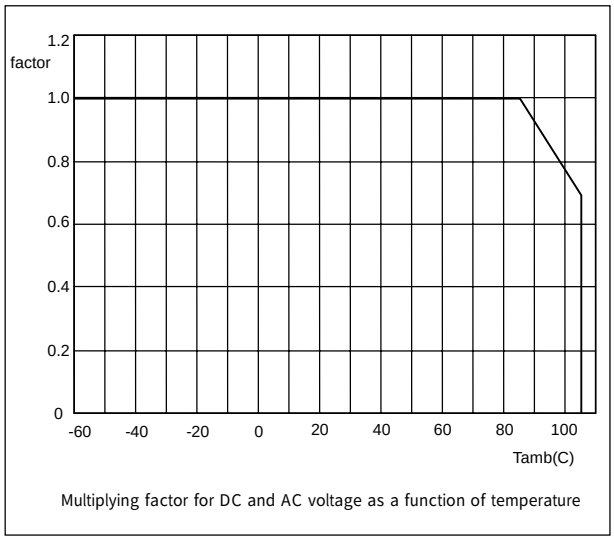
Capacitance change at 1kHz as a function of frequency temperature



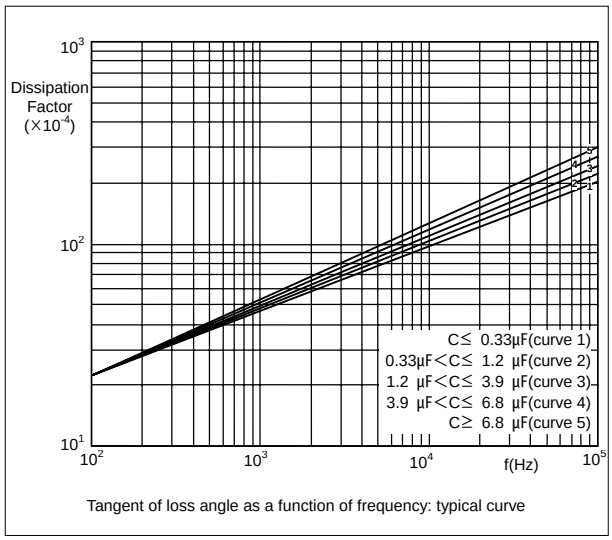
Capacitance as a function of ambient free air temperature, measured at 1kHz, 1V



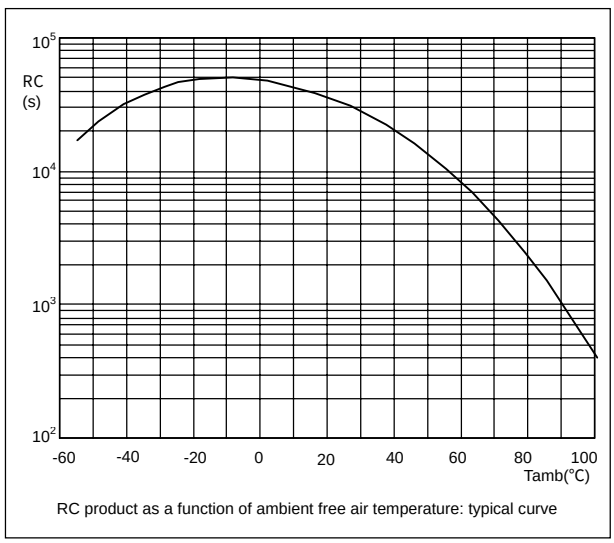
Impedance as a function of frequency: typical curve



Multiplying factor for DC and AC voltage as a function of temperature



Tangent of loss angle as a function of frequency: typical curve



RC product as a function of ambient free air temperature: typical curve

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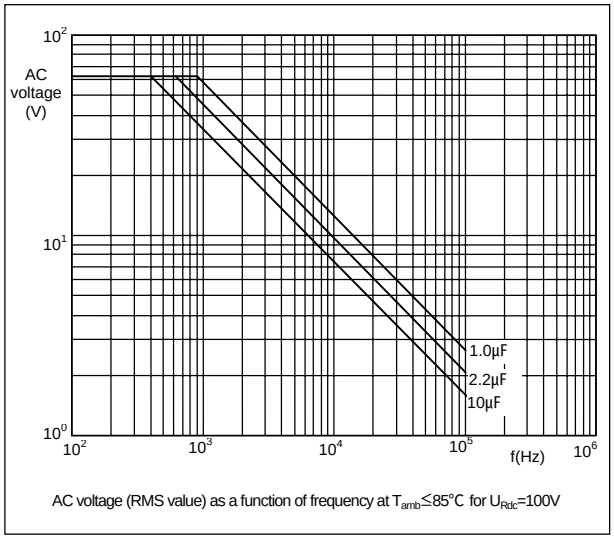
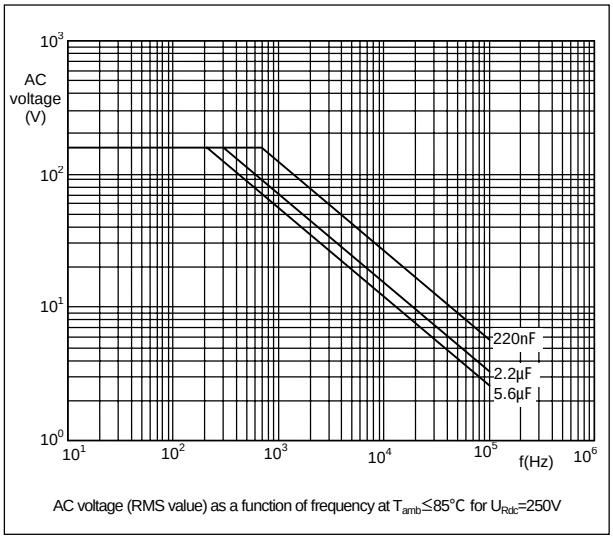
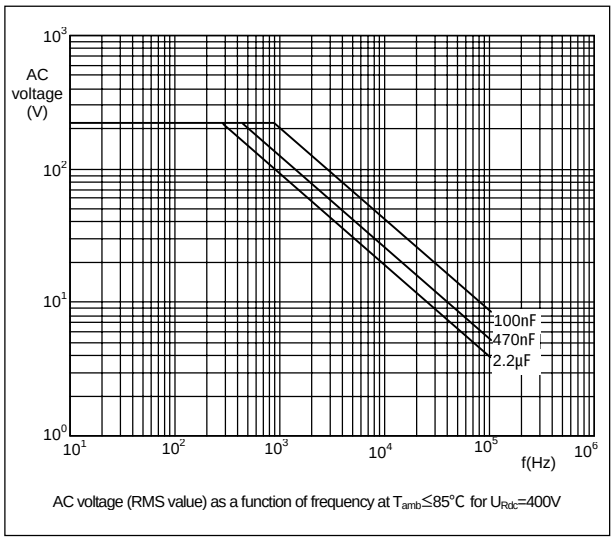
MAXIMUM RMS VOLTAGE (SINEWAVE) AS A FUNCTION OF FREQUENCY



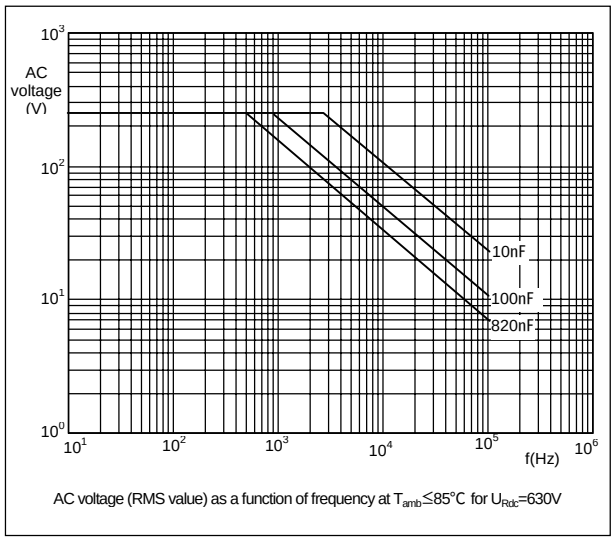
AC voltage (RMS value) as a function of frequency at $T_{amb} \leq 85°C$ for U_{Rdc}=100V



AC voltage (RMS value) as a function of frequency at $T_{amb} \leq 85°C$ for U_{Rdc}=250V



AC voltage (RMS value) as a function of frequency at $T_{amb} \leq 85°C$ for U_{Rdc}=400V



AC voltage (RMS value) as a function of frequency at $T_{amb} \leq 85°C$ for U_{Rdc}=630V

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APPLICATION NOTE AND LIMITING CONDITIONS

These capacitors are not suitable for mains application as across-the-line capacitors without additional protection.

To select the capacitor for a certain application, the following conditions must be checked :

1. The peak voltage (V_p) shall not be greater than the rated DC voltage (V_{Rdc}).

2. The peak-to-peak voltage (V_{p-p}) shall not be greater than the maximum V_{p-p} to avoid the ionization inception level.

3. The voltage pulse slope (dV/dt) shall not exceed the rated voltage pulse slope in an RC-circuit at rated voltage and without ringing. If the pulse voltage is lower than the rated DC voltage, the rated voltage pulse slope may be multiplied by V_{Rdc} and divided by the applied voltage. For all other pulses following equation must be fulfilled :

$$2 \times \int_0^T \left(\frac{dU}{dt}\right)^2 \times dt < U_{Rdc} \times \left(\frac{dU}{dt}\right)_{rated}$$

T is the pulse duration.

4. The maximum component surface temperature rise must be lower than the limits.

Voltage conditions for aboves.

ALLOWED VOLTAGES	$T_{amb} \leq 85°C$	$85°C < T_{amb} \leq 105°C$
Maximum continuous RMS voltage	V_{Rac}	0.7 x V_{Rac}
Maximum temporary RMS over voltage (<24 hrs)	1.25 x V_{Rac}	0.875 x V_{Rac}

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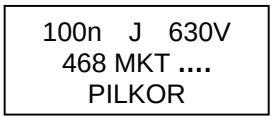
PRODUCT MARKING

The capacitors are marked on the top and side or on the top with the following information ;

. Rated capacitance in code according to IEC 60062
. Tolerance on rated capacitance : J = ±5% , K = ±10%
. Rated DC voltage : (e.g. 400V)
. Manufacturer's type designation : (468)
. Code for dielectric material : (MKT(ME))

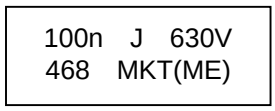
Example of marking

pitch = 10mm



Marking on the side

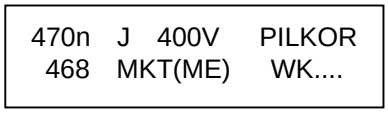
pitch = 15mm



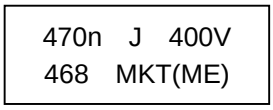
Marking on the top

Marking on the side

pitch = 22.5mm / 27.5mm



Marking on the top



Marking on the top

Marking on the side