






Product Approval Sheet

Customer :

Issued no : 2011. 04. 13.

Revision no :

- Product description : AC and Pulse Double Side Metallized Polypropylene film capacitors
- Product code : PCMP 384
- Application :

CUSTOMER			
PILKOR	Checked	Confirmed	Approved
			

- Area of production:

Headquarters : 381, Woncheon-dong, Yeong tong-gu, Suwon-si, Gyeonggi-do, Korea

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* Please returned to us this sheet before the order.

(Contents)

1.	Page 1
(General)	
2.	Page 19
(Construction)	
3.	Page 22
(Characteristics)	
4.	Page 26
(Mark & Packing)	
5.	Page 28
(Test Requirements)	

* (Material) LIST

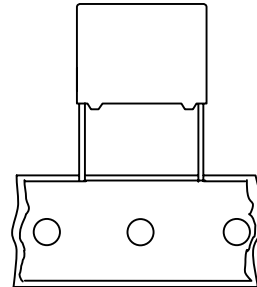
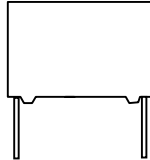
AC and Pulse Double Side Metallized Polypropylene film Capacitors

PCMP 384

MMKP RADIAL POTTED CAPACITORS

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

DRAFT



QUICK REFERENCE DATA

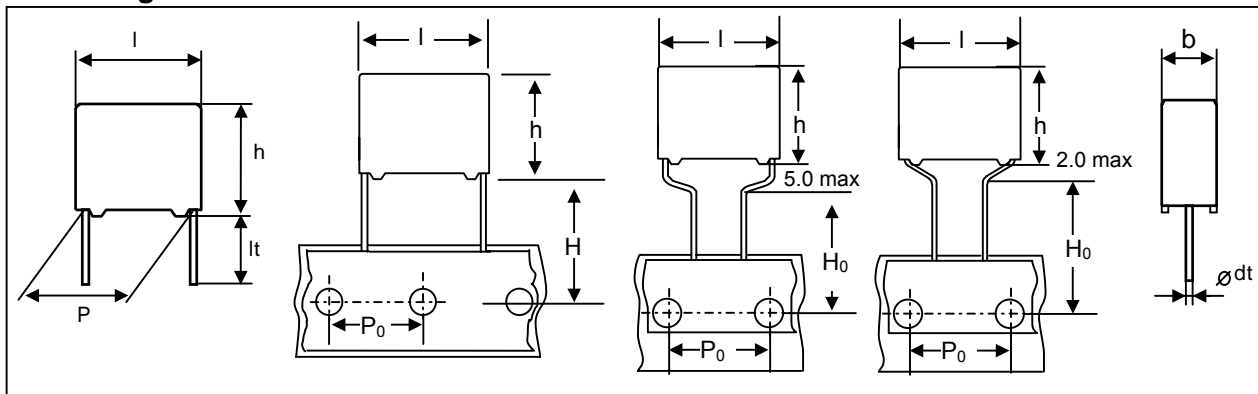
Capacitance range (E24 series)	0.00047 to 1.0 μ F
Capacitance tolerance	\pm 3.5%, \pm 5%, \pm 10%
Rated voltage (DC)	250V, 400V, 630V, 800V, 1000V, 1250V, 1600V, 2000V, 2500V
Climatic category	55/105/56
Temperature range	-55 ~ +105
Reference specification	IEC 60384-17 / 16
Potting & Encapsulation material	Qualified in accordance with UL94V-0

FEATURES	APPLICATIONS
<ul style="list-style-type: none"> . Low contact resistance . Low loss dielectric . Small dimension for high density packaging . Supplied loose in box and ammo pack 	<ul style="list-style-type: none"> . Electronic lighting e.g. Ballast . S-correction, Fly-back circuit in television receivers . UPS, Inverters . IGBT Snubber . Protection power semi-conductor

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

AC and Pulse Double Side Metallized Polypropylene film Capacitors

Ordering Information



PCMP 384 (X) X X XXX

Type series

Capacitance

*Code	Original pitch
D	10.0mm
F	15.0mm
J	22.5mm
L	27.5mm

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

Code	Voltage
4	250V
5	400V
6	630V
C	630V mini
1	630V (400Vac)
M	800V
7	1000V
D	1000V mini
N	1250V
8	1600V
9	2000V
2	2000V(700Vac)
0	2500V

Code	Packing method	C-tol.	Lead length & Height	Hole to hole (P ₀)	Product (I _{max})			
					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
8	Loose in box	± 3.5%	lt = 5.0±1.0mm	-	10.0	15.0	22.5	27.5
H	Loose in box	± 10%	lt = 5.0±1.0mm	-	10.0	15.0	22.5	27.5
3	Loose in box	± 5%	lt = 25.0±2.0mm	-	10.0	15.0	22.5	27.5
7	Loose in box	± 10%	lt = 25.0±2.0mm	-	10.0	15.0	22.5	27.5
5	Ammo packing	± 5%	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(*)	-	-
C	Ammo packing	± 5%	H ₀ = 16.0mm	15.0mm	-	7.5(**)	-	-

* Reduced pitch (Reduced lead spacings)

** Reduced pitch (Low height)

AC and Pulse Double Side Metallized Polypropylene film Capacitors

Packaging Information

SMALLEST PACKING QUANTITIES (SPQ)	Loose in box
	It = 5.0±1.0mm
DIMENSIONS	SPQ
4.0 X 10.0 X 12.5	2000
5.0 X 11.0 X 12.5	1500
6.0 X 12.0 X 12.5	1000
5.0 X 11.0 X 18.0	1000
6.0 X 12.0 X 18.0	1000
7.0 X 13.5 X 18.0	1000
8.5 X 15.0 X 18.0	1000
10.0 X 16.5 X 18.0	1000
6.0 X 15.5 X 26.0	1000
7.0 X 16.5 X 26.0	1000
8.5 X 18.0 X 26.0	500
10.0 X 19.5 X 26.0	500
11.5 X 21.0 X 26.0	500
13.0 X 23.0 X 26.0	500
11.0 X 21.0 X 31.0	500
13.0 X 23.0 X 31.0	250
15.0 X 25.0 X 31.0	250
18.0 X 28.0 X 31.0	200

AC and Pulse Double Side Metallized Polypropylene film Capacitors

PCMP 384

 $V_{Rdc} = 250 V$ $V_{Rac} = 125 V$

Cap (μF)	b x h x l (mm)	Mess (g)	CATALOGUE NUMBER	
			PCMP 384	
			loose in box	ammo packing
			lt = 5.0 \pm 1.0 mm	H = 16.0 mm Reduced pitch(7.5mm)
C - tol. \pm 5 %		C - tol. \pm 5 %		
Pitch = 10.0 \pm 0.4 mm			dt = 0.6 +0.06/-0.05 mm	
0.010 0.011 0.012 0.013 0.015 0.016 0.018 0.020 0.022 0.024 0.027 0.030 0.033 0.036 0.039	4.0 x 10.0 x 12.5	0.8	PCMP 384 42103 PCMP 384 42113 PCMP 384 42123 PCMP 384 42133 PCMP 384 42153 PCMP 384 42163 PCMP 384 42183 PCMP 384 42203 PCMP 384 42223 PCMP 384 42243 PCMP 384 42273 PCMP 384 42303 PCMP 384 42333 PCMP 384 42363 PCMP 384 42393	PCMP 384 4A103 PCMP 384 4A113 PCMP 384 4A123 PCMP 384 4A133 PCMP 384 4A153 PCMP 384 4A163 PCMP 384 4A183 PCMP 384 4A203 PCMP 384 4A223 PCMP 384 4A243 PCMP 384 4A273 PCMP 384 4A303 PCMP 384 4A333 PCMP 384 4A363 PCMP 384 4A393
0.043 0.047 0.051 0.056	5.0 x 11.0 x 12.5	0.9	PCMP 384 42433 PCMP 384 42473 PCMP 384 42513 PCMP 384 42563	PCMP 384 4A433 PCMP 384 4A473 PCMP 384 4A513 PCMP 384 4A563
0.062 0.068 0.075 0.082	6.0 x 12.0 x 12.5	1.0	PCMP 384 42623 PCMP 384D42683 PCMP 384D42753 PCMP 384D42823	PCMP 384 4A623 PCMP 384D4A683 PCMP 384D4A753 PCMP 384D4A823
Pitch = 15.0 \pm 0.4 mm			dt = 0.8 +0.08/-0.05 mm	
0.068 0.075 0.082 0.091 0.10	5.0 x 11.0 x 18.0	1.2	PCMP 384 42683 PCMP 384 42753 PCMP 384 42823 PCMP 384 42913 PCMP 384 42104	PCMP 384 4A683 PCMP 384 4A753 PCMP 384 4A823 PCMP 384 4A913 PCMP 384 4A104
0.11 0.12 0.13 0.15	6.0 x 12.0 x 18.0	1.4	PCMP 384 42114 PCMP 384 42124 PCMP 384 42134 PCMP 384 42154	PCMP 384 4A114 PCMP 384 4A124 PCMP 384 4A134 PCMP 384 4A154

AC and Pulse Double Side Metallized Polypropylene film Capacitors

PCMP 384

 $V_{Rdc} = 400 V$ $V_{Rac} = 220 V$

Cap (μF)	b x h x l (mm)	Mess (g)	CATALOGUE NUMBER		
			PCMP 384		
			loose in box	ammo packing	
			It = 5.0 \pm 1.0 mm	H = 16.0 mm Reduced pitch(7.5mm)	
		C - tol. \pm 5 %		C - tol. \pm 5 %	
Pitch = 10.0 \pm 0.4 mm		dt = 0.6 +0.06/-0.05 mm			
0.010 0.011 0.012 0.013 0.015 0.016 0.018 0.020 0.022	4.0 x 10.0 x 12.5	0.8	PCMP 384 52103 PCMP 384 52113 PCMP 384 52123 PCMP 384 52133 PCMP 384 52153 PCMP 384 52163 PCMP 384 52183 PCMP 384 52203 PCMP 384 52223	PCMP 384 5A103 PCMP 384 5A113 PCMP 384 5A123 PCMP 384 5A133 PCMP 384 5A153 PCMP 384 5A163 PCMP 384 5A183 PCMP 384 5A203 PCMP 384 5A223	
0.024 0.027 0.030 0.033	5.0 x 11.0 x 12.5	0.9	PCMP 384 52243 PCMP 384 52273 PCMP 384 52303 PCMP 384 52333	PCMP 384 5A243 PCMP 384 5A273 PCMP 384 5A303 PCMP 384 5A333	
0.036 0.039 0.043 0.047	6.0 x 12.0 x 12.5	1.0	PCMP 384D52363 PCMP 384D52393 PCMP 384D52433 PCMP 384D52473	PCMP 384D5A363 PCMP 384D5A393 PCMP 384D5A433 PCMP 384D5A473	
Pitch = 15.0 \pm 0.4 mm		dt = 0.8 +0.08/-0.05 mm			
0.036 0.039 0.043 0.047 0.051 0.056	5.0 x 11.0 x 18.0	1.2	PCMP 384 52363 PCMP 384 52393 PCMP 384 52433 PCMP 384 52473 PCMP 384 52513 PCMP 384 52563	PCMP 384 5A363 PCMP 384 5A393 PCMP 384 5A433 PCMP 384 5A473 PCMP 384 5A513 PCMP 384 5A563	
0.062 0.068 0.075 0.082	6.0 x 12.0 x 18.0	1.4	PCMP 384 52623 PCMP 384 52683 PCMP 384 52753 PCMP 384 52823	PCMP 384 5A623 PCMP 384 5A683 PCMP 384 5A753 PCMP 384 5A823	
0.091 0.10 0.11	7.0 x 13.5 x 18.0	1.9	PCMP 384 52913 PCMP 384 52104 PCMP 384 52114	PCMP 384 5A913 PCMP 384 5A104 PCMP 384 5A114	

AC and Pulse Double Side Metallized Polypropylene film Capacitors

PCMP 384

 $V_{Rdc} = 630 V$ $V_{Rac} = 250 V$

Mini Type

Cap (μF)	b x h x l (mm)	Mess (g)	CATALOGUE NUMBER		
			PCMP 384		
			loose in box	ammo packing	
			lt = 5.0 \pm 1.0 mm	H = 16.0 mm Reduced pitch(7.5mm)	
		C - tol. \pm 5 %		C - tol. \pm 5 %	
Pitch = 10.0 \pm 0.4 mm dt = 0.6 +0.06/-0.05 mm					
0.0047 0.0051 0.0056 0.0062 0.0068 0.0075 0.0082 0.0091 0.010 0.011 0.012 0.013	4.0 x 10.0 x 12.5	0.8	PCMP 384 C2472 PCMP 384 C2512 PCMP 384 C2562 PCMP 384 C2622 PCMP 384 C2682 PCMP 384 C2752 PCMP 384 C2822 PCMP 384 C2912 PCMP 384 C2103 PCMP 384 C2113 PCMP 384 C2123 PCMP 384 C2133	PCMP 384 CA472 PCMP 384 CA512 PCMP 384 CA562 PCMP 384 CA622 PCMP 384 CA682 PCMP 384 CA752 PCMP 384 CA822 PCMP 384 CA912 PCMP 384 CA103 PCMP 384 CA113 PCMP 384 CA123 PCMP 384 CA133	
0.015 0.016 0.018 0.020 0.022	5.0 x 11.0 x 12.5	0.9	PCMP 384 C2153 PCMP 384 C2163 PCMP 384 C2183 PCMP 384 C2203 PCMP 384 C2223	PCMP 384 CA153 PCMP 384 CA163 PCMP 384 CA183 PCMP 384 CA203 PCMP 384 CA223	
0.024 0.027 0.030	6.0 x 12.0 x 12.5	1.0	PCMP 384 C2243 PCMP 384 C2273 PCMP 384DC2303	PCMP 384 CA243 PCMP 384 CA273 PCMP 384DCA303	
Pitch = 15.0 \pm 0.4 mm dt = 0.8 +0.08/-0.05 mm					
0.010 0.011 0.012 0.013 0.015 0.016 0.018 0.020 0.022 0.024 0.027 0.030 0.033 0.036	5.0 x 11.0 x 18.0	1.2	PCMP 384 62103 PCMP 384 62113 PCMP 384 62123 PCMP 384 62133 PCMP 384 62153 PCMP 384 62163 PCMP 384 62183 PCMP 384 62203 PCMP 384 62223 PCMP 384 62243 PCMP 384 62273 PCMP 384 C2303 PCMP 384 C2333 PCMP 384 C2363	PCMP 384 6A103 PCMP 384 6A113 PCMP 384 6A123 PCMP 384 6A133 PCMP 384 6A153 PCMP 384 6A163 PCMP 384 6A183 PCMP 384 6A203 PCMP 384 6A223 PCMP 384 6A243 PCMP 384 6A273 PCMP 384 CA303 PCMP 384 CA333 PCMP 384 CA363	
0.039 0.043 0.047 0.051 0.056	6.0 x 12.0 x 18.0	1.4	PCMP 384 C2393 PCMP 384 C2433 PCMP 384 C2473 PCMP 384 C2513 PCMP 384 C2563	PCMP 384 CA393 PCMP 384 CA433 PCMP 384 CA473 PCMP 384 CA513 PCMP 384 CA563	
0.062 0.068 0.075	7.0 x 13.5 x 18.0	1.9	PCMP 384 C2623 PCMP 384 C2683 PCMP 384 C2753	PCMP 384 CA623 PCMP 384 CA683 PCMP 384 CA753	
0.082 0.091 0.10 0.11	8.5 x 15.0 x 18.0	2.6	PCMP 384 C2823 PCMP 384 C2913 PCMP 384 C2104 PCMP 384 C2114	PCMP 384 CA823 PCMP 384 CA913 PCMP 384 CA104 PCMP 384 CA114	

; Larger type

AC and Pulse Double Side Metallized Polypropylene film Capacitors

 $V_{Rdc} = 630 V$ $V_{Rac} = 400 V$

Cap (μF)	b x h x l (mm)	Mess (g)	CATALOGUE NUMBER	
			PCMP 384	
			loose in box	ammo packing
			lt = 5.0 \pm 1.0 mm	H = 16.0 mm Reduced pitch(7.5mm)
C - tol. \pm 5 %		C - tol. \pm 5 %		
Pitch = 10.0 \pm 0.4 mm dt = 0.6 +0.06/-0.05 mm				
0.0010	4.0 x 10.0 x 12.5	0.8	PCMP 384 12102	PCMP 384 1A102
0.0011			PCMP 384 12112	PCMP 384 1A112
0.0012			PCMP 384 12122	PCMP 384 1A122
0.0013			PCMP 384 12132	PCMP 384 1A132
0.0015			PCMP 384 12152	PCMP 384 1A152
0.0016			PCMP 384 12162	PCMP 384 1A162
0.0018			PCMP 384 12182	PCMP 384 1A182
0.0020			PCMP 384 12202	PCMP 384 1A202
0.0022			PCMP 384 12222	PCMP 384 1A222
0.0024			PCMP 384 12242	PCMP 384 1A242
0.0027			PCMP 384 12272	PCMP 384 1A272
0.0030			PCMP 384 12302	PCMP 384 1A302
0.0033			PCMP 384 12332	PCMP 384 1A332
0.0036			PCMP 384 12362	PCMP 384 1A362
0.0039			PCMP 384 12392	PCMP 384 1A392
0.0043			PCMP 384 12432	PCMP 384 1A432
0.0047			PCMP 384 12472	PCMP 384 1A472
0.0051			PCMP 384 12512	PCMP 384 1A512
0.0056			PCMP 384 12562	PCMP 384 1A562
0.0062			PCMP 384 12622	PCMP 384 1A622
0.0068	PCMP 384 12682	PCMP 384 1A682		
0.0075	PCMP 384 12752	PCMP 384 1A752		
0.0082	PCMP 384 12822	PCMP 384 1A822		
0.0091	5.0 x 11.0 x 12.5	0.9	PCMP 384 12912	PCMP 384 1A912
0.010			PCMP 384 12103	PCMP 384 1A103
0.011			PCMP 384 12113	PCMP 384 1A113
0.012			PCMP 384 12123	PCMP 384 1A123
0.013	6.0 x 12.0 x 12.5	1.0	PCMP 384 12133	PCMP 384 1A133
0.015			PCMP 384 12153	PCMP 384 1A153
0.016			PCMP 384 12163	PCMP 384 1A163
0.018			PCMP 384 12183	PCMP 384 1A183
Pitch = 15.0 \pm 0.4 mm dt = 0.8 +0.08/-0.05 mm				
0.020	5.0 x 11.0 x 18.0	1.2	PCMP 384 12203	PCMP 384 1A203
0.022			PCMP 384 12223	PCMP 384 1A223
0.024			PCMP 384 12243	PCMP 384 1A243
0.027			PCMP 384 12273	PCMP 384 1A273
0.030	6.0 x 12.0 x 18.0	1.4	PCMP 384 12303	PCMP 384 1A303
0.033			PCMP 384 12333	PCMP 384 1A333
0.036			PCMP 384 12363	PCMP 384 1A363
0.039			PCMP 384 12393	PCMP 384 1A393
0.043	7.0 x 13.5 x 18.0	1.9	PCMP 384 12433	PCMP 384 1A433
0.047			PCMP 384 12473	PCMP 384 1A473
0.051	8.5 x 15.0 x 18.0	2.6	PCMP 384 12513	PCMP 384 1A513
0.056			PCMP 384 12563	PCMP 384 1A563
0.062			PCMP 384 12623	PCMP 384 1A623
0.068			PCMP 384 12683	PCMP 384 1A683
0.075	10.0 x 16.5 x 18.0	3.1	PCMP 384 12753	PCMP 384 1A753
0.082			PCMP 384 12823	PCMP 384 1A823
0.091			PCMP 384 12913	PCMP 384 1A913
0.10			PCMP 384 12104	PCMP 384 1A104

AC and Pulse Double Side Metallized Polypropylene film Capacitors

PCMP 384

 $V_{Rdc} = 630 V$ $V_{Rac} = 400 V$

Cap (μF)	b x h x l (mm)	Mess (g)	CATALOGUE NUMBER	
			PCMP 384	
			loose in box	ammo packing
			It = 5.0 \pm 1.0 mm	H = 16.0 mm Reduced pitch(7.5mm)
			C - tol. \pm 5 %	C - tol. \pm 5 %
Pitch = 22.5 \pm 0.4 mm dt = 0.8 +0.08/-0.05 mm				
0.10 0.11 0.12	7.0 x 16.5 x 26.0	3.2	PCMP 384J12104 PCMP 384 12114 PCMP 384 12124	- - -
0.13 0.15 0.16 0.18	8.5 x 18.0 x 26.0	4.4	PCMP 384 12134 PCMP 384 12154 PCMP 384 12164 PCMP 384 12184	- - - -
0.20 0.22	10.0 x 19.5 x 26.0	5.5	PCMP 384 12204 PCMP 384 12224	- -
0.24 0.27 0.28	11.5 x 21.0 x 26.0	6.7	PCMP 384 12244 PCMP 384 12274 PCMP 384 12284	- - -
0.30 0.33	13.0 x 23.0 x 26.0	8.0	PCMP 384 12304 PCMP 384 12334	- -
Pitch = 27.5 \pm 0.4 mm dt = 0.8 +0.08/-0.05 mm				
0.24 0.27 0.30	11.0 x 21.0 x 31.0	7.8	PCMP 384L12244 PCMP 384L12274 PCMP 384L12304	- - -
0.33 0.36 0.39 0.43	13.0 x 23.0 x 31.0	10.4	PCMP 384L12334 PCMP 384 12364 PCMP 384 12394 PCMP 384 12434	- - - -
0.47 0.51 0.56	15.0 x 25.0 x 31.0	12.8	PCMP 384 12474 PCMP 384 12514 PCMP 384 12564	- - -
0.62 0.68 0.75 0.82	18.0 x 28.0 x 31.0	17.2	PCMP 384 12624 PCMP 384 12684 PCMP 384 12754 PCMP 384 12824	- - - -

AC and Pulse Double Side Metallized Polypropylene film Capacitors

PCMP 384

 $V_{Rdc} = 800 V$ $V_{Rac} = 450 V$

Cap (μF)	b x h x l (mm)	Mess (g)	CATALOGUE NUMBER		
			PCMP 384		
			loose in box	ammo packing	
			It = 5.0 \pm 1.0 mm	H = 16.0 mm Reduced pitch(7.5mm)	
		C - tol. \pm 5 %		C - tol. \pm 5 %	
		Pitch = 15.0 \pm 0.4 mm		dt = 0.8 +0.08/-0.05 mm	
0.010 0.011 0.012 0.013 0.015 0.016 0.018	5.0 x 11.0 x 18.0	1.2	PCMP 384 M2103 PCMP 384 M2113 PCMP 384 M2123 PCMP 384 M2133 PCMP 384 M2153 PCMP 384 M2163 PCMP 384 M2183	PCMP 384 MA103 PCMP 384 MA113 PCMP 384 MA123 PCMP 384 MA133 PCMP 384 MA153 PCMP 384 MA163 PCMP 384 MA183	
0.020 0.022	6.0 x 12.0 x 18.0	1.4	PCMP 384 M2203 PCMP 384 M2223	PCMP 384 MA203 PCMP 384 MA223	
0.027 0.033	7.0 x 13.5 x 18.0	1.9	PCMP 384 M2273 PCMP 384 M2333	PCMP 384 MA273 PCMP 384 MA333	
0.039 0.047	8.5 x 15.0 x 18.0	2.6	PCMP 384 M2393 PCMP 384 M2473	PCMP 384 MA393 PCMP 384 MA473	
0.056 0.068	10.0 x 16.5 x 18.0	3.1	PCMP 384 M2563 PCMP 384 M2683	PCMP 384 MA563 PCMP 384 MA683	

AC and Pulse Double Side Metallized Polypropylene film Capacitors

 $V_{Rdc} = 1000 V$ $V_{Rac} = 500 V\sim$

Mini Type

Cap (μF)	b x h x l (mm)	Mess (g)	CATALOGUE NUMBER	
			PCMP 384	
			loose in box	ammo packing
			lt = 5.0 \pm 1.0 mm	H = 16.0 mm Reduced pitch(7.5mm)
			C - tol. \pm 5 %	C - tol. \pm 5 %
Pitch = 10.0 \pm 0.4 mm dt = 0.6 +0.06/-0.05 mm				
0.00047 0.00056 0.00068 0.00082	4.0 x 10.0 x 12.5	0.8	PCMP 384DDH471(*) PCMP 384DDH561(*) PCMP 384DDH681(*) PCMP 384DDH821(*)	- (*) - (*) - (*) - (*)
0.0010 0.0011 0.0012 0.0013 0.0015 0.0016 0.0018 0.0020 0.0022 0.0024 0.0027 0.0030 0.0033	4.0 x 10.0 x 12.5	0.8	PCMP 384 D2102 PCMP 384 D2112 PCMP 384 D2122 PCMP 384 D2132 PCMP 384 D2152 PCMP 384 D2162 PCMP 384 D2182 PCMP 384 D2202 PCMP 384 D2222 PCMP 384 D2242 PCMP 384 D2272 PCMP 384 D2302 PCMP 384 D2332	PCMP 384 DA102 PCMP 384 DA112 PCMP 384 DA122 PCMP 384 DA132 PCMP 384 DA152 PCMP 384 DA162 PCMP 384 DA182 PCMP 384 DA202 PCMP 384 DA222 PCMP 384 DA242 PCMP 384 DA272 PCMP 384 DA302 PCMP 384 DA332
0.0036 0.0039 0.0043 0.0047	5.0 x 11.0 x 12.5	0.9	PCMP 384 D2362 PCMP 384 D2392 PCMP 384 D2432 PCMP 384 D2472	PCMP 384 DA362 PCMP 384 DA392 PCMP 384 DA432 PCMP 384 DA472
0.0051 0.0056 0.0062 0.0068	6.0 x 12.0 x 12.5	1.0	PCMP 384 D2512 PCMP 384 D2562 PCMP 384 D2622 PCMP 384 D2682	PCMP 384 DA512 PCMP 384 DA562 PCMP 384 DA622 PCMP 384 DA682
Pitch = 15.0 \pm 0.4 mm dt = 0.8 +0.08/-0.05 mm				
0.00022 0.00027 0.00033 0.00039 0.00047 0.00056 0.00068 0.00082	5.0 x 11.0 x 18.0	1.2	PCMP 384 DH221(*) PCMP 384 DH271(*) PCMP 384 DH331(*) PCMP 384 DH391(*) PCMP 384 DH471(*) PCMP 384 DH561(*) PCMP 384 DH681(*) PCMP 384 DH821(*)	- (*) - (*) - (*) - (*) - (*) - (*) - (*) - (*)
0.0033 0.0036 0.0039 0.0043 0.0047 0.0051 0.0056 0.0062 0.0068 0.0075 0.0082 0.0091 0.010 0.011 0.012 0.013	5.0 x 11.0 x 18.0	1.2	PCMP 384 72332 PCMP 384 72362 PCMP 384 72392 PCMP 384 72432 PCMP 384 72472 PCMP 384 72512 PCMP 384 72562 PCMP 384 72622 PCMP 384 72682 PCMP 384 D2752 PCMP 384 D2822 PCMP 384 D2912 PCMP 384 D2103 PCMP 384 D2113 PCMP 384 D2123 PCMP 384FD2133	PCMP 384 7A332 PCMP 384 7A362 PCMP 384 7A392 PCMP 384 7A432 PCMP 384 7A472 PCMP 384 7A512 PCMP 384 7A562 PCMP 384 7A622 PCMP 384 7A682 PCMP 384 DA752 PCMP 384 DA822 PCMP 384 DA912 PCMP 384 DA103 PCMP 384 DA113 PCMP 384 DA123 PCMP 384FDA133
0.013 0.015 0.016 0.018 0.020	6.0 x 12.0 x 18.0	1.4	PCMP 384 D2133 PCMP 384 D2153 PCMP 384FD2163 PCMP 384FD2183 PCMP 384FD2203	PCMP 384 DA133 PCMP 384 DA153 PCMP 384FDA163 PCMP 384FDA183 PCMP 384FDA203
0.016 0.018 0.020 0.022 0.024 0.027	7.0 x 13.5 x 18.0	1.9	PCMP 384 D2163 PCMP 384 D2183 PCMP 384 D2203 PCMP 384 D2223 PCMP 384FD2243 PCMP 384FD2273	PCMP 384 DA163 PCMP 384 DA183 PCMP 384 DA203 PCMP 384 DA223 PCMP 384FDA243 PCMP 384FDA273
0.024 0.027 0.030 0.033 0.036 0.039	8.5 x 15.0 x 18.0	2.6	PCMP 384 D2243 PCMP 384 D2273 PCMP 384 D2303 PCMP 384 D2333 PCMP 384FD2363 PCMP 384FD2393	PCMP 384 DA243 PCMP 384 DA273 PCMP 384 DA303 PCMP 384 DA333 PCMP 384FDA363 PCMP 384FDA393
0.036 0.039	10.0 x 16.5 x 18.0	3.1	PCMP 384 D2363 PCMP 384 D2393	PCMP 384 DA363 PCMP 384 DA393

* Capacitance tolerance \pm 10%

AC and Pulse Double Side Metallized Polypropylene film Capacitors

PCMP 384

 $V_{Rdc} = 1000 V$ $V_{Rac} = 500 V$

Mini Type

Cap (μF)	b x h x l (mm)	Mess (g)	CATALOGUE NUMBER		
			PCMP 384		
			loose in box	ammo packing	
			lt = 5.0 \pm 1.0 mm	H = 16.0 mm Reduced pitch(7.5mm)	
		C - tol. \pm 5 %		C - tol. \pm 5 %	
Pitch = 22.5 \pm 0.4 mm		dt = 0.8 +0.08/-0.05 mm			
0.043 0.047 0.051	7.0 x 16.5 x 26.0	3.2	PCMP 384 D2433 PCMP 384 D2473 PCMP 384 D2513	- - -	
0.056 0.062 0.068	8.5 x 18.0 x 26.0	4.4	PCMP 384 D2563 PCMP 384 D2623 PCMP 384 D2683	- - -	
0.075 0.082 0.091 0.10	10.0 x 19.5 x 26.0	5.5	PCMP 384 D2753 PCMP 384 D2823 PCMP 384 D2913 PCMP 384 D2104	- - - -	
Pitch = 27.5 \pm 0.4 mm		dt = 0.8 +0.08/-0.05 mm			
0.11 0.12 0.13	11.0 x 21.0 x 31.0	7.8	PCMP 384 D2114 PCMP 384 D2124 PCMP 384 D2134	- - -	
0.14 0.15 0.16 0.18	13.0 x 23.0 x 31.0	10.4	PCMP 384 D2144 PCMP 384 D2154 PCMP 384 D2164 PCMP 384 D2184	- - - -	
0.20 0.22 0.24	15.0 x 25.0 x 31.0	12.8	PCMP 384 D2204 PCMP 384 D2224 PCMP 384 D2244	- - -	
0.27 0.30 0.33 0.36	18.0 x 28.0 x 31.0	17.2	PCMP 384 D2274 PCMP 384 D2304 PCMP 384 D2334 PCMP 384 D2364	- - - -	

AC and Pulse Double Side Metallized Polypropylene film Capacitors

PCMP 384

 $V_{Rdc} = 1250 V$ $V_{Rac} = 550 V$

Cap (μF)	b x h x l (mm)	Mess (g)	CATALOGUE NUMBER	
			PCMP 384	
			loose in box	ammo packing
			lt = 5.0 \pm 1.0 mm	H = 16.0 mm Reduced pitch(7.5mm)
			C - tol. \pm 5 %	C - tol. \pm 5 %
Pitch = 15.0 \pm 0.4 mm dt = 0.8 +0.08/-0.05 mm				
0.010	5.0 x 11.0 x 18.0	1.2	PCMP 384FN2103	PCMP 384FNA103
0.010 0.011 0.012 0.013 0.015 0.016	6.0 x 12.0 x 18.0	1.4	PCMP 384 N2103 PCMP 384 N2113 PCMP 384 N2123 PCMP 384 N2133 PCMP 384FN2153 PCMP 384FN2163	PCMP 384 NA103 PCMP 384 NA113 PCMP 384 NA123 PCMP 384 NA133 PCMP 384FNA153 PCMP 384FNA163
0.015 0.016 0.018 0.020	7.0 x 13.5 x 18.0	1.9	PCMP 384 N2153 PCMP 384 N2163 PCMP 384FN2183 PCMP 384FN2203	PCMP 384 NA153 PCMP 384 NA163 PCMP 384FNA183 PCMP 384FNA203
0.018 0.020 0.022 0.024 0.027 0.030	8.5 x 15.0 x 18.0	2.6	PCMP 384 N2183 PCMP 384 N2203 PCMP 384 N2223 PCMP 384 N2243 PCMP 384FN2273 PCMP 384FN2303	PCMP 384 NA183 PCMP 384 NA203 PCMP 384 NA223 PCMP 384 NA243 PCMP 384FNA273 PCMP 384FNA303
0.027 0.030 0.033 0.036 0.039	10.0 x 16.5 x 18.0	3.1	PCMP 384 N2273 PCMP 384 N2303 PCMP 384 N2333 PCMP 384FN2363 PCMP 384FN2393	PCMP 384 NA273 PCMP 384 NA303 PCMP 384 NA333 PCMP 384FNA363 PCMP 384FNA393
0.036 0.039 0.043 0.047	11.0 x 18.5 x 18.0	4.1	PCMP 384 N2363 PCMP 384 N2393 PCMP 384 N2433 PCMP 384 N2473	PCMP 384 NA363 PCMP 384 NA393 PCMP 384 NA433 PCMP 384 NA473
Pitch = 22.5 \pm 0.4 mm dt = 0.8 +0.08/-0.05 mm				
0.051	8.5 x 18.0 x 26.0	4.4	PCMP 384 N2513	-
0.056 0.062 0.068 0.075	10.0 x 19.5 x 26.0	5.5	PCMP 384 N2563 PCMP 384 N2623 PCMP 384 N2683 PCMP 384 N2753	- - - -
0.082 0.091 0.10	11.5 x 21.0 x 26.0	6.7	PCMP 384 N2823 PCMP 384 N2913 PCMP 384 N2104	- - -
0.11 0.12	13.0 x 23.0 x 26.0	8.0	PCMP 384 N2114 PCMP 384 N2124	- -

AC and Pulse Double Side Metallized Polypropylene film Capacitors

 $V_{Rdc} = 1600 V$ $V_{Rac} = 630 V$

Cap (μF)	b x h x l (mm)	Mess (g)	CATALOGUE NUMBER	
			PCMP 384	
			loose in box	ammo packing
			It = 5.0 \pm 1.0 mm	H = 16.0 mm Reduced pitch(7.5mm)
C - tol. \pm 5 %		C - tol. \pm 5 %		
Pitch = 15.0 \pm 0.4 mm			dt = 0.8 +0.08/-0.05 mm	
0.00022	5.0 x 11.0 x 18.0	1.2	PCMP 384 8H221(*)	- (*)
0.00027			PCMP 384 8H271(*)	- (*)
0.00033			PCMP 384 8H331(*)	- (*)
0.00039			PCMP 384 8H391(*)	- (*)
0.00047			PCMP 384 8H471(*)	- (*)
0.00056			PCMP 384 8H561(*)	- (*)
0.00068			PCMP 384 8H681(*)	- (*)
0.00082			PCMP 384 8H821(*)	- (*)
0.0010	5.0 x 11.0 x 18.0	1.2	PCMP 384 82102	PCMP 384 8A102
0.0011			PCMP 384 82112	PCMP 384 8A112
0.0012			PCMP 384 82122	PCMP 384 8A122
0.0013			PCMP 384 82132	PCMP 384 8A132
0.0015			PCMP 384 82152	PCMP 384 8A152
0.0016			PCMP 384 82162	PCMP 384 8A162
0.0018			PCMP 384 82182	PCMP 384 8A182
0.0020			PCMP 384 82202	PCMP 384 8A202
0.0022			PCMP 384 82222	PCMP 384 8A222
0.0024			PCMP 384 82242	PCMP 384 8A242
0.0027			PCMP 384 82272	PCMP 384 8A272
0.0030			PCMP 384 82302	PCMP 384 8A302
0.0033			PCMP 384 82332	PCMP 384 8A332
0.0036			PCMP 384 82362	PCMP 384 8A362
0.0039			PCMP 384 82392	PCMP 384 8A392
0.0043			PCMP 384 82432	PCMP 384 8A432
0.0047			PCMP 384 82472	PCMP 384 8A472
0.0051			PCMP 384F82512	PCMP 384F8A512
0.0056	PCMP 384F82562	PCMP 384F8A562		
0.0062	PCMP 384F82622	PCMP 384F8A622		
0.0068	PCMP 384F82682	PCMP 384F8A682		
0.0075	6.0 x 12.0 x 18.0	1.4	PCMP 384F82752	PCMP 384F8A752
0.0051			PCMP 384 82512	PCMP 384 8A512
0.0056			PCMP 384 82562	PCMP 384 8A562
0.0062			PCMP 384 82622	PCMP 384 8A622
0.0068			PCMP 384 82682	PCMP 384 8A682
0.0082			PCMP 384F82822	PCMP 384F8A822
0.0091			PCMP 384F82912	PCMP 384F8A912
0.010	PCMP 384F82103	PCMP 384F8A103		
0.0075	7.0 x 13.5 x 18.0	1.9	PCMP 384 82752	PCMP 384 8A752
0.0082			PCMP 384 82822	PCMP 384 8A822
0.0091	8.5 x 15.0 x 18.0	2.6	PCMP 384 82912	PCMP 384 8A912
0.010			PCMP 384 82103	PCMP 384 8A103
0.011			PCMP 384 82113	PCMP 384 8A113
0.012			PCMP 384 82123	PCMP 384 8A123
0.013	10.0 x 16.5 x 18.0	3.1	PCMP 384 82133	PCMP 384 8A133
0.015			PCMP 384 82153	PCMP 384 8A153
0.016			PCMP 384 82163	PCMP 384 8A163
0.018			PCMP 384 82183	PCMP 384 8A183

* Capacitance tolerance \pm 10%

AC and Pulse Double Side Metallized Polypropylene film Capacitors

 $V_{Rdc} = 1600 V$ $V_{Rac} = 630 V$

Cap (μF)	b x h x l (mm)	Mess (g)	CATALOGUE NUMBER	
			PCMP 384	
			loose in box	ammo packing
			lt = 5.0 \pm 1.0 mm	H = 16.0 mm Reduced pitch(7.5mm)
C - tol. \pm 5 %		C - tol. \pm 5 %		
Pitch = 22.5 \pm 0.4 mm dt = 0.8 +0.08/-0.05 mm				
0.0056 0.0062 0.0068 0.0075 0.0082 0.0091 0.010	6.0 x 15.5 x 26.0	2.9	PCMP 384J82562 PCMP 384J82622 PCMP 384J82682 PCMP 384J82752 PCMP 384J82822 PCMP 384J82912 PCMP 384J82103	- - - - - - -
0.011 0.012 0.013 0.015	7.0 x 16.5 x 26.0	3.2	PCMP 384J82113 PCMP 384J82123 PCMP 384J82133 PCMP 384J82153	- - - -
0.016 0.018 0.020 0.022	8.5 x 18.0 x 26.0	4.4	PCMP 384J82163 PCMP 384J82183 PCMP 384 82203 PCMP 384 82223	- - - -
0.024 0.027	10.0 x 19.5 x 26.0	5.5	PCMP 384 82243 PCMP 384 82273	- -
0.030 0.033 0.036	11.5 x 21.0 x 26.0	6.7	PCMP 384 82303 PCMP 384 82333 PCMP 384 82363	- - -
0.039 0.043 0.047	13.0 x 23.0 x 26.0	8.0	PCMP 384 82393 PCMP 384 82433 PCMP 384 82473	- - -
Pitch = 27.5 \pm 0.4 mm dt = 0.8 +0.08/-0.05 mm				
0.039 0.043 0.047	11.0 x 21.0 x 31.0	7.8	PCMP 384L82393 PCMP 384L82433 PCMP 384L82473	- - -
0.051 0.056 0.062	13.0 x 23.0 x 31.0	10.4	PCMP 384 82513 PCMP 384 82563 PCMP 384 82623	- - -
0.068 0.075 0.082	15.0 x 25.0 x 31.0	12.8	PCMP 384 82683 PCMP 384 82753 PCMP 384 82823	- - -
0.10 0.11 0.12	18.0 x 28.0 x 31.0	17.2	PCMP 384 82104 PCMP 384 82114 PCMP 384 82124	- - -

AC and Pulse Double Side Metallized Polypropylene film Capacitors

PCMP 384

 $V_{Rdc} = 2000 V$ $V_{Rac} = 680 V$

Cap (μF)	b x h x l (mm)	Mess (g)	CATALOGUE NUMBER	
			PCMP 384	
			loose in box	ammo packing
			lt = 5.0 \pm 1.0 mm	H = 16.0 mm Reduced pitch(7.5mm)
C - tol. \pm 5 %		C - tol. \pm 5 %		
Pitch = 15.0 \pm 0.4 mm			dt = 0.8 +0.08/-0.05 mm	
0.0010 0.0011 0.0012 0.0013 0.0015 0.0016 0.0018 0.0020 0.0022 0.0024 0.0027 0.0030 0.0033 0.0036 0.0039 0.0043 0.0047	5.0 x 11.0 x 18.0	1.2	PCMP 384 92102 PCMP 384 92112 PCMP 384 92122 PCMP 384 92132 PCMP 384 92152 PCMP 384 92162 PCMP 384 92182 PCMP 384 92202 PCMP 384 92222 PCMP 384 92242 PCMP 384 92272 PCMP 384F92302 PCMP 384F92332 PCMP 384F92362 PCMP 384F92392 PCMP 384F92432 PCMP 384F92472	PCMP 384 9A102 PCMP 384 9A112 PCMP 384 9A122 PCMP 384 9A132 PCMP 384 9A152 PCMP 384 9A162 PCMP 384 9A182 PCMP 384 9A202 PCMP 384 9A222 PCMP 384 9A242 PCMP 384 9A272 PCMP 384F9A302 PCMP 384F9A332 PCMP 384F9A362 PCMP 384F9A392 PCMP 384F9A432 PCMP 384F9A472
0.0051 0.0030 0.0033 0.0036 0.0039 0.0056 0.0062 0.0068	6.0 x 12.0 x 18.0	1.4	PCMP 384F92512 PCMP 384 92302 PCMP 384 92332 PCMP 384 92362 PCMP 384 92392 PCMP 384F92562 PCMP 384F92622 PCMP 384F92682	PCMP 384F9A512 PCMP 384 9A302 PCMP 384 9A332 PCMP 384 9A362 PCMP 384 9A392 PCMP 384F9A562 PCMP 384F9A622 PCMP 384F9A682
0.0075 0.0043 0.0047 0.0051 0.0056 0.0082 0.0091	7.0 x 13.5 x 18.0	1.9	PCMP 384F92752 PCMP 384 92432 PCMP 384 92472 PCMP 384 92512 PCMP 384 92562 PCMP 384F92822 PCMP 384F92912	PCMP 384F9A752 PCMP 384 9A432 PCMP 384 9A472 PCMP 384 9A512 PCMP 384 9A562 PCMP 384F9A822 PCMP 384F9A912
0.010 0.0062 0.0068 0.0075 0.0082	8.5 x 15.0 x 18.0	2.6	PCMP 384F92103 PCMP 384 92622 PCMP 384 92682 PCMP 384 92752 PCMP 384 92822	PCMP 384F9A103 PCMP 384 9A622 PCMP 384 9A682 PCMP 384 9A752 PCMP 384 9A822
0.0091 0.010 0.011 0.012	10.0 x 16.5 x 18.0	3.1	PCMP 384 92912 PCMP 384 92103 PCMP 384 92113 PCMP 384 92123	PCMP 384 9A912 PCMP 384 9A103 PCMP 384 9A113 PCMP 384 9A123
0.013 0.015	11.0 x 18.5 x 18.0	4.1	PCMP 384F92133 PCMP 384F92153	PCMP 384F9A133 PCMP 384F9A153

AC and Pulse Double Side Metallized Polypropylene film Capacitors

PCMP 384

 $V_{Rdc} = 2000 V$ $V_{Rac} = 680 V$

Cap (μF)	b x h x l (mm)	Mess (g)	CATALOGUE NUMBER	
			PCMP 384	
			loose in box	ammo packing
			lt = 5.0 \pm 1.0 mm	H = 16.0 mm Reduced pitch(7.5mm)
C - tol. \pm 5 %		C - tol. \pm 5 %		
Pitch = 22.5 \pm 0.4 mm			dt = 0.8 +0.08/-0.05 mm	
0.0056 0.0062 0.0068	6.0 x 15.5 x 26.0	2.9	PCMP 384J92562 PCMP 384J92622 PCMP 384J92682	- - -
0.0075 0.0082 0.0091 0.010	7.0 x 16.5 x 26.0	3.2	PCMP 384J92752 PCMP 384J92822 PCMP 384J92912 PCMP 384J92103	- - - -
0.011 0.012 0.013 0.015	8.5 x 18.0 x 26.0	4.4	PCMP 384J92113 PCMP 384J92123 PCMP 384 92133 PCMP 384 92153	- - - -
0.016 0.018	10.0 x 19.5 x 26.0	5.5	PCMP 384 92163 PCMP 384 92183	- -
0.020 0.022 0.024	11.5 x 21.0 x 26.0	6.7	PCMP 384 92203 PCMP 384 92223 PCMP 384 92243	- - -

AC and Pulse Double Side Metallized Polypropylene film Capacitors

PCMP 384

 $V_{Rdc} = 2000 V$ $V_{Rac} = 700 V$

Cap (μF)	b x h x l (mm)	Mess (g)	CATALOGUE NUMBER	
			PCMP 384	
			loose in box	ammo packing
			lt = 5.0 \pm 1.0 mm	H = 16.0 mm Reduced pitch(7.5mm)
C - tol. \pm 5 %		C - tol. \pm 5 %		
Pitch = 15.0 \pm 0.4 mm			dt = 0.8 +0.08/-0.05 mm	
0.00022 0.00027 0.00033 0.00039 0.00047 0.00056 0.00068 0.00082	5.0 x 11.0 x 18.0	1.2	PCMP 384 2H221(*) PCMP 384 2H271(*) PCMP 384 2H331(*) PCMP 384 2H391(*) PCMP 384 2H471(*) PCMP 384 2H561(*) PCMP 384 2H681(*) PCMP 384 2H821(*)	- (*) - (*) - (*) - (*) - (*) - (*) - (*) - (*)
0.0010 0.0011 0.0012 0.0013 0.0015 0.0016 0.0018 0.0020 0.0022 0.0024	5.0 x 11.0 x 18.0	1.2	PCMP 384 22102 PCMP 384 22112 PCMP 384 22122 PCMP 384 22132 PCMP 384 22152 PCMP 384 22162 PCMP 384 22182 PCMP 384 22202 PCMP 384 22222 PCMP 384 22242	PCMP 384 2A102 PCMP 384 2A112 PCMP 384 2A122 PCMP 384 2A132 PCMP 384 2A152 PCMP 384 2A162 PCMP 384 2A182 PCMP 384 2A202 PCMP 384 2A222 PCMP 384 2A242
0.0027 0.0030 0.0033 0.0036	6.0 x 12.0 x 18.0	1.4	PCMP 384 22272 PCMP 384 22302 PCMP 384 22332 PCMP 384 22362	PCMP 384 2A272 PCMP 384 2A302 PCMP 384 2A332 PCMP 384 2A362
0.0039 0.0043 0.0047	7.0 x 13.5 x 18.0	1.9	PCMP 384 22392 PCMP 384 22432 PCMP 384 22472	PCMP 384 2A392 PCMP 384 2A432 PCMP 384 2A472
0.0051 0.0056 0.0062 0.0068	8.5 x 15.0 x 18.0	2.6	PCMP 384 22512 PCMP 384 22562 PCMP 384 22622 PCMP 384 22682	PCMP 384 2A512 PCMP 384 2A562 PCMP 384 2A622 PCMP 384 2A682
0.0075 0.0082 0.0091 0.010	10.0 x 16.5 x 18.0	3.1	PCMP 384 22752 PCMP 384 22822 PCMP 384 22912 PCMP 384 22103	PCMP 384 2A752 PCMP 384 2A822 PCMP 384 2A912 PCMP 384 2A103

* Capacitance tolerance \pm 10%

AC and Pulse Double Side Metallized Polypropylene film Capacitors

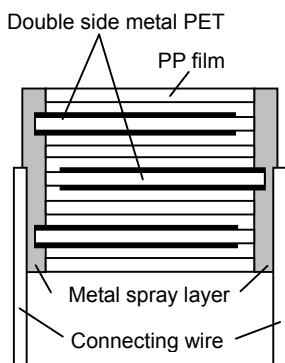
 $V_{Rdc} = 2500 V$ $V_{Rac} = 900 V$

Cap (μF)	b x h x l (mm)	Mess (g)	CATALOGUE NUMBER	
			PCMP 384	
			loose in box	ammo packing
			It = 5.0 \pm 1.0 mm	H = 16.0 mm Reduced pitch(7.5mm)
C - tol. \pm 5 %		C - tol. \pm 5 %		
Pitch = 22.5 \pm 0.4 mm dt = 0.8 +0.08/-0.05 mm				
0.0010 0.0011 0.0012 0.0013 0.0015 0.0016 0.0018 0.0020 0.0022 0.0024 0.0027 0.0030 0.0033 0.0036 0.0039 0.0043 0.0047 0.0051	6.0 x 15.5 x 26.0	2.9	PCMP 384 02102 PCMP 384 02112 PCMP 384 02122 PCMP 384 02132 PCMP 384 02152 PCMP 384 02162 PCMP 384 02182 PCMP 384 02202 PCMP 384 02222 PCMP 384 02242 PCMP 384 02272 PCMP 384 02302 PCMP 384 02332 PCMP 384 02362 PCMP 384 02392 PCMP 384 02432 PCMP 384 02472 PCMP 384 02512	- - - - - - - - - - - - - - - - - -
0.0056 0.0062 0.0068 0.0075	7.0 x 16.5 x 26.0	3.2	PCMP 384 02562 PCMP 384 02622 PCMP 384 02682 PCMP 384 02752	- - - -
0.0082 0.0091 0.010 0.011	8.5 x 18.0 x 26.0	4.4	PCMP 384 02822 PCMP 384 02912 PCMP 384 02103 PCMP 384 02113	- - - -
0.012 0.013 0.015	10.0 x 19.5 x 26.0	5.5	PCMP 384 02123 PCMP 384 02133 PCMP 384 02153	- - -

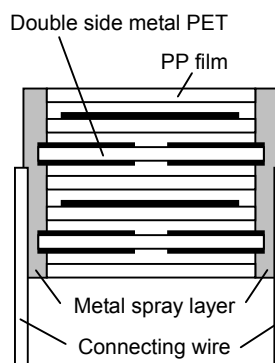
AC and Pulse Double Side Metallized Polypropylene film Capacitors

CONSTRUCTION

250V_{dc} ~ 630V_{dc} (< 400 V_{ac})



630V_{dc} ~ 2000V_{dc} (>400 V_{ac})



Description ;

- . Low - inductive wound cell of metallized polyester carrier film and polypropylene (PP) film.
- . Potted with blue epoxy resin in a blue 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

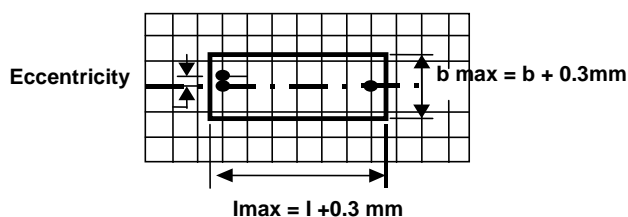
The capacitors are designed for mounting on printed-circuit boards. The capacitors packed in bandoliers are designed for mounting on printed-circuit boards by means of automatic insertion machines.

SPECIFIC METHOD OF MOUNTING TO WITHSTAND VIBRATION AND SHOCK

- . For pitches of 15 mm 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 : $h_{max} \quad h+0.3mm$

STORAGE TEMPERATURE

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

AC and Pulse Double Side Metallized Polypropylene film Capacitors

RATINGS AND CHARACTERISTICS

Unless otherwise specified all electrical values apply at an ambient temperature of $23 \pm 1^\circ\text{C}$, an atmospheric pressure of 86 to 106 kPa and a relative humidity of $50 \pm 2\%$.

For reference testing a conditioning period shall be applied of 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 terminations) : $1.6 \times V_{\text{Rdc}}$, 1min
- . Test Voltage (between leads and Case) : $2840 V_{\text{dc}}$, 1min

Dissipation Factor

Rated voltage	Capacitance	Tangent of loss angle ($\times 10^{-4}$)	
		10 KHz	100 KHz
250 V ($V_{\text{Rac}} = 125\text{V} \sim$)	C 0.082 μF (P =10.0mm)	5	15
	0.068 μF C 0.33 μF (P =15.0mm)	5	25
	0.33 μF < C 1.0 μF	5	45
400 V ($V_{\text{Rac}} = 220\text{V} \sim$)	C 0.047 μF (P =10.0mm)	5	15
	0.033 μF < C 0.22 μF (P =15.0mm)	5	20
	0.22 μF C 0.47 μF (P =22.5mm)	10	40
630 V ($V_{\text{Rac}} = 250\text{V} \sim$, mini)	C 0.030 μF (P =10.0mm)	5	15
	0.01 μF C 0.15 μF (P =15.0mm)	5	15
	0.15 μF < C 0.27 μF	8	20
630 V ($V_{\text{Rac}} = 400\text{V} \sim$)	C 0.018 μF	4	12
	0.018 μF < C 0.1 μF (P =15.0mm)	5	15
	0.1 μF C 0.33 μF (P =22.5mm)	8	25
	0.24 μF C (P =27.5mm)	10	40
630 V ($V_{\text{Rac}} = 250\text{V} \sim$, old)	C 0.1 μF	5	15
	0.1 μF < C 0.22 μF	8	20
800V ($V_{\text{Rac}} = 450\text{V} \sim$)	C 0.091 μF	5	15
1000 V ($V_{\text{Rac}} = 450\text{V} \sim$)	C 0.027 μF (P =15.0mm)	4	15
	0.012 μF C 0.039 μF (P =22.5mm)	6	20
1000 V ($V_{\text{Rac}} = 500\text{V} \sim$)	C 0.0056 μF	4	15
	0.0056 μF < C 0.039 μF	6	20
	0.039 μF < C 0.1 μF	8	25
	0.11 μF C	10	30
1250V ($V_{\text{Rac}} = 550\text{V} \sim$)	C 0.047 μF	6	15
	0.051 μF C	8	25
1600 V ($V_{\text{Rac}} = 630\text{V} \sim$)	C 0.018 μF (P =15.0mm)	5	15
	0.0056 μF C 0.047 μF (P =22.5mm)	5	20
	0.039 μF C (P =27.5mm)	10	25
2000 V ($V_{\text{Rac}} = 680\text{V} \sim$)	C 0.015 μF (P =15.0mm)	5	15
	0.0051 μF C 0.024 μF (P =22.5mm)	5	20
2000 V ($V_{\text{Rac}} = 700\text{V} \sim$)	C 0.01 μF	5	15
2500 V ($V_{\text{Rac}} = 900\text{V} \sim$)	C 0.015 μF	5	15

AC and Pulse Double Side Metallized Polypropylene film Capacitors

Insulation Resistance

The insulation resistance is measured for 1min \pm 5s, at 100V for $V_{Rdc} < 630V$, at 500V for $V_{Rdc} \geq 630V$
Between terminals :

$$C \leq 0.33\mu F : R > 100\,000\,M\Omega$$

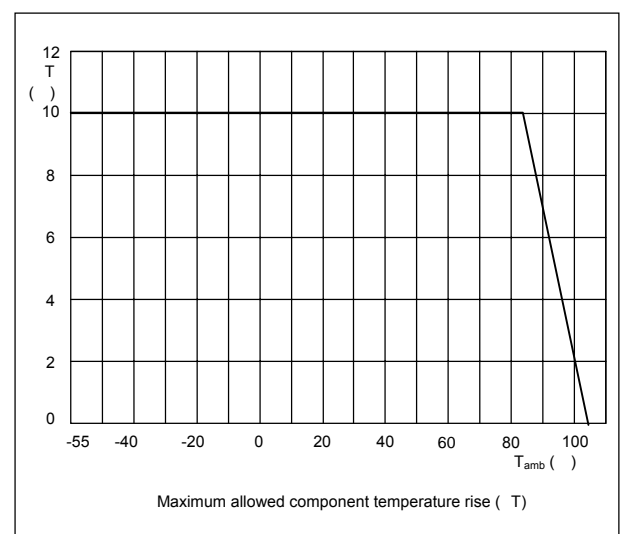
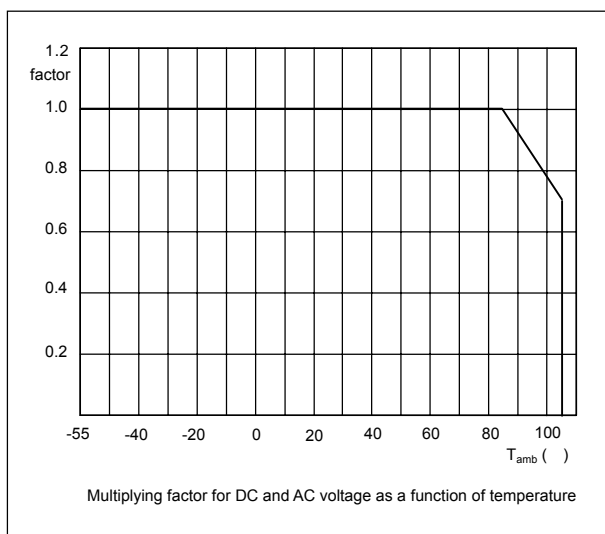
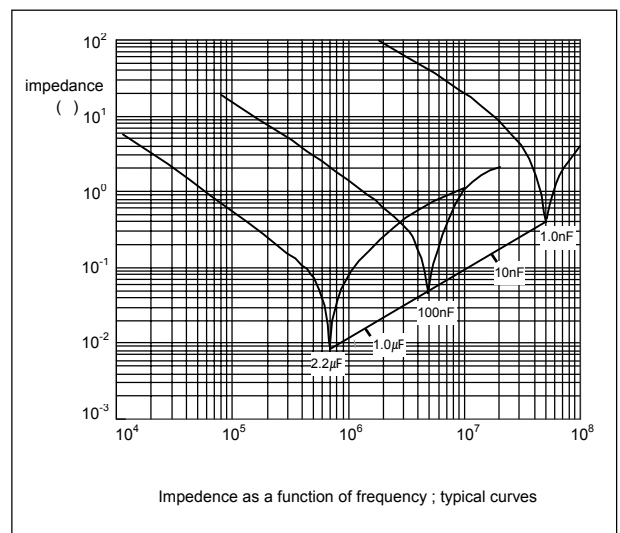
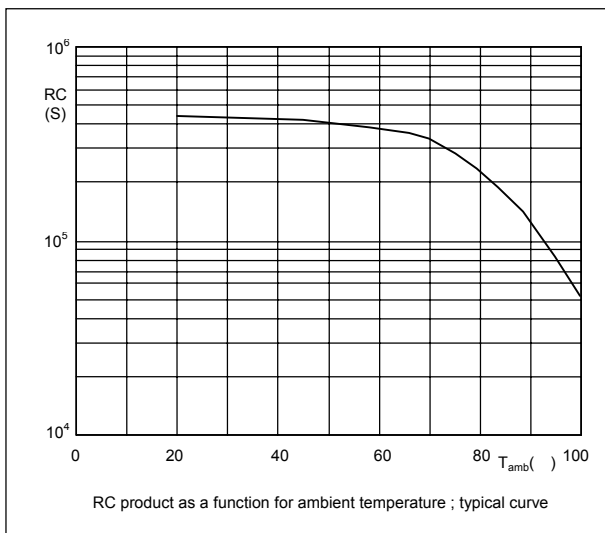
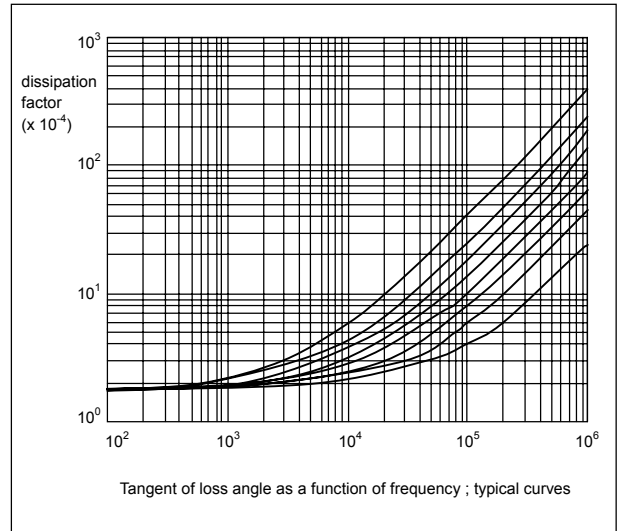
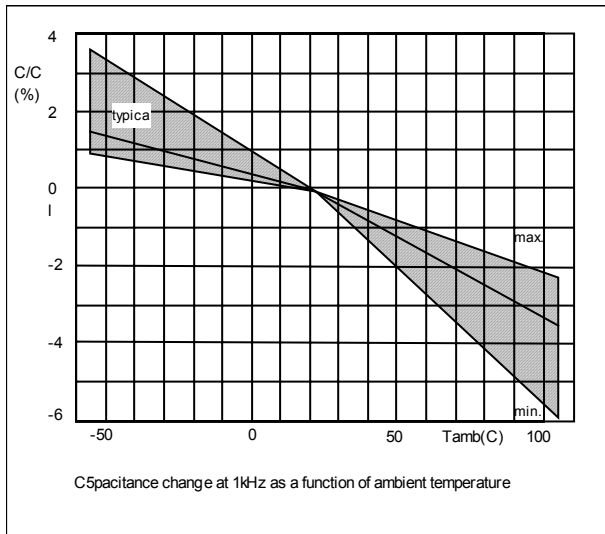
$$C > 0.33\mu F : RC \geq 30\,000\,s$$

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 must be multiplied by V_{Rdc} and divided by the applied voltage

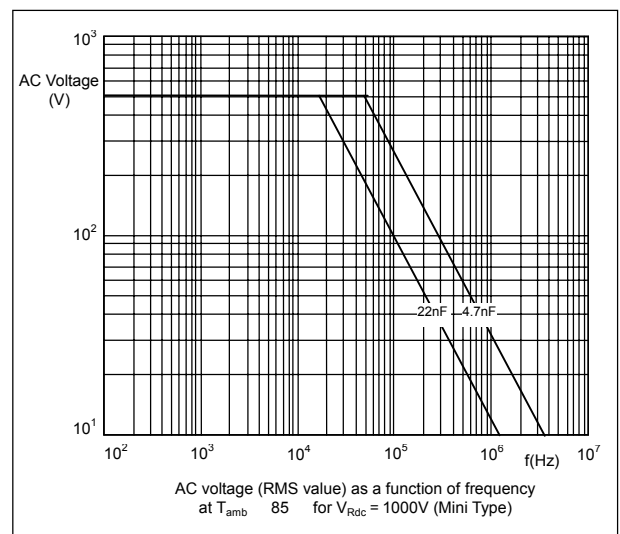
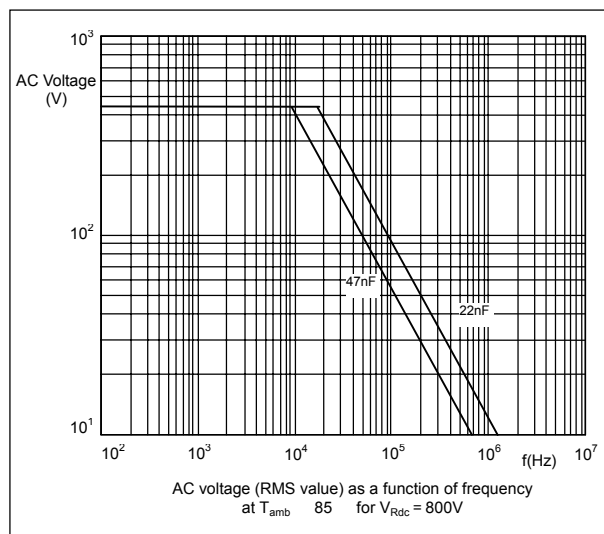
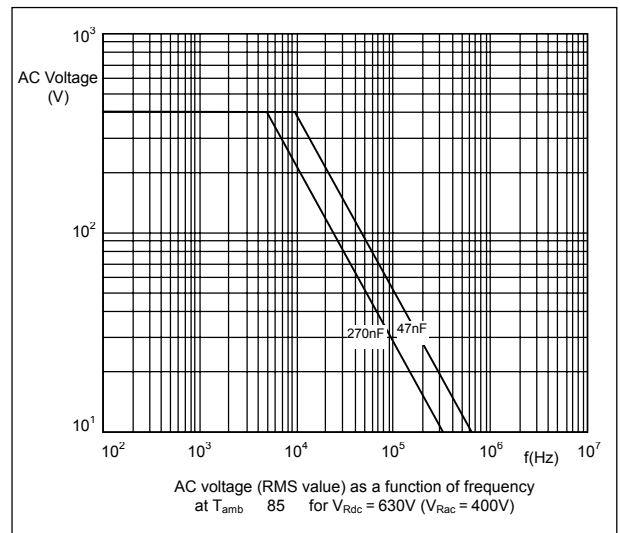
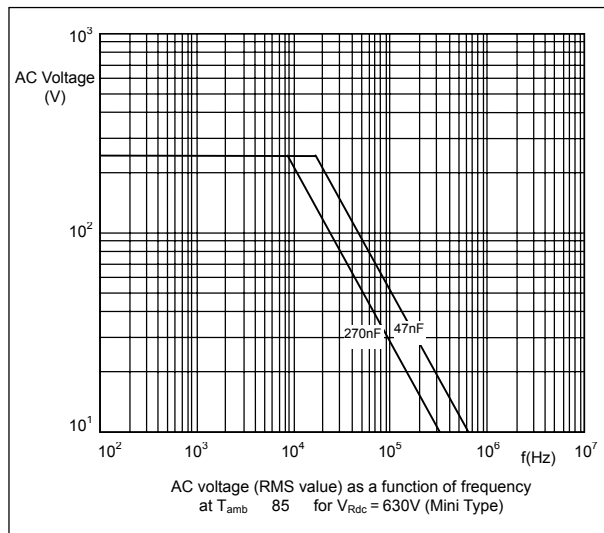
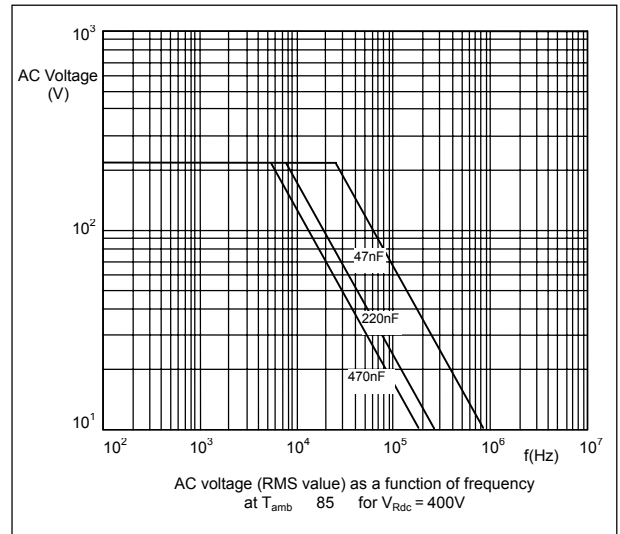
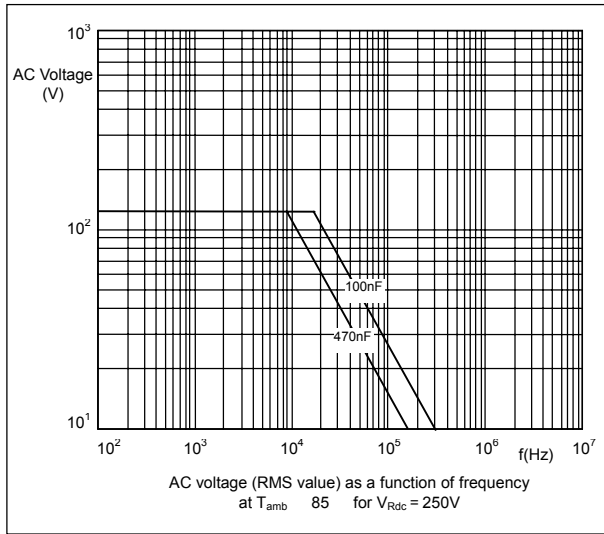
Rated voltage	Rated voltage pulse slope (V/ μ s)			
	P = 10.0 mm	P = 15.0 mm	P = 22.5 mm	P = 27.5 mm
250 V	1000	550	250	-
400 V	1200	700	400	-
630V	1500	900	500	400
630 V ($V_{Rac} = 400V\tilde{}$)	3000	2500	1500	900
800 V	-	3000	-	-
1000 V	4800	3300	2100	1200
1250 V	-	4500	2500	1400
1600 V	-	6000	3000	2000
2000 V ($V_{Rac} = 680V\tilde{}$)	-	9500	3500	2300
2000 V ($V_{Rac} = 700V\tilde{}$)	-	11000	-	-
2500 V	-	-	11000	-

THE GRAPHS OF CHARACTERISTICS



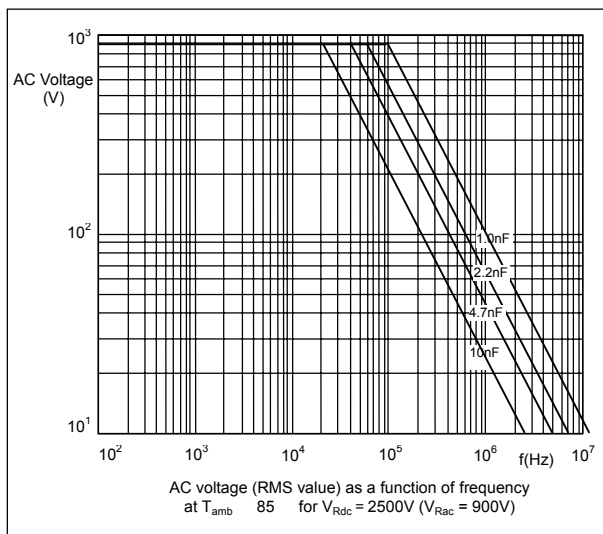
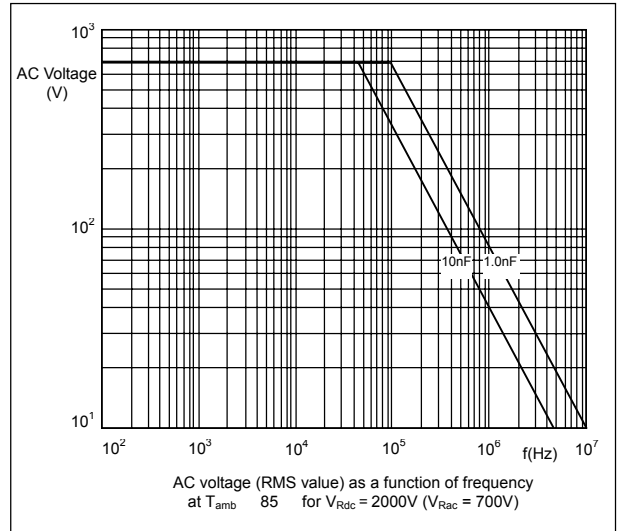
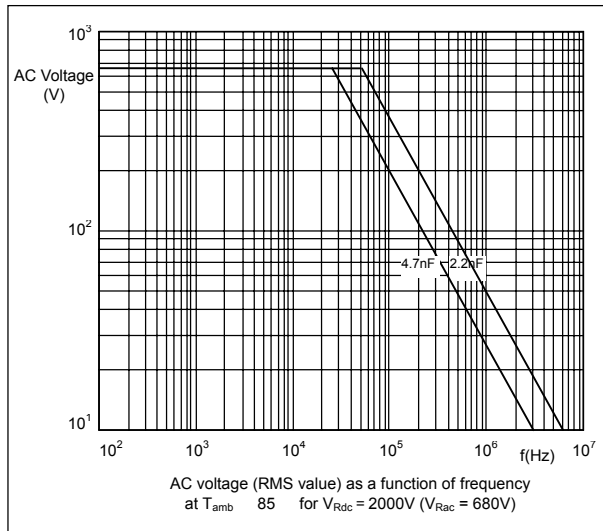
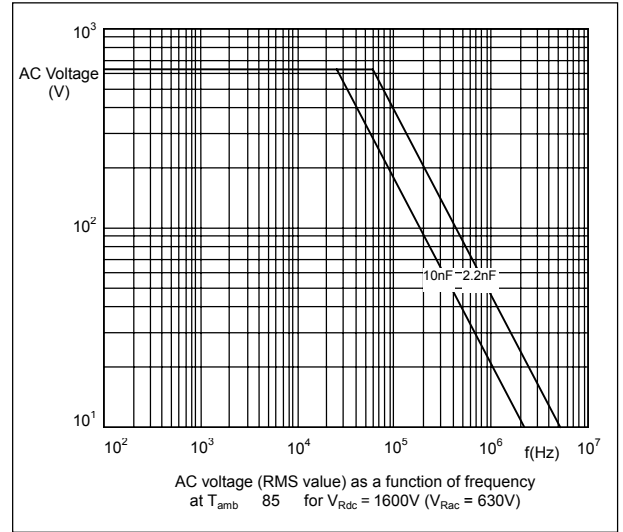
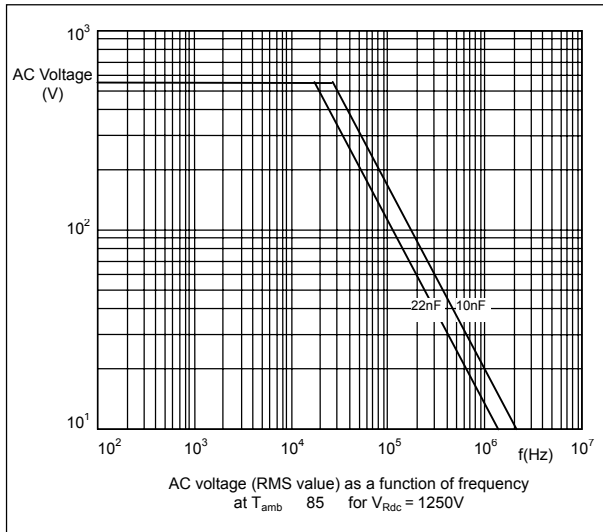
AC and Pulse Double Side Metallized Polypropylene film Capacitors

MAXIMUM RMS VOLTAGE (SINEWAVE) AS A FUNCTION OF FREQUENCY



AC and Pulse Double Side Metallized Polypropylene film Capacitors

MAXIMUM RMS VOLTAGE (SINEWAVE) AS A FUNCTION OF FREQUENCY



AC and Pulse Double Side Metallized Polypropylene film Capacitors

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 ionisation 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	$T_{amb} \leq 85^\circ\text{C}$	$85^\circ\text{C} < T_{amb} \leq 105^\circ\text{C}$
Maximum continuous RMS voltage	V_{Rac}	$0.75 \times V_{Rac}$
Maximum temporary RMS over voltage (<24 hours)	$1.25 \times V_{Rac}$	$1.0 \times V_{Rac}$
Maximum peak voltage (V_{o-p}) (<2s)	$1.6 \times V_{Rdc}$	$1.1 \times V_{Rdc}$

AC and Pulse Double Side Metallized Polypropylene film Capacitors

PRODUCT MARKING

The capacitors are marked with the following information :

- . Rated capacitance in code according to IEC 60062
- . Tolerance on rated capacitance J = $\pm 5\%$ A = $\pm 3.5\%$
- . Rated DC voltage or rated AC voltage (e.g. 1000 V or 700Vac)
- . Manufacturer's type designation (384)
- . Code for dielectric material (MMKP)
- . Manufacturer's name (PILKOR)
- . Year and week of manufacture (e.g. 0301)

Example of marking

Pitch = 10.0 mm

4n7 J 630V 384 MMKP PILKOR
--

Marking on the side

Pitch = 15.0 mm

33n J 1000V 384 MMKP

Marking on the top

PILKOR WK.....

Marking on the side

at 400Vac

20n J 630V 384 MMKP 400~

PILKOR WK.....

at 700Vac

12n J 2000V 384 MMKP 700~

PILKOR WK.....

Pitch 22.5 mm

47n J 1000V 384 MMKP

Marking on the top

PILKOR WK....

Marking on the side

at 400Vac

110n J 630V 384 MMKP 400~

PILKOR WK.....

or

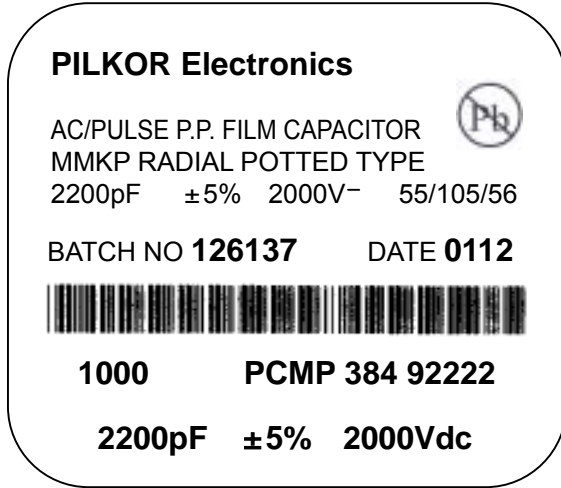
47n J 1000V 384 MMKP	PILKOR WK....
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Marking on the top

**AC and Pulse
Double Side Metallized Polypropylene film Capacitors**

PACKAGE MARKING

The package containing the capacitors is marked as shown.



LINE MARKING EXPLANAION

1. Manufacturer's name
2. Sub – family
3. Pb free marking(JEDEC-STD-97)
4. Type description
5. Capacitance value in μ F, tolerance, voltage and climatic category (IEC)
6. Batch no. & Production period year and week code
7. Quantity and product code (12NC)
8. Capacitance, tolerance and voltage

AC and Pulse Double Side Metallized Polypropylene film Capacitors

TEST REQUIREMENTS

TEST	D or ND	CONDITIONS	p	n	REQUIREMENTS
Group C inspection (periodic)	D		6	9	
Sub-group C1A part of a sample of sub-group C1					
4.1 Dimensions (detail)					As specified in Table 1 of this specification
4.2.2 capacitance		at 1 kHz			Within specified tolerance
4.2.3 Tangent of loss angle		at 100 kHz			As in this specification
4.2.1 Voltage proof (test A)		at $1.6 \times V_{Rdc}$ for 1 min or $1.75 \times V_{Rdc}$ for 5 s			No breakdown or flashover.
4.2.5 Insulation resistance (test A)		at 100V for $V_{Rdc} < 630V$ at 500V for $V_{Rdc} \geq 630V$			As in this specification
4.3 Robustness of terminals		Tensile ; load 10N ; 10s Bending ; 5N ; 4 x 90			No visible damage, Legible marking
4.4 Resistance to soldering heat		Solder bath : 260 ; 10 s			$\Delta C/C \leq 1\%$ $\Delta \tan \delta < 0.0005 (C \leq 100nF)$ $\Delta \tan \delta < 0.001 (100nF < C \leq 470nF)$ $\Delta \tan \delta < 0.0015 (C > 470nF)$
4.14 Component solvent resistance		Isopropyl alcohol ; 23 ; 5 min			
Sub-group C1B Other part of sample of sub-group C1	D		6	18	
4.6 Rapid change of temperature		θA = lower category temperature θB = upper category temperature 5 cycles Duration $t = 30$ min			No visible damage $\Delta C/C \leq 1\%$
4.7 Vibration (see note 4)		10Hz to 55Hz Amplitude : 0.75mm or acceleration $98m/s^2$ 6hrs			$\Delta \tan \delta < 0.0005 (C \leq 100nF)$ $\Delta \tan \delta < 0.001 (100nF < C \leq 470nF)$ $\Delta \tan \delta < 0.0015 (C > 470nF)$
4.9 Shock (see note 4)		Half sine wave ; $490m/s^2$: 11 ms			

AC and Pulse Double Side Metallized Polypropylene film Capacitors

TEST	D or ND	CONDITIONS	p	n	REQUIREMENTS
Sub-group C1 Combined of sample of specimens of sub-groups C1A and C1B	D		6	27	
4.10 Climatic sequence					No visible damage, Legible marking
4.10.2 Dry heat		$T = T_{\text{upp-cat}}$, 16 hours			$\Delta C/C \leq 3\%$
4.10.3 Damp heat cyclic, test Db, first cycle					$\Delta \tan \delta < 0.0005$ ($C \leq 100\text{nF}$) $\Delta \tan \delta < 0.001$ ($100\text{nF} < C \leq 470\text{nF}$) $\Delta \tan \delta < 0.0015$ ($C > 470\text{nF}$)
4.10.4 Cold		$T = T_{\text{low-cat}}$, 2 hours			
4.10.6 Damp heat cyclic, test Db, remaining cycle					$R_{\text{ins}} \geq 50\%$ specified value
Sub-group C2	D		6	15	
4.11 Damp heat steady state		56days ; 40 ; 90 to 95%RH			No visible damage, Legible marking
					$\Delta C/C \leq 1\%$
					$\Delta \tan \delta < 0.0005$ ($C \leq 100\text{nF}$) $\Delta \tan \delta < 0.001$ ($100\text{nF} < C \leq 470\text{nF}$) $\Delta \tan \delta < 0.0015$ ($C > 470\text{nF}$)
					$R_{\text{ins}} \geq 50\%$ specified value
Sub-group C3	D		3	21	
4.12 Endurance (AC)		1000hours ; 85 ; $1.25 \times V_{\text{Rac}}$ 105 ; $0.875 \times V_{\text{Rac}}$			No visible damage, Legible marking
					$\Delta C/C \leq 5\%$
					$\Delta \tan \delta < 0.0005$ ($C \leq 100\text{nF}$) $\Delta \tan \delta < 0.001$ ($100\text{nF} < C \leq 470\text{nF}$) $\Delta \tan \delta < 0.0015$ ($C > 470\text{nF}$)
					$R_{\text{ins}} \geq 50\%$ specified value
Sub-group C4	D		3	9	
4.2.6 Temperature characteristics		Lower category temperature			-55°C to +20°C $0\% \leq \Delta C/C \leq 3.75\%$
		Upper category temperature			+20°C to +105°C $-3.25\% \leq \Delta C/C \leq 0\%$
					$R_{\text{ins}} \geq 50\%$ specified value
4.13 Charge and discharge		Nuber of pulse; 10000, Pulse frequency ; (1Hz) Test pulse rise; $1.5 \times C(dV/dt)_R$			$\Delta C/C \leq 2\%$
					$\Delta \tan \delta < 0.0005$ ($C \leq 100\text{nF}$) $\Delta \tan \delta < 0.001$ ($100\text{nF} < C \leq 470\text{nF}$) $\Delta \tan \delta < 0.0015$ ($C > 470\text{nF}$)
					$R_{\text{ins}} \geq 50\%$ specified value

AC and Pulse Double Side Metallized Polypropylene film Capacitors

TEST	D or ND	CONDITIONS	p	n	REQUIREMENTS
Sub-group ADD1	D		3	35	
A.1 Solderability		Non-activated colophony flux 501 Solder bath : 235°C Dwell time : 2s			Good tinning as evidenced by free flowing of the solder with wetting of the terminations (>95%)
Solvent resistance of the marking		Isopropyl alcohol at 23 Rubbing material ; cotton wool immersion time : 5 min			Legible marking
Sub-group ADD2	D		3	12	
A.2 Heat storage		2000 hrs Upper category temperature			$\Delta C/C \leq 2\%$ $\Delta \tan \delta < 0.0005$ ($C \leq 100\text{nF}$) $\Delta \tan \delta < 0.001$ ($100\text{nF} < C \leq 470\text{nF}$) $\Delta \tan \delta < 0.0015$ ($C > 470\text{nF}$) $R_{\text{ins}} \geq 50\%$ specified value
Sub-group ADD3			3	9	
A.3 Detergent resistance		Density 20g/L dishwasher detergent 70°C, 3min followed by rinsing in clear water for 1 minute. Recovery time 1 to 2 hours.			$\Delta C/C \leq 1\%$ $\Delta \tan \delta < 0.0005$ ($C \leq 100\text{nF}$) $\Delta \tan \delta < 0.001$ ($100\text{nF} < C \leq 470\text{nF}$) $\Delta \tan \delta < 0.0015$ ($C > 470\text{nF}$) $R_{\text{ins}} \geq 50\%$ specified value
Sub-group ADD4	D		6	15	
A.4 Resistance to soldering heat with preheating		Capacitors mounted on a 1.6mm board with non-plated holes Body temp. : 85 Bath temp. : 260 Dwell time : 10 s.			$\Delta C/C \leq 2\%$ $\Delta \tan \delta < 0.0005$ ($C \leq 100\text{nF}$) $\Delta \tan \delta < 0.001$ ($100\text{nF} < C \leq 470\text{nF}$) $\Delta \tan \delta < 0.0015$ ($C > 470\text{nF}$) $R_{\text{ins}} \geq 50\%$ specified value
Sub-group ADD6					
A.6 Endurance(DC)		Duration : 2000 hours 1.25 x V_{Rdc} at 85°C 0.875 x V_{Rdc} at 105°C			No visible damage $\Delta C/C \leq 3\%$ $\Delta \tan \delta < 0.0005$ ($C \leq 100 \text{ nF}$) $\Delta \tan \delta < 0.001$ ($100\text{nF} < C \leq 470\text{nF}$) $\Delta \tan \delta < 0.0015$ ($C > 470 \text{ nF}$) $R_{\text{ins}} \geq 50\%$ specified value

AC and Pulse Double Side Metallized Polypropylene film Capacitors

INSPECTION REQUIREMENTS

Note 1 : Sub-clause numbers of tests and performance requirements refer to the Sectional Specification, IEC 384-17 and Section One this specification.

Note 2 : Inspection levels are selected from IEC-Publication 410 : Sampling Plans and Procedures for inspection by attributes.

Note 3 : In this table :

- p = periodicity in months
- n = sample size
- D = destructive
- ND = non-destructive
- IL = inspection level) IEC 410
- AQL = acceptance quality level)

Note 4 : For this capacitors, considered as a solid construction, the periodicity of the vibration and shock test is reduced from 6 months to 36 months.

TEST	D or ND	CONDITIONS	IL	n	REQUIREMENTS
Group A inspection (lot by lot)					
Sub-group A1	ND				
4.1 Visual examination		Detail	S4	1)	No mechanical failures. Legible marking and as specified in GENERAL DATA of this specification
4.1 Dimensions 2)			S3	1)	AS specified in This specification
Sub-group A2 3)	ND				
4.2.2 capacitance		at 1 KHz			Within specified tolerance
4.2.3 Tangent of loss angle		at 100 KHz			As in this specification
4.2.1 Voltage proof (test A)		at $1.6 \times V_{Rdc}$ for 1 s			No breakdown or flashover.
4.2.5 Insulation resistance (test A)		at 100V for $V_{Rdc} < 630V$ at 500V for $V_{Rdc} \geq 630V$			As in this specification

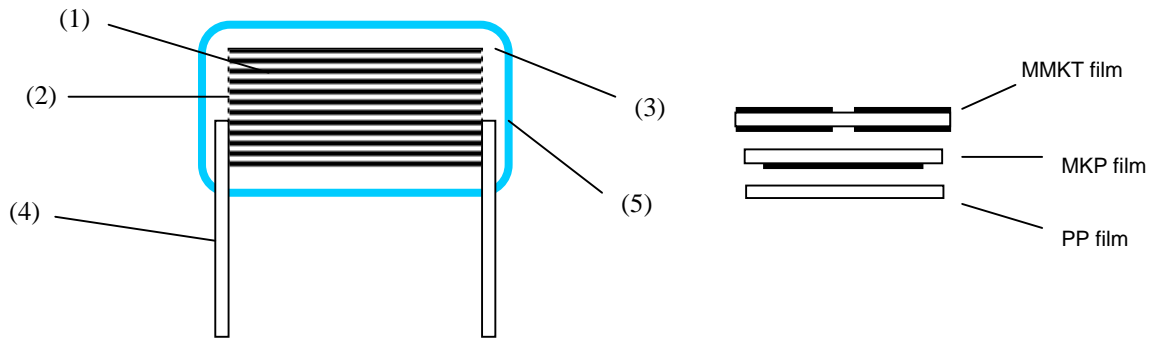
- 1) Number to be tested : Sample size as directly allocated to the code letter for IL in Table 2A of IEC 410 (Single sampling plan for normal inspection).
The acceptance number complies with AQL value : 0.65 %
- 2) This test may be replaced by in-production testing, if SPC on dimensional measurements or other mechanisms to avoid parts exceeding the limits is installed.
- 3) The 100% End-of-line testing is followed by re-inspection by sampling in order to monitor outgoing quality level by defectives per million (DPM). The sampling level and the calculation of DPM values is in accordance with CECC 00 014, counting any parametric failure as a defective. In case one or more defectives occur in a lot, this lot shall be rejected.



MATERIAL LIST

- Product type ; Metallized Polypropylene film capacitors

- Model name ; PCMP 384 XXXXX



	Description	Material	Supplier
1	MMKT film	Double side metallized PET film	SUNGMOON Elec.(Korea) STEINER GMBH(Germany) NUINTEK(Korea)
	PP film	Polypropylene film	
	MKP Film	Metallized polypropylene film	
2	Metal Spray	Tin-Zinc	SAMHWA Non-Ferrous metal Ind. SHINSAENG metal Ind.
3	Epoxy	UL94V-0	DAEJOO Fine chemical GREEN STAR
4	Lead Wire	Cu 0.6/0.8mm [Sn 100%:10 μm]	ILKWANG DAE-A LEAD SAMATRON
5	PP Case	POLYPROPYLENE UL94-V0	SAMSUNG Total LG Chemical

** Solderability : 235 , 2 sec

** Resistance to soldering heat : 260 , 10 sec