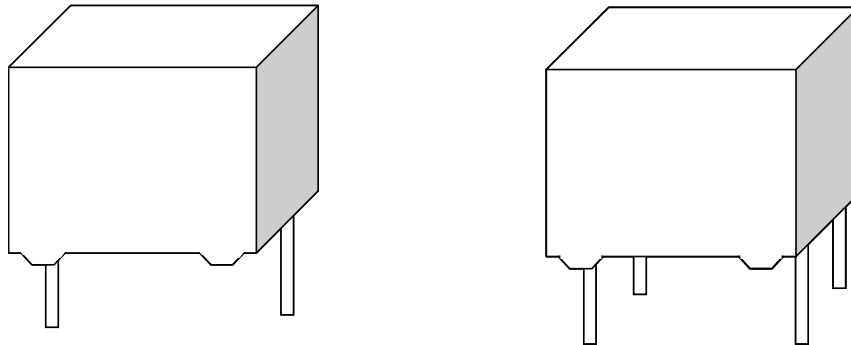


Metallized Polypropylene Film Capacitors (AC filtering)

PCPW 255



QUICK REFERENCE DATA

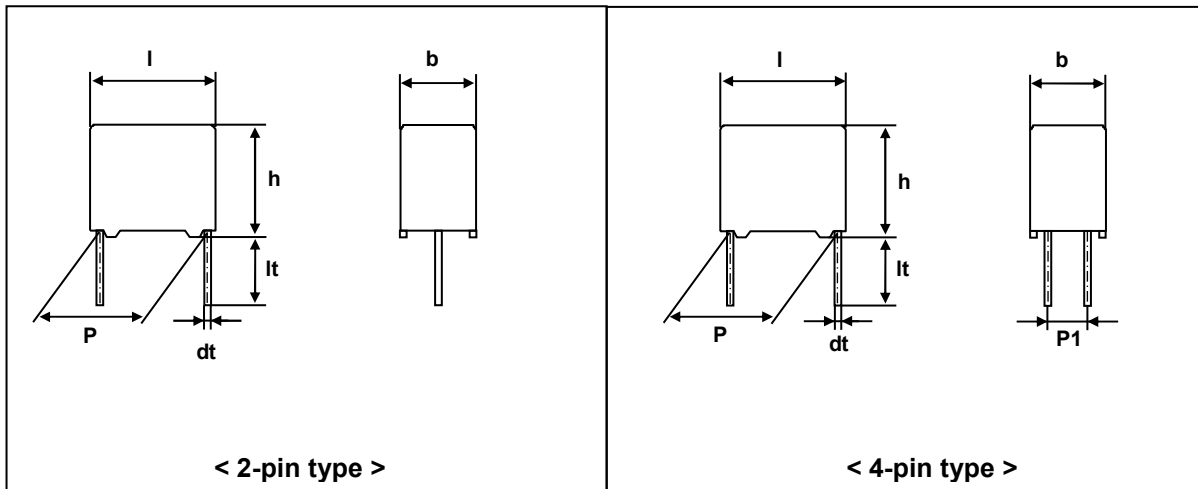
Capacitance range	1 μ F to 55 μ F
Capacitance tolerance	\pm 5%, \pm 10%
Rated voltage (V _{Rac})	250, 300, 350, 400, 450
Climatic category	40/ 85 / 56
Temperature range	-40 ~ +105 $^{\circ}$ C
Reference IEC specification	IEC 61071
Safety approvals	UL810, CSA C22.2 No.190 (Construction only / File No. E348397)
Potting & Encapsulation material	Qualified in accordance with UL94V-0

<h3>FEATURES</h3> <ul style="list-style-type: none"> . 27.5 to 52.5mm lead pitch . Supplied loose in box and arrange packing . Small dimensions . For PCB mounting . Potted in a flame retardant case . Consist of a low-inductive wound cell of Metallized(PP) film 	<h3>APPLICATIONS</h3> <ul style="list-style-type: none"> . Output AC filtering for power converters UPS, solar inverters, motor drives . Motor applications
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- Please refer to caution and warning at <http://www.pilkor.co.kr/download/Introductions.pdf> before using these products.

Metallized Polypropylene Film Capacitors (AC filtering)

Ordering Information



P	2	5	5	F	A	L	4	0	5	J	A	G	J
1~4				5~6		7	8~10			11	12	13~14	

1~4	
Code	Series Name
P255	PCPW 255

5~6	
Code	Voltage+Version
FA	250Vac
GA	300Vac
HA	350Vac
JA	400Vac
LA	450Vac

7	
Code	Original Pitch
L	27.5mm
Q	37.5mm
T	52.5mm

8~10	
Code	Capacitance (example)
335	3.3uF
336	33uF

11	
Code	Capacitance Tolerance
J	± 5 %
K	± 10 %

12	
Code	Revision
A	Standard

13~14				Product(lmax)		
Code	Packing Method	Lead length & Height	Lead Type	31.0	42.0	57.0
				Pitch(P)		
LJ	Loose in box	lt= 5.0±1.0mm	2-pin	27.5	-	-
GJ	Arrange Pack.	lt= 5.0±1.0mm	2-pin	27.5	37.5	52.5
PJ	Arrange Pack.	lt= 5.0±1.0mm	4-pin	27.5	37.5	52.5

Packing Information

SMALLEST PACKING QUANTITIES (SPQ)	Loose in box	Arrange Packing
	It = 5.0 ± 1.0mm	It = 5.0 ± 1.0mm
11.0 x 23.0 x 31.0	500	200
13.0 x 23.0 x 31.0	250	100
15.0 x 25.0 x 31.0	250	120
18.0 x 28.0 x 31.0	200	100
19.0 x 30.0 x 31.0	200	65
21.0 x 31.0 x 31.0	150	60
18.0 x 33.0 x 42.0	-	100
20.0 x 35.0 x 42.0	-	90
24.0 x 39.0 x 42.0	-	75
28.0 x 43.0 x 42.0	-	65
30.0 x 45.0 x 42.0	-	60
30.0 x 45.0 x 57.0	-	40
35.0 x 50.0 x 57.0	-	40

Metallized Polypropylene Film Capacitors (AC filtering)

PCPW 255

 $V_{Rac} = 250Vac$ $V_{Rdc} = 500Vdc$

Cap (μF)	b x h x l (mm)	P1 \pm 0.5 (mm)	dv/dt (V/us)	Ipk (A)	Code		
					P255		
		4-Pin			Loose in box	Arrange Pack.	
					Tol. \pm 10% / It = 5 \pm 1 mm		
					2-pin	4-pin	
Pitch = 27.5 \pm 0.4 mm					dt = 0.8	-	
2.5	11.0 x 21.0 x 31.0	-	25	62	FAL255KALJ	-	
3.6	13.0 x 23.0 x 31.0	-	25	90	FAL365KALJ	-	
5.0	15.0 x 25.0 x 31.0	-	25	125	FAL505KALJ	-	
7.0	18.0 x 28.0 x 31.0	-	25	175	FAL705KALJ	-	
10.0	21.0 x 31.0 x 31.0	-	25	250	FAL106KALJ	-	
Pitch = 37.5 \pm 0.7 mm					Arrange Pack.		
					dt = 1.0	dt = 1.2	
12	18.0 X 33.0 X 42.0	-	15	180	FAQ126KAGJ	-	
14	20.0 X 35.0 X 42.0	10.2	15	210	FAQ146KAGJ	FAQ146KAPJ	
19	24.0 X 39.0 X 42.0	10.2	15	285	FAQ196KAGJ	FAQ196KAPJ	
25	28.0 X 43.0 X 42.0	10.2	15	375	FAQ256KAGJ	FAQ256KAPJ	
28	30.0 X 45.0 X 42.0	20.3	15	420	FAQ286KAGJ	FAQ286KAPJ	
Pitch = 52.5 \pm 0.7 mm					Arrange Pack.		
					dt = 1.0	dt = 1.2	
40	30.0 X 45.0 X 57.0	20.3	10	400	-	FAT406KAPJ	
55	35.0 X 50.0 X 57.0	20.3	10	550	-	FAT556KAPJ	

Metallized Polypropylene Film Capacitors (AC filtering)

PCPW 255

 $V_{Rac} = 300Vac$ $V_{Rdc} = 550Vdc$

Cap (μF)	b x h x l (mm)	P1 \pm 0.5 (mm)	dv/dt (V/us)	Ipk (A)	Code		
					P255		
		4-Pin			Loose in box	Arrange Pack.	
					Tol. \pm 10% / lt = 5 \pm 1 mm		
					2-pin	4-pin	
Pitch = 27.5 \pm 0.4 mm					dt = 0.8	-	
2.0	11.0 x 21.0 x 31.0	-	30	60	GAL205KALJ	-	
2.8	13.0 x 23.0 x 31.0	-	30	84	GAL285KALJ	-	
3.5	15.0 x 25.0 x 31.0	-	30	105	GAL355KALJ	-	
5.0	18.0 x 28.0 x 31.0	-	30	150	GAL505KALJ	-	
7.5	21.0 x 31.0 x 31.0	-	30	225	GAL755KALJ	-	
Pitch = 37.5 \pm 0.7 mm					Arrange Pack.		
					dt = 1.0	dt = 1.2	
9	18.0 X 33.0 X 42.0	-	20	180	GAQ905KAGJ	-	
11	20.0 X 35.0 X 42.0	10.2	20	220	GAQ116KAGJ	GAQ116KAPJ	
15	24.0 X 39.0 X 42.0	10.2	20	300	GAQ156KAGJ	GAQ156KAPJ	
20	28.0 X 43.0 X 42.0	10.2	20	400	GAQ206KAGJ	GAQ206KAPJ	
22	30.0 X 45.0 X 42.0	20.3	20	440	GAQ226KAGJ	GAQ226KAPJ	
Pitch = 52.5 \pm 0.7 mm					Arrange Pack.		
					dt = 1.0	dt = 1.2	
30	30.0 X 45.0 X 57.0	20.3	14	420	-	GAT306KAPJ	
45	35.0 X 50.0 X 57.0	20.3	14	630	-	GAT456KAPJ	

Metallized Polypropylene Film Capacitors (AC filtering)

 $V_{Rac} = 350Vac$ $V_{Rdc} = 630Vdc$

Cap (μF)	b x h x l (mm)	P1 \pm 0.5 (mm)	dv/dt (V/us)	l _{pk} (A)	Code	
					P255	
					Loose in box	Arrange Pack.
					Tol. \pm 10% / lt = 5 \pm 1 mm	
					2-pin	4-pin
Pitch = 27.5 \pm 0.4 mm					dt = 0.8	-
1.5	11.0 x 19.0 x 31.0	-	35	52	HAL155KALJ	-
2.2	13.0 x 23.0 x 31.0	-	35	77	HAL225KALJ	-
3.0	15.0 x 25.0 x 31.0	-	35	105	HAL305KALJ	-
4.0	18.0 x 28.0 x 31.0	-	35	140	HAL405KALJ	-
5.0	19.0 x 30.0 x 31.0	-	35	175	HAL505KALJ	-
6.0	21.0 x 31.0 x 31.0	-	35	210	HAL605KALJ	-
Pitch = 37.5 \pm 0.7 mm					Arrange Pack.	
					dt = 1.0	dt = 1.2
8.0	18.0 X 33.0 X 42.0	-	25	200	HAQ805KAGJ	-
9.5	20.0 X 35.0 X 42.0	10.2	25	237	HAQ955KAGJ	HAQ955KAPJ
13	24.0 X 39.0 X 42.0	10.2	25	325	HAQ136KAGJ	HAQ136KAPJ
17	28.0 X 43.0 X 42.0	10.2	25	425	HAQ176KAGJ	HAQ176KAPJ
20	30.0 X 45.0 X 42.0	20.3	25	500	HAQ206KAGJ	HAQ206KAPJ
Pitch = 52.5 \pm 0.7 mm					Arrange Pack.	
					dt = 1.0	dt = 1.2
24	30.0 X 45.0 X 57.0	20.3	15	360	-	HAT246KAPJ
35	35.0 X 50.0 X 57.0	20.3	15	525	-	HAT356KAPJ

Metallized Polypropylene Film Capacitors (AC filtering)

PCPW 255

 $V_{Rac} = 400Vac$ $V_{Rdc} = 700Vdc$

Cap (μF)	b x h x l (mm)	P1 \pm 0.5 (mm)	dv/dt (V/us)	l _{pk} (A)	Code		
					P255		
		4-Pin			Loose in box	Arrange Pack.	
					Tol. \pm 10% / lt = 5 \pm 1 mm		
					2-pin	4-pin	
Pitch = 27.5 \pm 0.4 mm					dt = 0.8	-	
1.0	11.0 x 19.0 x 31.0	-	45	45	JAL105KALJ	-	
1.5	13.0 x 23.0 x 31.0	-	45	67	JAL155KALJ	-	
2.0	15.0 x 25.0 x 31.0	-	45	90	JAL205KALJ	-	
2.8	18.0 x 28.0 x 31.0	-	45	126	JAL285KALJ	-	
4.0	21.0 x 31.0 x 31.0	-	45	180	JAL405KALJ	-	
Pitch = 37.5 \pm 0.7 mm					Arrange Pack.		
					dt = 1.0	dt = 1.2	
5.0	18.0 X 33.0 X 42.0	-	30	150	JAQ505KAGJ	-	
6.0	20.0 X 35.0 X 42.0	10.2	30	180	JAQ605KAGJ	JAQ605KAPJ	
8.5	24.0 X 39.0 X 42.0	10.2	30	255	JAQ855KAGJ	JAQ855KAPJ	
10	28.0 X 43.0 X 42.0	10.2	30	300	JAQ106KAGJ	JAQ106KAPJ	
11	28.0 X 43.0 X 42.0	10.2	30	330	JAQ116KAGJ	JAQ116KAPJ	
13	30.0 X 45.0 X 42.0	20.3	30	390	JAQ136KAGJ	JAQ136KAPJ	
Pitch = 52.5 \pm 0.7 mm					Arrange Pack.		
					dt = 1.0	dt = 1.2	
18	30.0 X 45.0 X 57.0	20.3	20	360	-	JAT186KAPJ	
25	35.0 X 50.0 X 57.0	20.3	20	500	-	JAT256KAPJ	

 $V_{Rac} = 450Vac$ $V_{Rdc} = 900Vdc$

Cap (μF)	b x h x l (mm)	P1 \pm 0.5 (mm)	dv/dt (V/us)	l _{pk} (A)	Code		
					P255		
		4-Pin			Arrange Pack.		
					Tol. \pm 10% / lt = 5 \pm 1 mm		
					2-pin	4-pin	
Pitch = 37.5 \pm 0.7 mm					dt = 1.0	dt = 1.2	
4	24.0 X 39.0 X 42.0	10.2	35	140	LAQ405KAGJ	LAQ405KAPJ	
5	28.0 X 43.0 X 42.0	10.2	35	175	LAQ505KAGJ	LAQ505KAPJ	
6	30.0 X 45.0 X 42.0	10.2	35	210	LAQ605KAGJ	LAQ605KAPJ	

MOUNTING

NORMAL USE

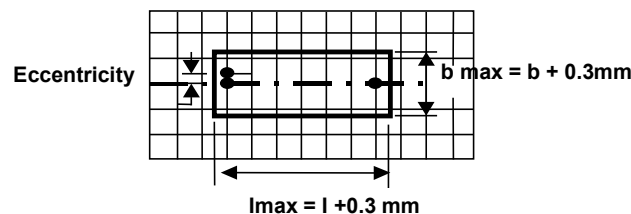
The capacitors are designed for mounting on printed-circuit boards. The capacitors packed in bandoliers are designed for mounting on printed-circuit boards by means of automatic insertion machines.

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 : $h_{max} \leq h + 0.3 \text{ mm}$

STORAGE TEMPERATURE

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

RATINGS AND CHARACTERISTICS

Unless otherwise specified all electrical values apply at an ambient temperature of $23 \pm 1 \text{ }^\circ\text{C}$, 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

- Cut off current 10mA / rise time 100V/sec.
- Test Voltage (between lead and lead) : $1.6 \times V_{Rdc}$, 1min.
- Test Voltage (between leads and case) : $2KV_{ac}$ (50 or 60Hz), 10sec.

● Capacitance

- . Capacitance : Within specified tolerance range when sine wave AC is applied at $1kHz \pm 200Hz$ and $5V_{rms}$

● Dissipation Factor(DF)

- . Dissipation factor: When sine wave AC is applied at 1kHz and $\leq 1 V_{rms}$

Pitch	Tangent of loss angle ($\times 10^{-4}$)
27.5mm	≤ 10
37.5mm	≤ 15
52.5mm	≤ 20

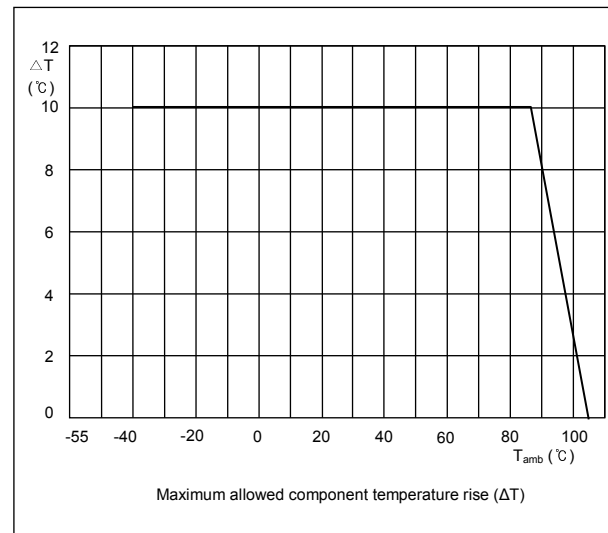
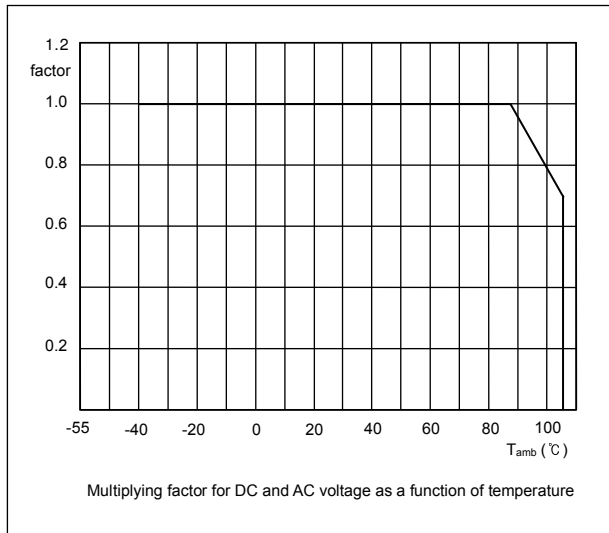
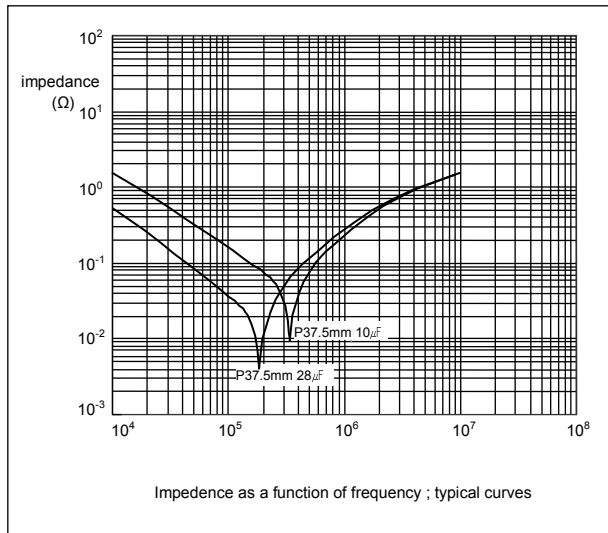
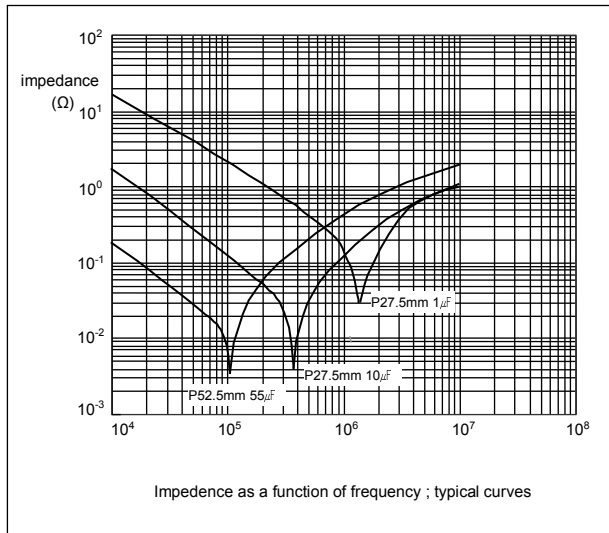
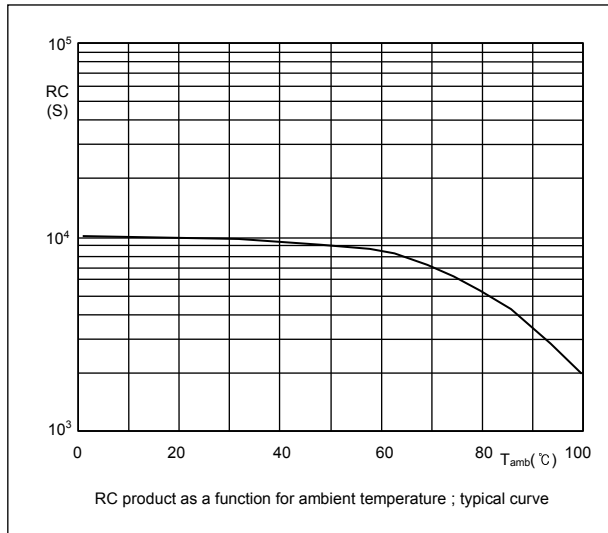
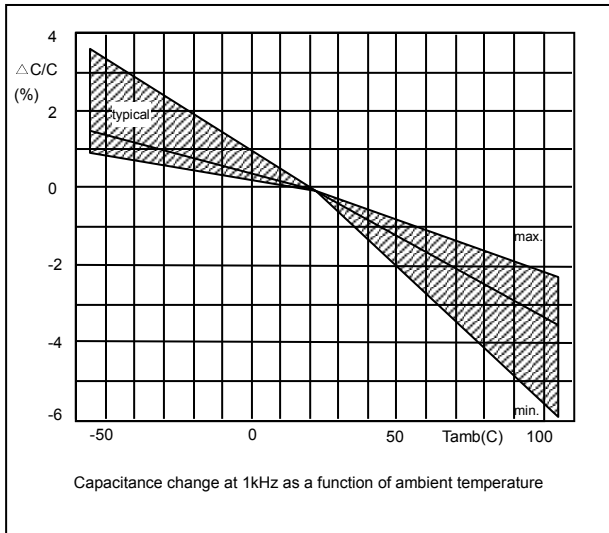
● Insulation Resistance

- . The insulation resistance is measured for 1min. \pm 5sec. at 100V
- . Minimum RC ($\Omega \cdot F$) > 10,000s
(R = insulation resistance between the terminations[Ω], C= capacitance[Farad])

● Self heating temperature

- . Maximum allowable rise is 10 $^{\circ}C$

THE GRAPHS OF CHARACTERISTICS

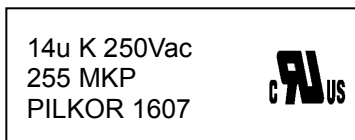


PRODUCT MARKING

Capacitors are marked with the following information :

- . Rated capacitance code in accordance with IEC 60062
- . Tolerance on rated capacitance : J : $\pm 5\%$ K : $\pm 10\%$
- . Rated (AC) Voltage (e.g. 250Vac)
- . Code for dielectric material (MKP)
- . Manufacturer's type designation (PCPW 255 or 255)
- . Manufacturer's name (PILKOR)
- . Year and week of manufacturing (1607)
- . Safety approvals
- . Marking color : White or Black

Example of marking

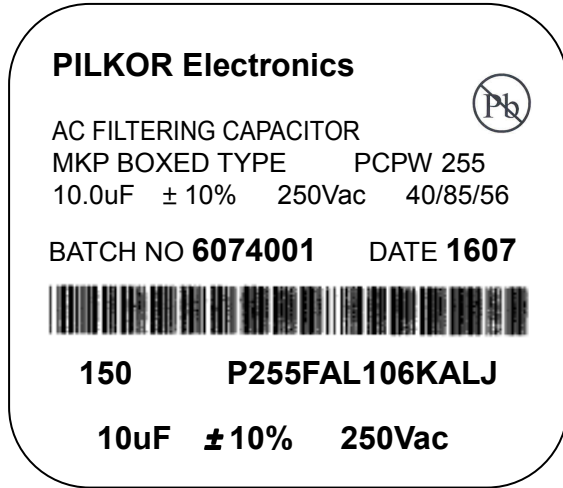


Marking on the top or side

Metallized Polypropylene Film Capacitors (AC filtering)

PACKAGE MARKING

The package containing the capacitors is marked as shown.



LINE MARKING EXPLANATION

- 1 Manufacturer`s name
- 2 Sub – family
3. Pb free marking(JEDEC-STD-97)
- 4 Type description
- 5 Capacitance value, tolerance,
Voltage and climatic category (IEC)
- 6 Batch no. & production period
year and week code
- 7 Quantity and Product code
- 8 Capacitance, tolerance and voltage