

PFC Input Capacitors

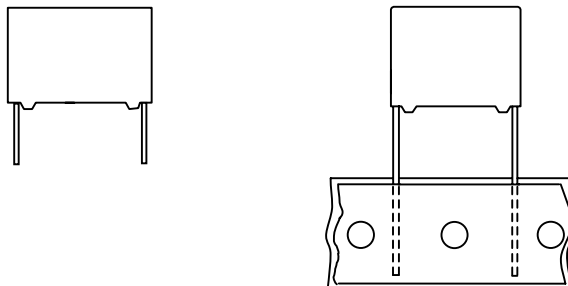
Metallized Polypropylene film capacitors

PCMP 372

(MPP)

MKP RADIAL POTTED CAPACITORS

Pitch 15.0/22.5/27.5mm



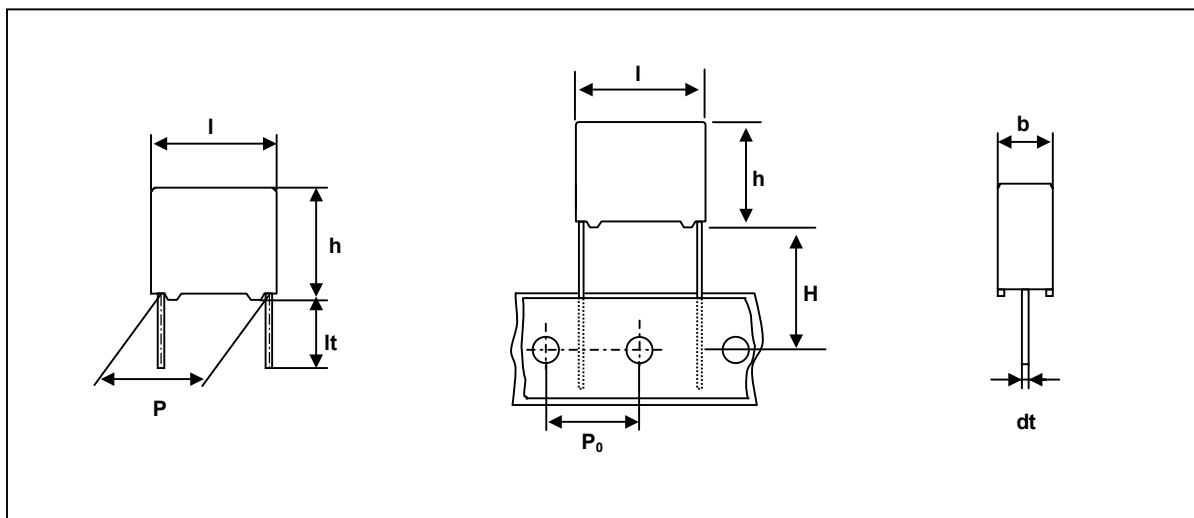
QUICK REFERENCE DATA

Capacitance range (E6 series)	0.022 to 2.2 μ F
Capacitance tolerance	$\pm 5\%$, $\pm 10\%$
Rated voltage (DC)	450V, 550V, 630 V
Climatic category	40/105/21
Temperature range	-40 ~ + 105
Reference specification	IEC 60384-16
Potting & Encapsulation material	Qualified in accordance with UL94V-0

FEATURES <ul style="list-style-type: none"> . Low-noise . Self-healing properties . Low dissipation factor . Low ESR . Supplied loose in box & ammo packing 	APPLICATIONS <ul style="list-style-type: none"> . PFC Input Capacitor for LCD/PDP power
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- Please refer to caution and warning at <http://www.pilkor.co.kr/download/Introductions.pdf> before using these products.

Ordering Information



PCMP 372 X X X X X X

Type series

Capacitance

Code	Voltage
L	450V
R	450V mini
H	550V
6	630V

Code	Pitch
D	10.0mm
F	15.0mm
J	22.5mm
L	27.5mm

Available versions					Product (I_{max})			
code	Packing method	C - tol.	Lead length & Height	Hole to hole (P_0)	12.5	18.0	26.0	31.0
					Pitch (P)			
3	Loose in box	$\pm 5\%$	$It = 5.0 \pm 1.0mm$	-	10.0	15.0	22.5	27.5
4	Loose in box	$\pm 10\%$	$It = 5.0 \pm 1.0mm$	-	10.0	15.0	22.5	27.5
5	Loose in box	$\pm 5\%$	$It = 25 \pm 2.0mm$	-	10.0	15.0	22.5	27.5
6	Loose in box	$\pm 10\%$	$It = 25 \pm 2.0mm$	-	10.0	15.0	22.5	27.5
7	Ammopack	$\pm 5\%$	$H = 18.5 mm^*$	12.7mm	10.0	15.0	22.5	27.5
8	Ammopack	$\pm 10\%$	$H = 18.5 mm^*$	12.7mm	10.0	15.0	22.5	27.5

PFC Input Capacitors

PCMP 372

Metallized Polypropylene film capacitors

(MPP)

 $V_{Rdc} = 450 V$

Cap. (μF)	b x h x l (mm)	Mass (g)	CATALOGUE NUMBER	
			PCMP 372.....	
			loose in box	
			lt= 5.0 \pm 1.0 mm	lt= 25.0 \pm 2.0 mm
			C – tol. \pm 10%	C – tol. \pm 10%
Pitch = 15.0 \pm 0.4 mm			dt = 0.8 + 0.08 / -0.05 mm	
0.47	8.5 x 15.0 x 18.0	2.6	PCMP 372FL4474	PCMP 372FL6474
0.56	8.5 x 15.0 x 18.0	2.6	PCMP 372FL4564	PCMP 372FL6564
0.68	10.0 x 16.5 x 18.0	3.1	PCMP 372FL4684	PCMP 372FL6684
0.82	11.0 x 18.5 x 18.0	4.1	PCMP 372FL4824	PCMP 372FL6824
1.0	11.0 x 18.5 x 18.0	4.1	PCMP 372FL4105	PCMP 372FL6105
Pitch = 22.5 \pm 0.4 mm			dt = 0.8 + 0.08 / -0.05 mm	
1.0	8.5 x 18.0 x 26.0	4.4	PCMP 372JL4105	PCMP 372JL6105
1.2	10.0 x 19.5 x 26.0	5.5	PCMP 372JL4125	PCMP 372JL6125
1.5	11.5 x 21.0 x 26.0	6.7	PCMP 372JL4155	PCMP 372JL6155
1.8	12.0 x 22.0 x 26.0	7.5	PCMP 372JL4185	PCMP 372JL6185
2.2	13.0 x 23.0 x 26.0	8.0	PCMP 372JL4225	PCMP 372JL6225

 $V_{Rdc} = 450 V$ mini

Cap. (μF)	b x h x l (mm)	Mass (g)	CATALOGUE NUMBER	
			PCMP 372.....	
			loose in box	
			lt= 5.0 \pm 1.0 mm	lt= 25.0 \pm 2.0 mm
			C – tol. \pm 10%	C – tol. \pm 10%
Pitch = 10.0 \pm 0.4 mm			dt = 0.6 + 0.06 / -0.05 mm	
0.22	5.0 x 11.0 x 12.5	0.9	PCMP 372DR4224	PCMP 372DR6224
0.33	6.2 x 12.3 x 12.5	1.0	PCMP 372DR4334	PCMP 372DR6334
Pitch = 15.0 \pm 0.4 mm			dt = 0.8 + 0.08 / -0.05 mm	
0.47	6.0 x 12.0 x 18.0	1.4	PCMP 372FR4474	PCMP 372FR6474
0.56	7.0 x 13.5 x 18.0	1.9	PCMP 372FR4564	PCMP 372FR6564
0.68	8.5 x 15.0 x 18.0	2.6	PCMP 372FR4684	PCMP 372FR6684
0.82	8.5 x 15.0 x 18.0	2.6	PCMP 372FR4824	PCMP 372FR6824
1.0	8.5 x 15.0 x 18.0	2.6	*PCMP 372FR4105	*PCMP 372FR6105
1.0	10.0 x 16.5 x 18.0	3.1	**PCMP 372FR3105	**PCMP 372FR5105
1.2	10.0 x 16.5 x 18.0	3.1	PCMP 372FR4125	PCMP 372FR6125
1.5	11.0 x 18.5 x 18.0	4.1	PCMP 372FR4155	PCMP 372FR6155
Pitch = 22.5 \pm 0.4 mm			dt = 0.8 + 0.08 / -0.05 mm	
0.47	6.0 x 15.5 x 26.5	3.0	PCMP 372JR4474	PCMP 372JR6474
0.56	6.0 x 15.5 x 26.5	3.0	PCMP 372JR4564	PCMP 372JR6564
0.68	6.0 x 15.5 x 26.5	3.0	PCMP 372JR4684	PCMP 372JR6684
0.82	7.0 x 16.5 x 26.0	3.5	PCMP 372JR4824	PCMP 372JR6824
1.0	7.0 x 16.5 x 26.0	3.5	PCMP 372JR4105	PCMP 372JR6105
1.2	8.5 x 18.0 x 26.0	4.4	PCMP 372JR4125	PCMP 372JR6125
1.5	8.5 x 18.0 x 26.0	4.4	PCMP 372JR4155	PCMP 372JR6155
1.8	10.0 x 19.5 x 26.0	5.5	PCMP 372JR4185	PCMP 372JR6185
2.2	10.0 x 19.5 x 26.0	5.5	PCMP 372JR4225	PCMP 372JR6225

* 10% tolerance products only / ** 5% tolerance products only

PFC Input Capacitors

PCMP 372

Metallized Polypropylene film capacitors

(MPP)

 $V_{Rdc} = 550 V$

Cap. (μF)	b x h x l (mm)	Mass (g)	CATALOGUE NUMBER	
			PCMP 372.....	
			loose in box	
			It= 5.0 \pm 1.0 mm C – tol. \pm 10%	It= 25.0 \pm 2.0 mm C – tol. \pm 10%
Pitch = 15.0 \pm 0.4 mm			dt = 0.8 + 0.08 / -0.05 mm	
0.22	7.0 x 13.5 x 18.0	1.9	PCMP 372FH4224	PCMP 372FH6224
0.47	10.0 x 16.5 x 18.0	3.1	PCMP 372FH4474	PCMP 372FH6474
0.56	11.0 x 18.5 x 18.0	4.1	PCMP 372FH4564	PCMP 372FH6564
0.68	11.0 x 18.5 x 18.0	4.1	PCMP 372FH4684	PCMP 372FH6684
Pitch = 22.5 \pm 0.4 mm			dt = 0.8 + 0.08 / -0.05 mm	
0.68	8.5 x 18.0 x 26.0	4.4	PCMP 372JH4684	PCMP 372JH6684
0.82	10.0 x 19.5 x 26.0	5.5	PCMP 372JH4824	PCMP 372JH6824
1.0	11.5 x 21.0 x 26.0	6.7	PCMP 372JH4105	PCMP 372JH6105
1.2	11.5 x 21.0 x 26.0	6.7	PCMP 372JH4125	PCMP 372JH6125
1.5	13.0 x 23.0 x 26.0	8.0	PCMP 372JH4155	PCMP 372JH6155
Pitch = 27.5 \pm 0.4 mm			dt = 0.8 + 0.08 / -0.05 mm	
1.5	13.0 x 23.0 x 31.0	10.4	PCMP 372LH4155	PCMP 372LH6155
1.8	15.0 x 25.0 x 31.0	12.8	PCMP 372LH4185	PCMP 372LH6185
2.2	15.0 x 25.0 x 31.0	12.8	PCMP 372LH4225	PCMP 372LH6225

 $V_{Rdc} = 630 V$

Cap. (μF)	b x h x l (mm)	Mass (g)	CATALOGUE NUMBER	
			PCMP 372.....	
			loose in box	
			It= 5.0 \pm 1.0 mm C – tol. \pm 10%	It= 25.0 \pm 2.0 mm C – tol. \pm 10%
Pitch = 10.0 \pm 0.4 mm			dt = 0.6 + 0.06 / -0.05 mm	
0.022	4.0 x 10.0 x 12.5	0.8	PCMP 372D64223	PCMP 372D66223
0.068	5.0 x 11.0 x 12.5	0.9	PCMP 372D64683	PCMP 372D66683
0.10	5.0 x 11.0 x 12.5	0.9	PCMP 372D64104	PCMP 372D66104
0.12	5.0 x 11.0 x 12.5	0.9	PCMP 372D64124	PCMP 372D66124
0.22	6.2 x 12.3 x 12.5	1.0	PCMP 372D64224	PCMP 372D66224
Pitch = 15.0 \pm 0.4 mm			dt = 0.8 + 0.08 / -0.05 mm	
0.47	11.0 x 18.5 x 18.0	4.1	PCMP 372F64474	PCMP 372F66474
Pitch = 22.5 \pm 0.4 mm			dt = 0.8 + 0.08 / -0.05 mm	
0.47	8.5 x 18.0 x 26.0	4.4	PCMP 372J64474	PCMP 372J66474
0.56	10.0 x 19.5 x 26.0	5.5	PCMP 372J64564	PCMP 372J66564
0.68	11.5 x 21.0 x 26.0	6.7	PCMP 372J64684	PCMP 372J66684
0.82	13.0 x 23.0 x 26.0	8.0	PCMP 372J64824	PCMP 372J66824
1.0	13.0 x 23.0 x 26.0	8.0	PCMP 372J64105	PCMP 372J66105
Pitch = 27.5 \pm 0.4 mm			dt = 0.8 + 0.08 / -0.05 mm	
1.0	13.0 x 23.0 x 31.0	10.4	PCMP 372L64105	PCMP 372L66105
1.2	13.0 x 23.0 x 31.0	10.4	PCMP 372L64125	PCMP 372L66125
1.5	15.0 x 25.0 x 31.0	12.8	PCMP 372L64155	PCMP 372L66155
1.8	18.0 x 28.0 x 31.0	17.2	PCMP 372L64185	PCMP 372L66185
2.2	18.0 x 28.0 x 31.0	17.2	PCMP 372L64225	PCMP 372L66225

MOUNTING**NORMAL USE**

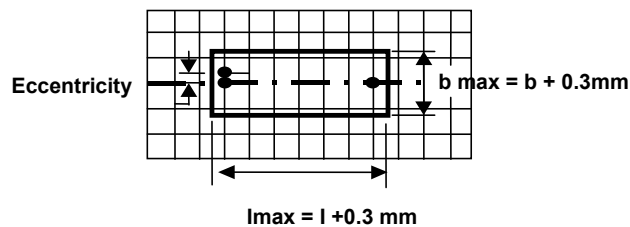
The capacitors are designed for mounting on printed-circuit boards. The capacitors packed in bandoliers are designed for mounting on printed-circuit boards by means of automatic insertion machines.

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

STORAGE TEMPERATURE

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

RATINGS AND CHARACTERISTICS

Unless otherwise specified all electrical values apply at an ambient temperature of 23 ± 1 , an atmospheric pressure of 86 to 106kPa 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) : $2840 V_{dc}$, 1min.

Capacitance

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

Dissipation Factor(DF)

- . Dissipation factor: When sine wave AC is applied at 10kHz and $1 V_{rms}$, $DF < 20 \times 10^{-4}$

Insulation Resistance

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

Rated voltage	Minimum RC	Minimum Insulation Resistance
	Capacitance > 0.33uF	Capacitance \leq 0.33uF
450V, 550V & 630V(except P10.0mm)	> 30,000s	> 90G Ω
450V mini & 630V(only P10.0mm)	> 10,000s	> 30G Ω

(R = insulation resistance between the terminations[], C= capacitance[Farad])

Self heating temperature

- . Maximum allowable rise is 7

Rated Voltage Pulse Load Slope(dV/dt)_R

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

Rated voltage	MAXIMUM RATED VOLTAGE PULSE SLOPE (V/ μ s)			
	P = 10.0 mm	P = 15.0 mm	P = 22.5 mm	P = 27.5 mm
450V & 450V mini	150	95	60	-
550V	-	120	70	55
630V	270	141	85	65

PRODUCT MARKING

The capacitors are marked with the following informations :

- . Rated capacitance in code according to IEC 60062 (680n ; 680nF)
- . Tolerance on rated capacitance (J : $\pm 5\%$, K : $\pm 10\%$)
- . Rated DC voltage (630V)
- . Manufacturer's mark (PILKOR)
- . Manufacturer's type designation (372)
- . Code for dielectric material (MKP)
- . Date code number (WK....)

Example of marking

Pitch = 10.0mm

220n K 450V 372 MKP PILKOR

Marking on the side

Pitch = 15.0mm

470n K 630V 372 MKP

Marking on the top

PILKOR WK....

Marking on the side

Pitch = 22.5mm or 27.5

680n K 630V 372 MKP

Marking on the top

PILKOR WK....

Marking on the side

or

680n K 630V PILKOR 372 MKP WK....

Marking on the top