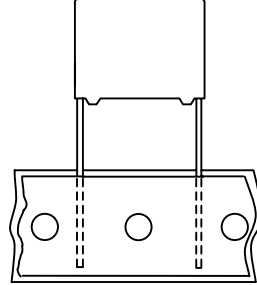
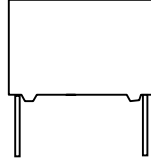


MKP RADIAL POTTED CAPACITORS

Pitch 10.0/15.0/22.5/27.5mm



PRELIMINARY

QUICK REFERENCE DATA

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

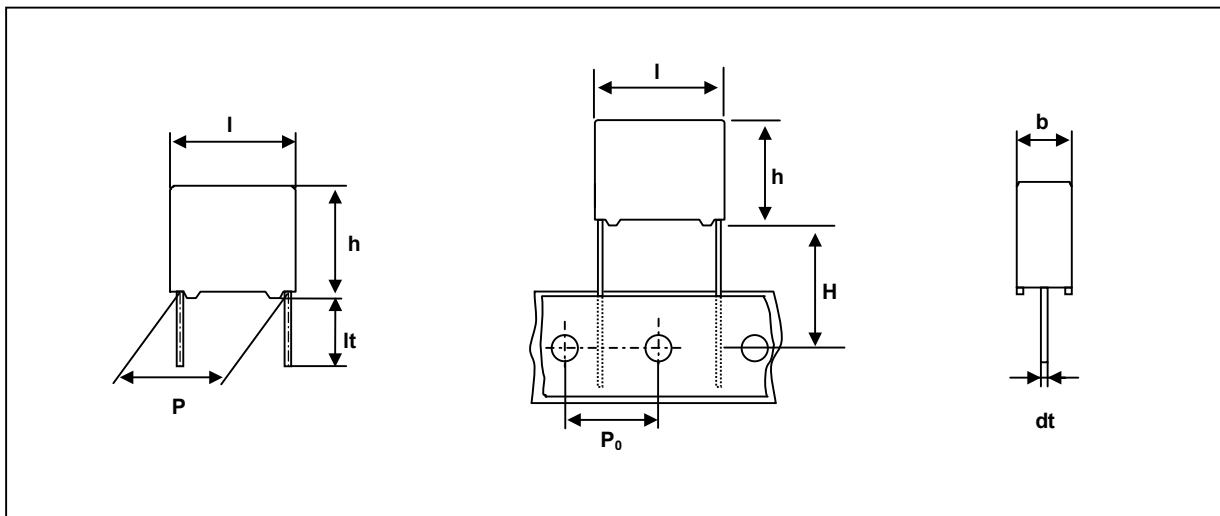
<p>FEATURES</p> <ul style="list-style-type: none"> . Low-noise . Self-healing properties . Low dissipation factor . Low ESR . Supplied loose in box 	<p>APPLICATIONS</p> <ul style="list-style-type: none"> . PFC Input Capacitor for LCD/PDP power
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------

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

PFC Input Capacitors
Metallized Polypropylene film capacitors

PCMP 372
(MPP)

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 _o)	12.5	18.0	26.0	31.0
					Pitch (P)			
3	Loose in box	± 5%	It = 5.0±1.0mm	-	10.0	15.0	22.5	27.5
4	Loose in box	±10%	It = 5.0±1.0mm	-	10.0	15.0	22.5	27.5
5	Loose in box	± 5%	It = 25±2.0mm	-	10.0	15.0	22.5	27.5
6	Loose in box	±10%	It = 25±2.0mm	-	10.0	15.0	22.5	27.5
7	Ammopack	± 5%	H = 18.5 mm*	12.7mm	10.0	15.0	22.5	27.5
8	Ammopack	±10%	H = 18.5 mm*	12.7mm	10.0	15.0	22.5	27.5

* H(In-tape height) ; For detailed specifications refer to chapter PACKAGING

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

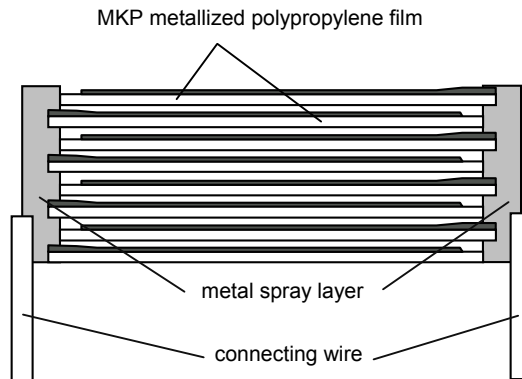
(MPP)

 $V_{Rdc} = 550 V$

Cap. (μF)	b x h x l (mm)	Mass (g)	CATALOGUE NUMBER	
			PCMP 372.....	
			loose in box	
			lt= 5.0 \pm 1.0 mm C – tol. \pm 10%	lt= 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	
0.47	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	
			lt= 5.0 \pm 1.0 mm C – tol. \pm 10%	lt= 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

CONSTRUCTION**Description ;**

- . Low – inductive wound cell of metallized polypropylene (PP) film.
- . Potted with blue epoxy resin in a blue flame-retardant polypropylene case
- . Radial leads, tin-coated.

MOUNTING**NORMAL USE**

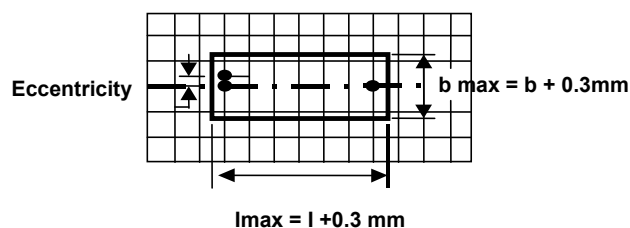
The capacitors are designed for mounting on printed-circuit boards. The capacitors packed in bandoliers are designed for mounting on printed-circuit boards by means of automatic insertion machines.

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 : $h_{max} = h + 0.3mm$

PFC Input Capacitors**PCMP 372****Metallized Polypropylene film capacitors****(MPP)****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 1kHz ± 200 Hz and $5V_{rms}$

Dissipation Factor(DF)

- . Dissipation factor: When sine wave AC is applied at 10kHz and $1 V_{rms}$, $DF < 20 \times 10^{-4}$
 $DF < 15 \times 10^{-4}$ when $C < 1.0 \mu F$
 $DF < 20 \times 10^{-4}$ when $C \geq 1.0 \mu F$

Insulation Resistance

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

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 [Ω], 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

PFC Input Capacitors
Metallized Polypropylene film capacitors

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 : ±5%, K : ±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

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

or Marking on the top

PACKAGE MARKING

The package containing the capacitors is marked as shown.

PILKOR Electronics		
AC / PULSE P.P. FILM CAPACITOR		
MKP RAD. POTTED TYPE		
0.68uF	±5%	630V- 40/105/21
BATCH NO 5343072 DATE 0604		
		
1000	PCMP 372J63684	
0.68uF	±5%	630Vdc

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 (13NC)
- 8 Capacitance, tolerance and voltage

INSPECTION REQUIREMENTS

Note 1 : Sub-clause numbers of tests and performance requirements refer to the Sectional Specification, IEC 384-16 and Section One this specification.

Note 2 : 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 3 : 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 10kHz			As in this specification
4.2.1 Voltage proof (test A)		at $1.6 \times V_{Rdc}$ for 1min. or $1.75 \times V_{Rdc}$ for 5 s			No breakdown or flashover.
4.2.5 Insulation resistance (test A)		at 100V for $V_{Rdc} < 500V$ at 500V for $V_{Rdc} \geq 500V$			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.

PFC Input Capacitors

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 10kHz			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 $V_{Rdc} < 500V$ at 500V for $V_{Rdc} \geq 500V$			As in this specification(at 20 °C)
4.3 Robustness of terminals		Tensile ; load 10N Bending ; $4 \times 90^\circ$			No visible damage, Legible marking
4.4 Resistance to soldering heat		Solder bath : 260 °C for 10 s			No visible damage $\Delta C/C \leq 1\%$ $\Delta \tan \delta < 0.0015$
4.14 Component solvent resistance		Isopropyl alcohol ; 23 °C ; 5 min			No visible damage $\Delta C/C \leq 1\%$ $\Delta \tan \delta < 0.0015$
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
4.7 Vibration (see note 3)		Frequency ; 10Hz to 55Hz Amplitude : 0.75mm or acceleration $100m/s^2$ for 6hrs			No visible damage
4.9 Shock (see note 3)		Half sine wave ; $490m/s^2$; 11 ms			No visible damage $\Delta C/C \leq 1\%$ $\Delta \tan \delta < 0.0015$ $R_{ins} \geq 50\%$ specified value

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					
4.10.2 Dry heat		T = + 105 for 16 hours			No visible damage, Legible marking $\Delta C/C \leq 3\%$ $\Delta \tan \delta < 0.003$ $R_{ins} \geq 50\%$ specified value
4.10.3 Damp heat cyclic, test Db, first cycle					
4.10.4 Cold		T = -40 for 2 hours			
4.10.6 Damp heat cyclic, test Db, remaining cycle					
Sub-group C2	D		6	15	
4.11 Damp heat steady state		21days ; 40 ; 90 to 95%RH			No visible damage, Legible marking $\Delta C/C \leq 5\%$ $\Delta \tan \delta < 0.002$ (C < 1uF) $\Delta \tan \delta < 0.005$ (1uF \leq C \leq 1.5uF) $R_{ins} \geq 50\%$ specified value
Sub-group C3	D		3	21	
4.12 Endurance (DC)		1000hours ; 105 ; 1.25 x V _{Rdc} R = 0.022/C [] C = capacitance[F]			No visible damage, Legible marking $\Delta C/C \leq 5\%$ $\Delta \tan \delta < 0.004$ $R_{ins} \geq 50\%$ specified value
Sub-group C4	D		3	9	
4.2.6 Temperature characteristics		Lower category temperature Upper category temperature			-40°C to +20°C $0\% \leq \Delta C/C \leq 3\%$ +20°C to +85°C $-3.25\% \leq \Delta C/C \leq 0\%$ RC \geq 1200s
4.13 Charge and discharge		Number of pulse; 10,000cycles Pulse frequency ; (1Hz) Test pulse rise; 1.5 x C(dV/dt) _R			$\Delta C/C \leq 3\%$ $\Delta \tan \delta < 0.003$ $R_{ins} \geq 50\%$ specified value

PFC Input Capacitors

PCMP 372

Metallized Polypropylene film capacitors

(MPP)

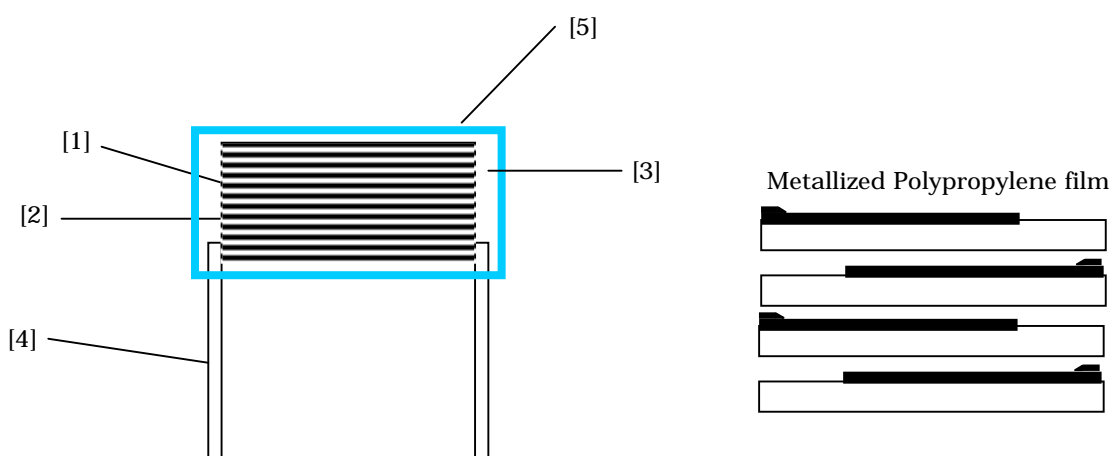
TEST	D or ND	CONDITIONS	p	n	REQUIREMENTS
Sub-group ADD1	D		3	35	
A.1 Solderability		Non-activated colophony flux 501 Solder bath : 235°C Dwell time : 2s			Good tinning as evidenced by free flowing of the solder with wetting of the terminations (>95%)
Solvent resistance of the marking		Isopropyl alcohol at 23 Rubbing material ; cotton wool immersion time : 5 min			Legible marking
Sub-group ADD2	D		3	12	
A.2 Heat storage		1000 hrs Upper category temperature			$\Delta C/C \leq 3\%$ $\Delta \tan \delta < 0.002$ ($C < 1\mu F$) $\Delta \tan \delta < 0.005$ ($1\mu F \leq C \leq 1.5\mu F$) $R_{ins} \geq 50\%$ 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.			$\Delta C/C \leq 1\%$ $\Delta \tan \delta < 0.0005$ ($C \leq 100nF$) $\Delta \tan \delta < 0.001$ ($100nF < C \leq 470nF$) $\Delta \tan \delta < 0.0015$ ($C > 470nF$) $R_{ins} \geq 50\%$ 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.			$\Delta C/C \leq 2\%$ $\Delta \tan \delta < 0.0005$ ($C \leq 100nF$) $\Delta \tan \delta < 0.001$ ($100nF < C \leq 470nF$) $\Delta \tan \delta < 0.0015$ ($C > 470nF$) $R_{ins} \geq 50\%$ specified value



MATERIAL LIST

- Product type ; Metallized Polypropylene film capacitors

- Model name ; PCMP 372



	Description	Material	Supplier
1	MKP Film	Metallized polypropylene	SUNGMOON Elec.(Korea) STEINER GMBH(Germany) NUINTEK(Korea)
2	Metal Spray	Tin-Zinc	SAMHWA Non-Ferrous metal Ind. SHINSAENG metal Ind.
3	Epoxy	UL 94V-0	DAEJOO Fine chemical GREEN STAR
4	Lead Wire	Cu 0.8mm [Sn 100%:10 μm]	ILKWANG DAE-A LEAD
5	PP Case	POLYPROPYLENE UL94-V0	SAMSUNG Total

** Solderability : 235 , 2 sec

** Resistance to soldering heat : 260 , 10 sec