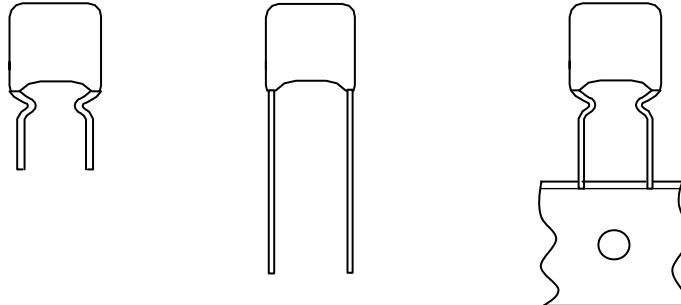


## PFC Input Capacitors Metallized Polypropylene film capacitors

**PCMP 392**  
**(MPP)**

MKP LACQUERED CAPACITORS(Dipped Type)-Brown

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



### QUICK REFERENCE DATA

Capacitance range (E12 series)	0.22 to 2.2 $\mu$ F
Capacitance tolerance	$\pm$ 5%, $\pm$ 10%
Rated voltage (DC)	450V
Climatic category	40/105/21
Temperature range	-40 $^{\circ}$ C ~ +105 $^{\circ}$ C
Reference specification	IEC 60384-16
Coating Materials	Qualified in accordance with UL94V-0
Passive flammability category to IEC 60065	Class B

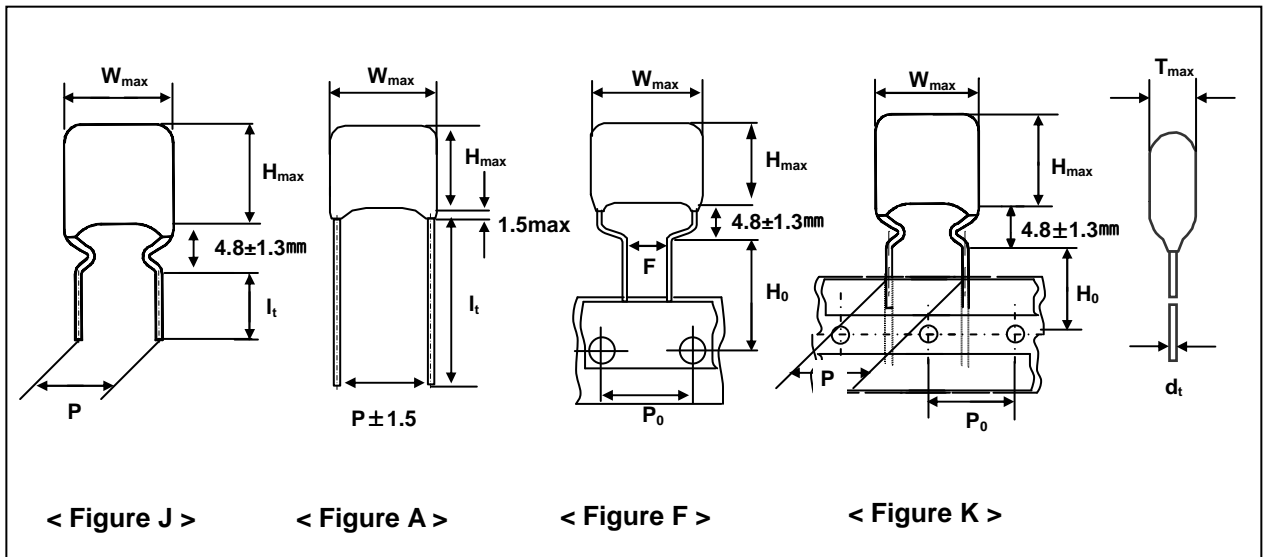
FEATURES	APPLICATIONS
<ul style="list-style-type: none"> <li>. Low-noise</li> <li>. Self-healing properties</li> <li>. Low dissipation factor</li> <li>. Low ESR</li> <li>. Cell coated with flame resisting epoxy lacquer</li> <li>. Supplied loose in box</li> <li>. Miniature type of PCMP 472 series</li> </ul>	<ul style="list-style-type: none"> <li>. PFC Input Capacitor for LCD/PDP power</li> <li>. PFC Input Capacitor for LED lamp power</li> </ul>

- 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 392**  
**(MPP)**

**Ordering Information**



P	3	9	2	H	A	F	6	8	4	J	A	J	T
1				2		3	4		5	6	7		

1	
Code	Series Name
P392	PCMP 392

2	
Code	Voltage+Version
HA	450V

3	
Code	Original Pitch
D	10.0mm
F	15.0mm

4	
Code	Capacitance (example)
474	0.47uF
105	1.0uF

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

6	
Code	Revision
A	Standard

7					Product(Wmax)	
Code	Packing Method	Lead Figure	Lead length & Height	Hole to hole (Po)	12.5	18.0
					Pitch(P or F)	
AM	Loose in box - Vinyl	A	lt= 20.0mm(min.)	-	10.0	15.0
JT	Loose in box - Vinyl	J	lt=4.5±0.5mm	-	10.0	15.0
KA	Ammo packing	K	H0=16.0mm	12.7mm	10.0	15.0
FG	Ammo packing	F	H0=16.0mm	15.0mm	7.5(*)	7.5(*)

\*Reduced pitch(Reduced lead spacings).

## PFC Input Capacitors

PCMP 392

## Metallized Polypropylene film capacitors

(MPP)

 $V_{Rdc} = 450V$ 

Cap. ( $\mu F$ )	$W_{max} \times H_{max} \times T_{max}$ (mm)	Mass (g)	CATALOGUE NUMBER	
			loose in box – Vinyl / Figure J	
			It= 4.5 $\pm$ 0.5 mm	
			C – tol. $\pm$ 5%	C – tol. $\pm$ 10%
Pitch = 10.0 $\pm$ 0.8 mm			dt = 0.6 + 0.06 / -0.05 mm	
0.22	12.5 x 10.5 x 5.5	0.7	P392HAD224JAJT	P392HAD224KAJT
0.27	12.5 x 11.0 x 5.7	0.8	P392HAD274JAJT	P392HAD274KAJT
0.33	12.5 x 11.5 x 6.2	0.8	P392HAD334JAJT	P392HAD334KAJT
0.39	12.5 x 12.0 x 6.6	0.9	P392HAD394JAJT	P392HAD394KAJT
0.47	12.5 x 14.6 x 6.1	1.1	P392HAD474JAJT	P392HAD474KAJT
0.56	12.5 x 15.2 x 6.7	1.2	P392HAD564JAJT	P392HAD564KAJT
0.68	12.5 x 15.8 x 7.3	1.4	P392HAD684JAJT	P392HAD684KAJT
0.82	12.5 x 16.5 x 8.0	1.6	P392HAD824JAJT	P392HAD824KAJT
1.0	12.5 x 17.3 x 8.8	1.8	P392HAD105JAJT	P392HAD105KAJT
Pitch = 15.0 $\pm$ 0.8 mm			dt = 0.8 + 0.08 / -0.05 mm	
0.47	18.0 x 11.0 x 6.0	0.9	P392HAF474JAJT	P392HAF474KAJT
0.56	18.0 x 11.5 x 6.0	1.0	P392HAF564JAJT	P392HAF564KAJT
0.68	18.0 x 12.0 x 6.5	1.1	P392HAF684JAJT	P392HAF684KAJT
0.82	18.0 x 12.5 x 7.0	1.3	P392HAF824JAJT	P392HAF824KAJT
1.0	18.0 x 13.0 x 7.7	1.5	P392HAF105JAJT	P392HAF105KAJT
1.2	18.0 x 13.7 x 8.5	1.8	P392HAF125JAJT	P392HAF125KAJT
1.5	18.0 x 14.5 x 9.3	2.1	P392HAF155JAJT	P392HAF155KAJT
1.8	18.0 x 15.5 x 10.0	2.5	P392HAF185JAJT	P392HAF185KAJT
2.2	18.0 x 16.5 x 11.0	2.9	P392HAF225JAJT	P392HAF225KAJT

**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.

**STORAGE TEMPERATURE**

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

**RATINGS AND CHARACTERISTICS**

Unless otherwise specified all electrical values apply at an ambient temperature of  $23 \pm 1^{\circ}\text{C}$ , 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 116  $\pm 4$  hours by heating the products in a circulating air oven at the rated temperature and a relative humidity not exceeding 20%.

# PFC Input Capacitors

## Metallized Polypropylene film capacitors

**PCMP 392**  
**(MPP)**

### 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  $\pm 200$ Hz and max.  $5V_{rms}$

#### ● Dissipation Factor(DF)

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

#### ● Insulation Resistance

- . The insulation resistance is measured for 1min.  $\pm 5$ 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	> 10,000s	> 30G $\Omega$

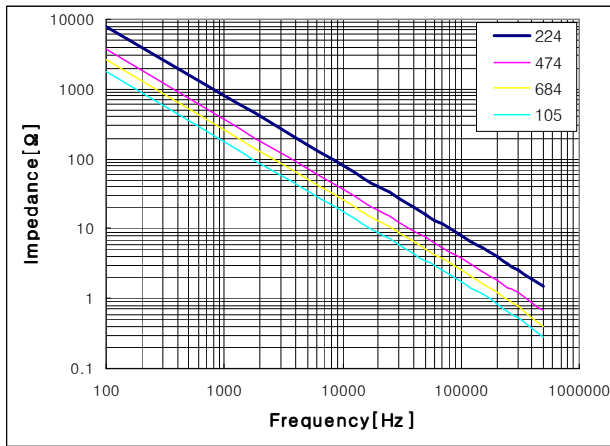
( R = insulation resistance between the terminations[ $\Omega$ ], C= capacitance[Farad] )

#### ● Rated Voltage Pulse Load Slope(dV/dt)<sub>R</sub>

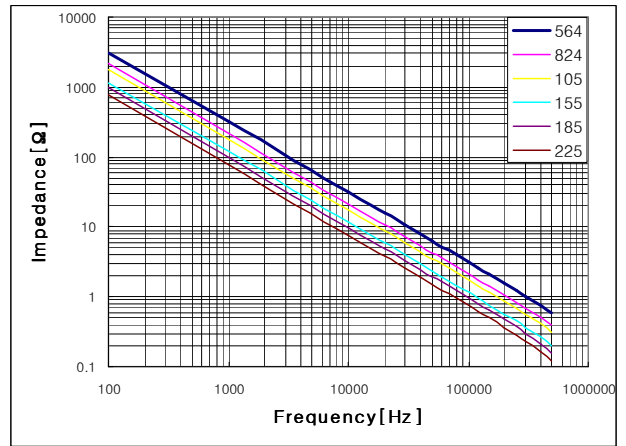
- . For values see specific reference data. IF the pulse voltage is lower than the rated voltage, the values of the specific reference data must be multiplied by  $V_{Rdc}$  and divided by the applied voltage.

Rated voltage	MAXIMUM RATED VOLTAGE PULSE SLOPE (V/ $\mu$ S)	
	P = 10.0 mm	P = 15.0 mm
450V	47.5	47.5

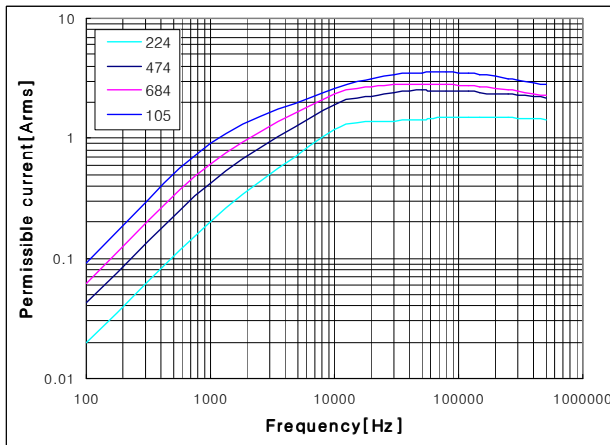
**THE GRAPHS OF CHARACTERISTICS**



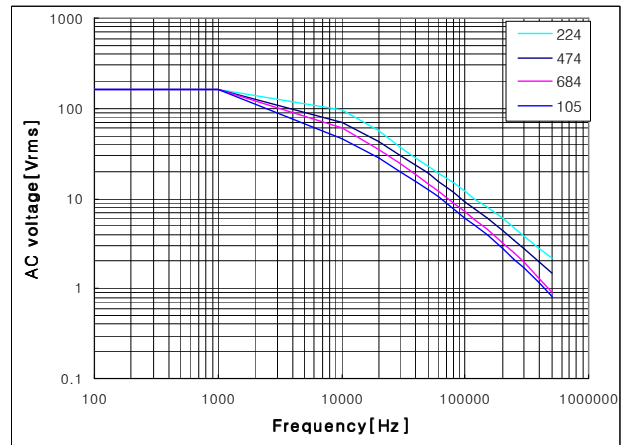
Impedance as a function of frequency  
 at  $T_{amb.} \leq 85^{\circ}\text{C}$  for original pitch 10.0mm



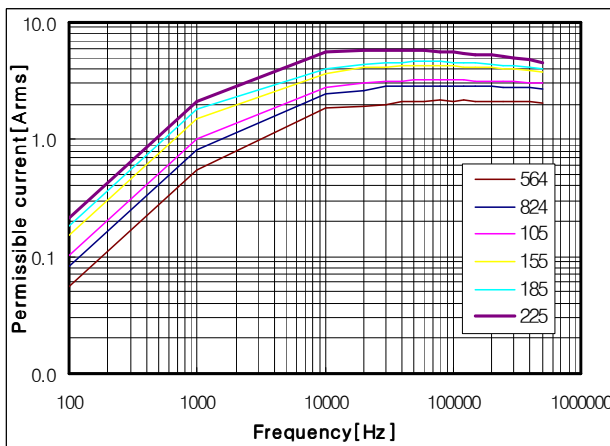
Impedance as a function of frequency  
 at  $T_{amb.} \leq 85^{\circ}\text{C}$  for original pitch 15.0mm



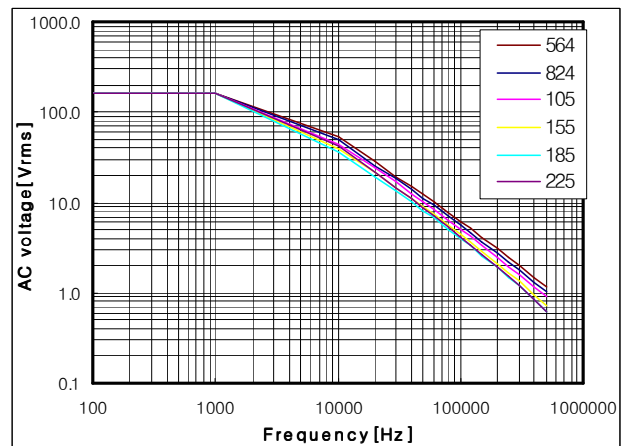
Permissible current as a function of frequency  
 at  $T_{amb.} \leq 85^{\circ}\text{C}$  for original pitch 10.0mm



AC voltage as a function of frequency  
 at  $T_{amb.} \leq 85^{\circ}\text{C}$  for original pitch 10.0mm



Permissible current as a function of frequency  
 at  $T_{amb.} \leq 85^{\circ}\text{C}$  for original pitch 15.0mm



AC voltage as a function of frequency  
 at  $T_{amb.} \leq 85^{\circ}\text{C}$  for original pitch 15.0mm

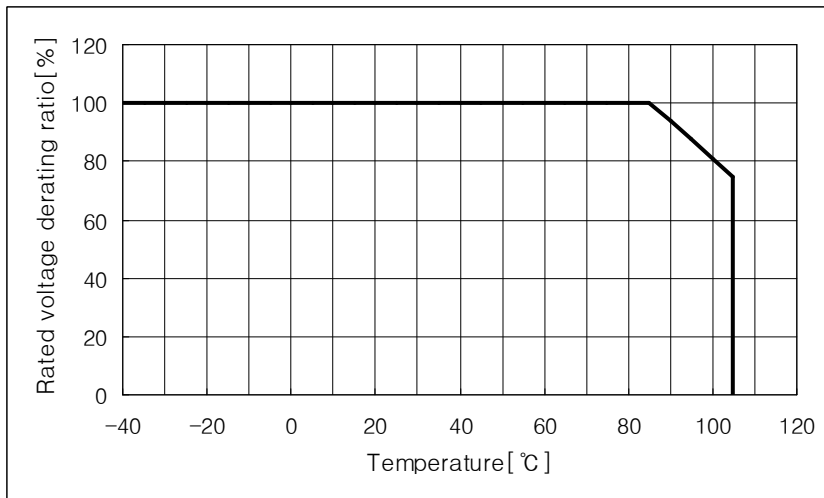
- **Permissible current to temperature**

When operating in the range of  $T_{amb.}$  ( $85^{\circ}\text{C} \sim 105^{\circ}\text{C}$ ) with waveform, the value for characteristic of permissible current to frequency shown in Fig. shall be derated 2.25% at each  $1^{\circ}\text{C}$ .

- **Self heating temperature**

. Maximum allowable rise is  $7^{\circ}\text{C}$  under  $85^{\circ}\text{C}$ .

- **Maximum permissible continuous voltage vs temperature [ $^{\circ}\text{C}$ ]**



**PRODUCT MARKING**

The capacitors are marked on the side in black ink with the following informations :

- . Rated capacitance in code according to IEC 60062(680nF : 684)
- . Tolerance on rated capacitance(J :  $\pm 5\%$ , K :  $\pm 10\%$ )
- . Rated DC voltage(450V : 450)
- . Manufacturer's mark(Pilkor ; P)
- . Manufacturer's type designation(P392)
- . Code for dielectric material( Metallized polypropylene film : MPP )
- . Batch number code(3151100)

**Example of marking**

684 J 450
P392 MPP
3151100