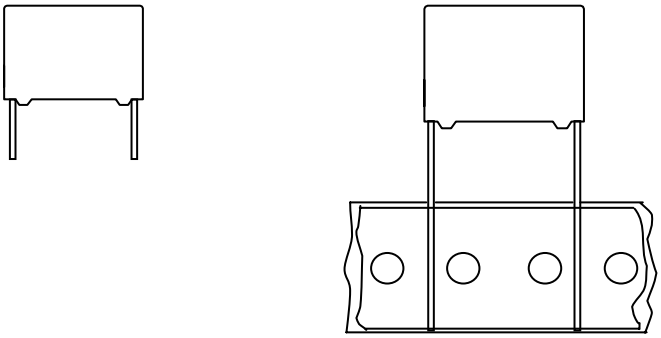
Metallized Polypropylene film capacitor for Electrical Apparatus

PCMP 371 (Motor Run Capacitors)

MKP RADIAL POTTED CAPACITORS **Pitch 22.5/27.5 mm**



QUICK REFERENCE DATA

Capacitance range	0.1 to 6.0㎌
Capacitance tolerance	± 5%, ± 10%
Rated voltage (AC)	250 V, 300 V, 350 V, 400 V, 450 V, 600 V
Rated Frequency	50/60 ㎐
Climatic category	25/070/21
Temperature range	-25℃ ~ +70℃
Reference specification	KSC 4805
Potting & Encapsulation material	Qualified in accordance with UL94V-0

FEATURES	APPLICATIONS
. 22.5 mm to 27.5 mm lead pitch . Lead wire terminals . Low loss dielectric . Consist of a low low-Inductive wound cell of Metallized polypropylene film	. For miniature Electric apparatus such as a Electric fans, Motors, Magnetic ballast etc… . For Motor running

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

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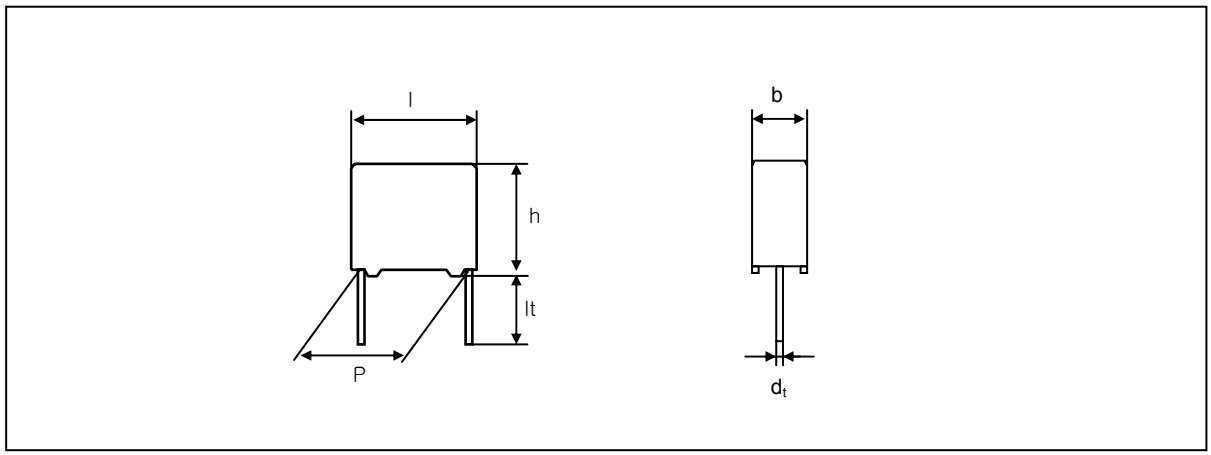
PCMP 371 (Motor Run Capacitors)

Ordering Information



PCMP 371 X X XXX

- PCMP 371: Type series
- X: Voltage
- X: Capacitance
- XXX: Capacitance

Code	Voltage
1	250V
2	300V
3	350V
4	400V
B	450V
6	600V

Available versions				Product (I_{max})	
Code	Packing method	C-tol.	Lead length & Height	26.0	31.0
				Pitch (P)	
2	Loose in box	± 5%	lt = 5.0±1.0mm	22.5	27.5
5	Loose in box	±10%	lt = 5.0±1.0mm	22.5	27.5
4	Loose in box	± 5%	lt =25.0±1.0mm	22.5	27.5
3	Loose in box	±10%	lt =25.0±1.0mm	22.5	27.5

SMALLEST PACKING QUANTITIES (SPQ)	Loose in box	
	lt = 5.0 ± 1.0 mm	lt = 25.0 ± 2.0 mm
DIMENSIONS	SPQ	SPQ
7.0 x 16.5 x 26.0	1000	1000
8.5 x 18.0 x 26.0	500	500
10.0 x 19.5 x 26.0	500	500
12.0 x 21.0 x 26.0	500	500
11.0 x 21.0 x 31.0	500	250
13.0 x 23.0 x 31.0	250	250
15.0 x 25.0 x 31.0	250	250
18.0 x 28.0 x 31.0	200	200
21.0 x 31.0 x 31.0	150	150

Metallized Polypropylene film capacitor for Electrical Apparatus

PCMP 371 (Motor Run Capacitors)

V_{Rac} = 250 V~

Cap. (μF)	b x h x l (mm)	Mass (g)	CATALOGUE NUMBER PCMP 371 ..... loose in box			
			lt = 5.0 ± 1.0 mm		lt = 25.0 ± 2.0 mm	
			C – tol. ± 5 %	C – tol. ± 10 %	C – tol. ± 5 %	C – tol. ± 10 %
Pitch = 22.5 ± 0.4 mm						
1.0	10.0 x 19.5 x 26.0		12105	15105	14105	13105
1.5	12.0 x 21.0 x 26.0		12155	15155	14155	13155
Pitch = 27.5 ± 0.4 mm						
2.0	13.0 x 23.0 x 31.0		12205	15205	14205	13205
2.5 3.0	15.0 x 25.0 x 31.0		12255 12305	15255 15305	14255 14305	13255 13305
3.5 4.0	18.0 x 28.0 x 31.0		12355 12405	15355 15405	14355 14405	13355 13405
5.0 6.0	21.0 x 31.0 x 31.0		12505 12605	15505 15605	14505 14605	13505 13605

SPECIFIC REFERENCE DATA FOR THE 250 V_{ac} VERSION

Tangent of loss angle	at 60 Hz	at 1 kHz
1.0μF ≤ C ≤ 6.0μF	≤ 10 x 10^{-4}	≤ 10 x 10^{-4}
Insulation Resistance		
R between leads, for C ≤ 1μF RC between leads, for C > 1μF R between lead and case	≥ 30 000 MΩ ≥ 10 000 s ≥ 2 000 MΩ	

Metallized Polypropylene film capacitor for Electrical Apparatus

PCMP 371 (Motor Run Capacitors)

V_{Rac} = 300 V~

Cap. (µF)	b x h x l (mm)	Mass (g)	CATALOGUE NUMBER PCMP 371 ..... loose in box			
			lt = 5.0 ± 1.0 mm		lt = 25.0 ± 2.0 mm	
			C – tol. ± 5 %	C – tol. ± 10 %	C – tol. ± 5 %	C – tol. ± 10 %
Pitch = 22.5 ± 0.4 mm						
0.5	8.5 x 18.0 x 26.0		22504	25504	24504	23504
0.8	10.0 x 19.5 x 26.0		22804	25804	24804	23804
1.0	12.0 x 21.0 x 26.0		22105	25105	24105	23105
Pitch = 27.5 ± 0.4 mm						
1.5	13.0 x 23.0 x 31.0		22155	25155	24155	23155
2.0	15.0 x 25.0 x 31.0		22205	25205	24205	23205
2.5 3.0	18.0 x 28.0 x 31.0		22255 22305	25255 25305	24255 24305	23255 23305
3.5 4.0	21.0 x 31.0 x 31.0		22355 22405	25355 25405	24355 24405	23355 23405

SPECIFIC REFERENCE DATA FOR THE 300 V_{ac} VERSION

Tangent of loss angle	at 60 Hz	at 1 kHz
0.5µF ≤ C ≤ 4.0µF	≤ 10 x 10^{-4}	≤ 10 x 10^{-4}
Insulation Resistance		
R between leads, for C ≤ 1µF RC between leads, for C > 1µF R between lead and case	≥ 30 000 MΩ ≥ 10 000 s ≥ 2 000 MΩ	

Metallized Polypropylene film capacitor for Electrical Apparatus

PCMP 371 (Motor Run Capacitors)

V_{Rac} = 350 V~

Cap. (µF)	b x h x l (mm)	Mass (g)	CATALOGUE NUMBER PCMP 371 ..... loose in box			
			lt = 5.0 ± 1.0 mm		lt = 25.0 ± 2.0 mm	
			C – tol. ± 5 %	C – tol. ± 10 %	C – tol. ± 5 %	C – tol. ± 10 %
Pitch = 22.5 ± 0.4 mm						
0.5	10.0 x 19.5 x 26.0		32504	35504	34504	33504
0.8	12.0 x 21.0 x 26.0		32804	35804	34804	33804
Pitch = 27.5 ± 0.4 mm						
1.0	13.0 x 23.0 x 31.0		32105	35105	34105	33105
1.5	15.0 x 25.0 x 31.0		32155	35155	34155	33155
2.0	18.0 x 28.0 x 31.0		32205	35205	34205	33205
2.5 3.0	21.0 x 31.0 x 31.0		32255 32305	35255 35305	34255 34305	33255 33305

SPECIFIC REFERENCE DATA FOR THE 350 V_{ac} VERSION

Tangent of loss angle	at 60 Hz	at 1 kHz
0.5µF ≤ C ≤ 3.0µF	≤ 10 x 10^{-4}	≤ 10 x 10^{-4}
Insulation Resistance		
R between leads, for C ≤ 1µF RC between leads, for C > 1µF R between lead and case	≥ 30 000 MΩ ≥ 10 000 s ≥ 2 000 MΩ	

Metallized Polypropylene film capacitor for Electrical Apparatus

PCMP 371 (Motor Run Capacitors)

V_{Rac} = 400 V~

Cap. (µF)	b x h x l (mm)	Mass (g)	CATALOGUE NUMBER PCMP 371 ..... loose in box			
			lt = 5.0 ± 1.0 mm		lt = 25.0 ± 2.0 mm	
			C – tol. ± 5 %	C – tol. ± 10 %	C – tol. ± 5 %	C – tol. ± 10 %
Pitch = 22.5 ± 0.4 mm						
0.3	8.5 x 18.0 x 26.0		42304	45304	44304	43304
0.5	12.0 x 21.0 x 26.0		42504	45504	44504	43504
Pitch = 27.5 ± 0.4 mm						
0.8	13.0 x 23.0 x 31.0		42804	45804	44804	43804
1.0	15.0 x 25.0 x 31.0		42105	45105	44105	43105
1.5	18.0 x 28.0 x 31.0		42155	45155	44155	43155
2.0 2.5	21.0 x 31.0 x 31.0		42205 42255	45205 45255	44205 44255	43205 43255

SPECIFIC REFERENCE DATA FOR THE 400 V_{ac} VERSION

Tangent of loss angle	at 60 Hz	at 1 kHz
0.3µF ≤ C ≤ 2.5µF	≤ 10 x 10^{-4}	≤ 10 x 10^{-4}
Insulation Resistance		
R between leads, for C ≤ 1µF RC between leads, for C > 1µF R between lead and case	≥ 30 000 MΩ ≥ 10 000 s ≥ 2 000 MΩ	

Metallized Polypropylene film capacitor for Electrical Apparatus

PCMP 371 (Motor Run Capacitors)

V_{Rac} = 450V~

Cap. (µF)	b x h x l (mm)	Mass (g)	CATALOGUE NUMBER PCMP 371 ..... loose in box			
			lt = 5.0 ± 1.0 mm		lt = 25.0 ± 2.0 mm	
			C – tol. ± 5 %	C – tol. ± 10 %	C – tol. ± 5 %	C – tol. ± 10 %
Pitch = 22.5 ± 0.4 mm						
0.2	8.5 x 18.0 x 26.0		B2204	B5204	B4204	B3204
0.4	12.0 x 21.0 x 26.0		B2404	B5404	B4404	B3404
Pitch = 27.5 ± 0.4 mm						
0.5	11.0 x 21.0 x 31.0		B2504	B5504	B4504	B3504
0.6	13.0 x 23.0 x 31.0		B2604	B5604	B4604	B3604
0.8 1.0	15.0 x 25.0 x 31.0		B2804 B2105	B5804 B5105	B4804 B4105	B3804 B3105
1.2	18.0 x 28.0 x 31.0		B2125	B5125	B4125	B3125
1.5 2.0	21.0 x 31.0 x 31.0		B2155 B2205	B5155 B5205	B4155 B4205	B3155 B3205

SPECIFIC REFERENCE DATA FOR THE 450 V_{ac} VERSION

Tangent of loss angle	at 60 Hz	at 1 kHz
0.2µF ≤ C ≤ 2.0µF	≤ 10 x 10^{-4}	≤ 10 x 10^{-4}
Insulation Resistance		
R between leads, for C ≤ 1µF RC between leads, for C > 1µF R between lead and case	≥ 30 000 MΩ ≥ 10 000 s ≥ 2 000 MΩ	

Metallized Polypropylene film capacitor for Electrical Apparatus

PCMP 371 (Motor Run Capacitors)

V_{Rac} = 600V~

Cap. (µF)	b x h x l (mm)	Mass (g)	CATALOGUE NUMBER PCMP 371 ..... loose in box			
			lt = 5.0 ± 1.0 mm		lt = 25.0 ± 2.0 mm	
			C – tol. ± 5 %	C – tol. ± 10 %	C – tol. ± 5 %	C – tol. ± 10 %
Pitch = 22.5 ± 0.4 mm						
0.1	7.0 x 16.5 x 26.0		62104	65104	64104	63104
0.2	12.0 x 21.0 x 26.0		62204	65204	64204	63204
Pitch = 27.5 ± 0.4 mm						
0.3	15.0 x 25.0 x 31.0		62304	65304	64304	63304
0.5	18.0 x 28.0 x 31.0		62504	65504	64504	63504
0.8 1.0	21.0 x 31.0 x 31.0		62804 62105	65804 65105	64804 64105	63804 63105

SPECIFIC REFERENCE DATA FOR THE 600 V_{ac} VERSION

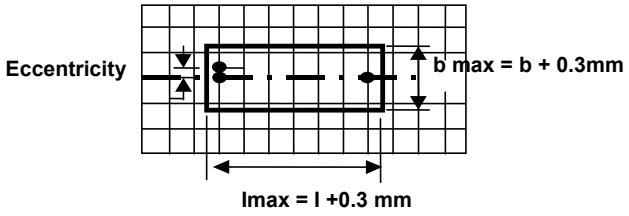
Tangent of loss angle	at 60 Hz	at 1 kHz
0.1µF ≤ C ≤ 1.0µF	≤ 10 x 10^{-4}	≤ 10 x 10^{-4}
Insulation Resistance		
R between leads, for C ≤ 1µF R between lead and case	≥ 30 000 MΩ ≥ 2 000 MΩ	

Metallized Polypropylene film capacitor for Electrical Apparatus

PCMP 371 (Motor Run Capacitors)

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+0.3mm

RATINGS AND CHARACTERISTICS

Unless otherwise specified all electrical values apply at an ambient temperature of 23±1℃, an atmospheric pressure of 86 to 106 kPa and a relative humidity of 50±2 %.

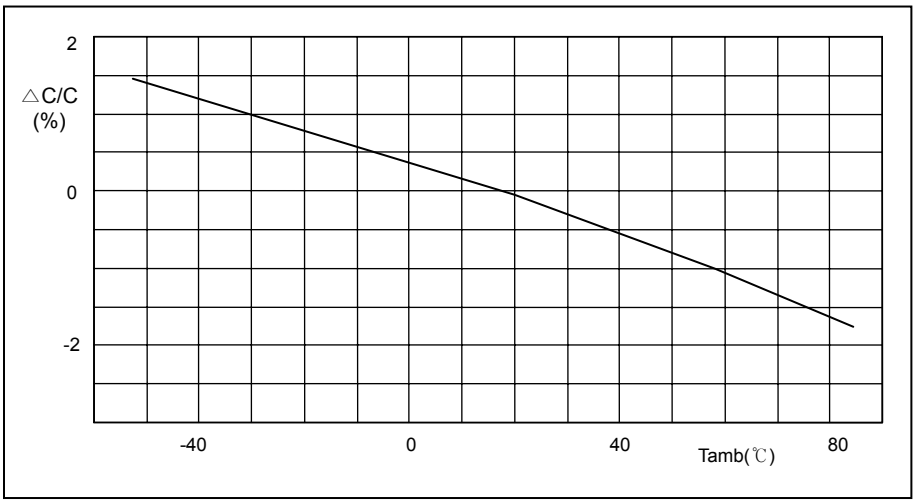
For reference testing a conditioning period shall be applied of 96±4 hours by heating the products in a circulating air oven at the rated temperature and a relative humidity not exceeding 20%.

Metallized Polypropylene film capacitor for Electrical Apparatus

PCMP 371 (Motor Run Capacitors)

CAPACITANCE

. All capacitance values are specified at 60 ㎐.



[Capacitance change as a function of temperature = Typical curves]

TEMPERATURE

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

VOLTAGE

. Test voltage between leads.
- W.V. x 1.5 Vac, during 10 sec. or W.V. x 1.5 x $\sqrt{2}$ x 1.2 Vdc during 1 sec.

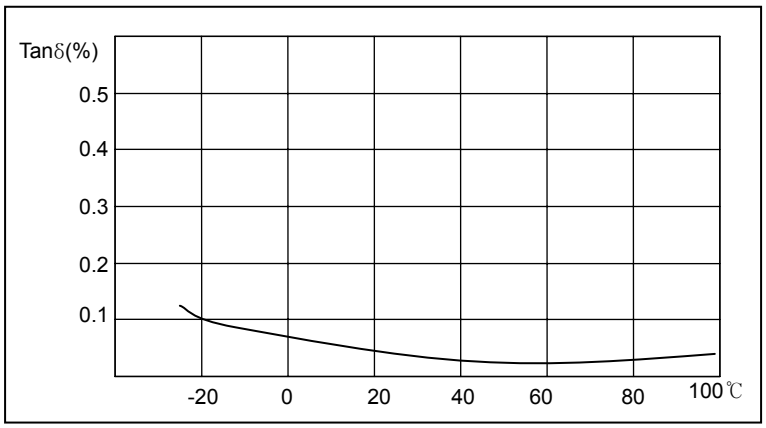
. Test voltage between interconnected leads and case (foil method)
- W.V. x 2 +1000 (min 2000)Vac during 10sec. or
  [W.V. x 2 +1000 (min 2000)Vac] $\sqrt{2}$ x 1.2 Vdc during 1 sec.

Metallized Polypropylene film capacitor for Electrical Apparatus

PCMP 371 (Motor Run Capacitors)

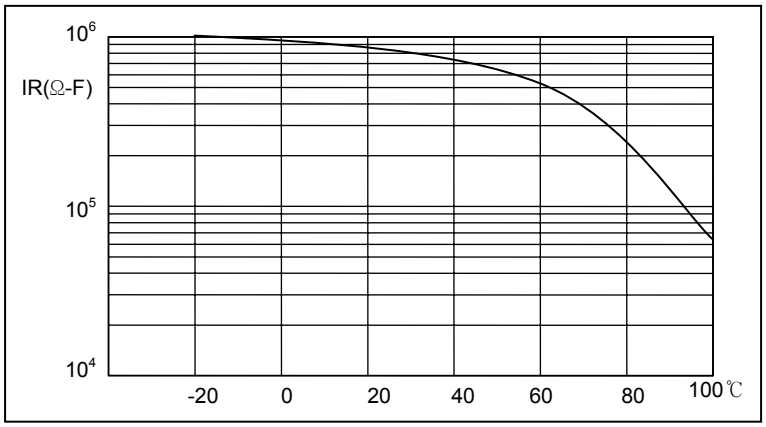
TANGENT OF THE LOSS ANGLE

. All tangent of loss angles a specified at 60㎐.



INSULATION RESISTANCE

. The insulation resistance is measured after a voltage has been applied for 1 min.± 5 sec.
. Test voltage
- Between leads : 100±15V for the 250 to 450Vac and 500±50V for the 500 to 600 Vac version.
- Between leads to case : 500±50V.



MAXIMUM PERMISSIBLE OVER VOLTAGE

. Maximum permissible over voltage is less than 110% of the Rated Voltage.

MAXIMUM PERMISSIBLE OVER CURRENT

. Maximum permissible over current is less than 130% of the Rated Current.

MAXIMUM PERMISSIBLE VA

. Maximum permissible VA is less than 135% of the Rated VA.

Metallized Polypropylene film capacitor for Electrical Apparatus — PCMP 371 (Motor Run Capacitors)

PRODUCT MARKING

Capacitors are marked with the following information :

. Rated capacitance code in accordance with IEC 60062

. Tolerance on rated capacitance : J : ± 5 %

. Rated (AC) Voltage (e.g. 250 Vac)

. Code for dielectric material (MKP)

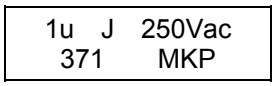
. Manufacturer's type designation (371)

. Manufacturer's name (PILKOR)

. Year and week of manufacture (e.g. 1401)

Example of marking

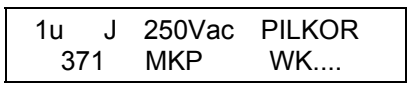
Pitch = 22.5mm or 27.5mm



Marking on the top

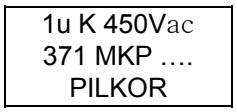
Marking on the side

or



Marking on the top

Pitch = 27.5mm



Marking on the top