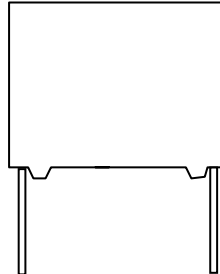


# Metallized Polyester film capacitors

PCPW 223

MKT RADIAL POTTED CAPACITORS

Pitch 15.0/20.0/22.5mm



## QUICK REFERENCE DATA

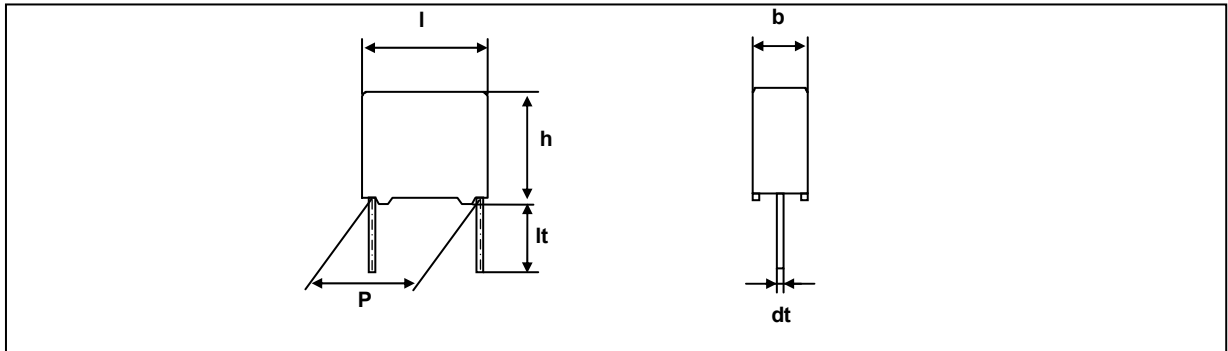
Capacitance range	4.7 $\mu\text{F}$ ~ 22 $\mu\text{F}$
Capacitance tolerance	$\pm 10\%$
Rated voltage (DC)	35V
Climatic category	40/105/21
Temperature range	-40 $^{\circ}\text{C}$ ~ + 105 $^{\circ}\text{C}$
Reference specification	IEC 60384-2 & *) Tested acc. with AEC-Q200 Qualified in accordance with UL94V-0
Potting & Encapsulation material	

\*) Some test result does not meet AEC Q200, which is described in Supplement.

FEATURES	APPLICATIONS
<ul style="list-style-type: none"> <li>. Low inductive wound cell of metallized(PET) film</li> <li>. Supplied loose in box</li> </ul>	<ul style="list-style-type: none"> <li>. Blocking</li> <li>. Bypassing/Coupling/Decoupling</li> <li>. RFI for automotive</li> <li>. High current applications</li> </ul>

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

**Ordering Information**



**PCPW 223 X X X X X X**

Type series      Capacitance

Code	Voltage
V	35V

Code	Pitch
F	15.0mm
H	20.0mm
J	22.5mm

Available versions				Product (I <sub>max</sub> )		
Code	Packing method	C – tol.	Lead length & tol.	18.0	23.5	26.0
				Pitch (P)		
1	Loose in box	±10%	lt = 5.0±1.0mm	15.0	20.0	22.5
2	Loose in box	±10%	lt = 25.0±2.0mm	15.0	20.0	22.5

**Packing Information**

Smallest Packing Quantities (SPQ)	Loose in box	Loose in box
	Lt = 5.0 ± 1.0mm	Lt = 25.0 ± 2.0mm
Dimensions(max.)	SPQ	SPQ
8.5 x 15.0 x 18.0	1000	4000
11.0 x 18.5 x 18.0	1000	4000
11.0 x 22.5 x 23.5	500	2000
12.5 x 23.0 x 26.0	500	2000
13.0 x 23.0 x 26.0	500	2000

**Metallized Polyester  
film capacitors**
 $V_{Rdc} = 35 V$ 

Cap. ( $\mu F$ )	$b_{max.} \times h_{max.} \times l_{max.}$ (mm)	Mass (g)	CATALOGUE NUMBER
			PCPW 223.....
			loose in box
			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	
4.7	8.5 x 15.0 x 18.0	3.1	FV2475
5.6	10.0 x 16.5 x 18.0	-	FV2565
6.8	10.0 x 16.5 x 18.0	-	FV2685
8.2	11.0 x 18.5 x 18.0	-	FV2825
9.4	11.0 x 18.5 x 18.0	4.9	FV2945
Pitch = 20.0 $\pm$ 0.4 mm		dt = 0.8 + 0.08 / -0.05 mm	
19.0	11.0 x 22.5 x 23.5	7.5	HV2196
Pitch = 22.5 $\pm$ 0.4 mm		dt = 0.8 + 0.08 / -0.05 mm	
19.0	12.5 x 23.0 x 26.0	9.2	JV2196
22.0	13.0 x 23.0 x 26.0	9.9	JV2226

## MOUNTING

### NORMAL USE

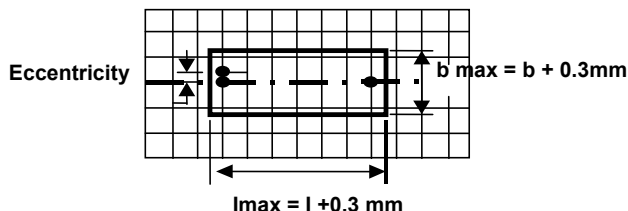
The capacitors are designed for mounting on printed-circuit boards. The capacitors packed in bandoliers are designed for mounting on printed-circuit boards by means of automatic insertion machines.

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

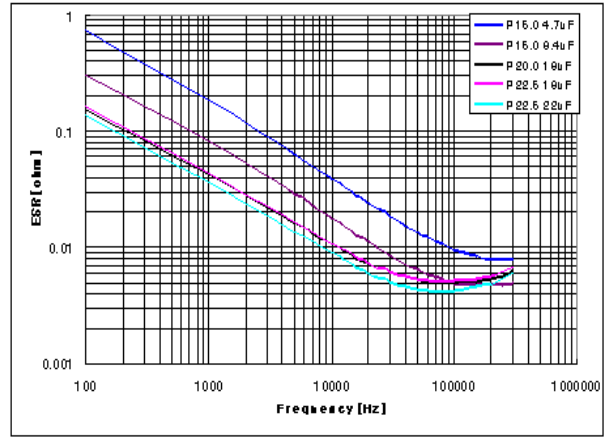
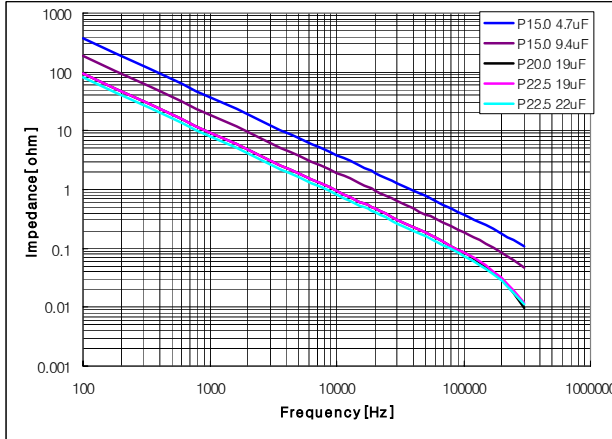
## RATINGS AND CHARACTERISTICS

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  $96 \pm 4$  hours by heating the products in a circulating air oven at the rated temperature and a relative humidity not exceeding 20%.

**CHARACTERISTICS**

● **Impedance & ESR as a function of frequency[Hz]**

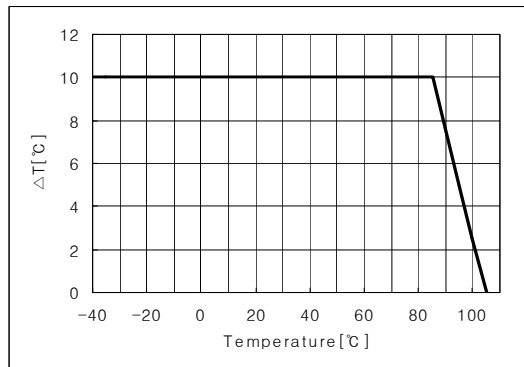
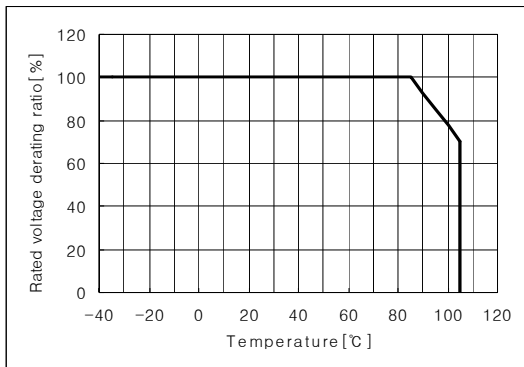


● **Rated Voltage Pulse Load Slope(dV/dt)<sub>R</sub>**

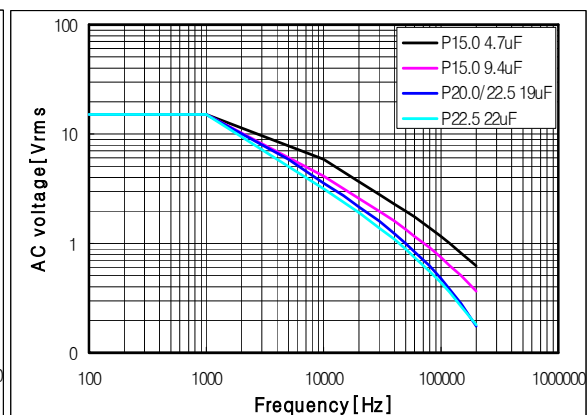
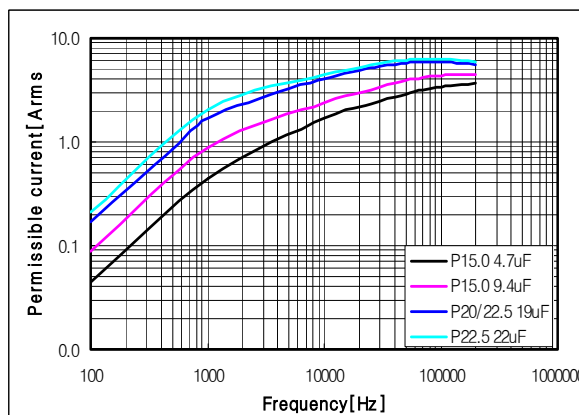
. For values see specific reference data. IF the pulse voltage is lower than the rated voltage, values of the specific reference data must be multiplied by  $V_{Rdc}$  and divided by the applied voltage

Rated voltage	MAXIMUM RATED VOLTAGE PULSE SLOPE (V/ $\mu$ s)		
	P = 15.0 mm	P = 20.0 mm	P = 22.5mm
35V	9.2	9.2	3.0

● **Maximum DC voltage & self heating temp. as a function of ambient temperature**



● **Maximum permissible current( $T_{amb.} < 85^{\circ}C$ ) or Voltage( $V_{rms}$ ) as a function of frequency**



**PRODUCT MARKING**

The capacitors are marked with the following informations :

- . Rated capacitance in code according to IEC 60062 ( 19u ; 19uF )
- . Tolerance on rated capacitance ( K :  $\pm 10\%$  )
- . Rated DC voltage ( 35V )
- . Manufacturer's mark ( PILKOR )
- . Manufacturer's type designation ( PCPW 223 ; 223 )
- . Code for dielectric material ( MKT )
- . Date code number ( WK.... )

**Example of marking**

Pitch = 15.0/20.0/22.5mm

19u K 35V 223 MKT
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Marking on the top

PILKOR WK....
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Marking on the side

19u K 35V PILKOR 223 MKT WK....
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or

Marking on the top