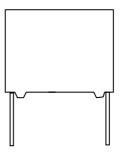
**PCPW 223** 

**MKT RADIAL POTTED CAPACITORS** 

Pitch 15.0/20.0/22.5mm



## **QUICK REFERENCE DATA**

Capacitance range	4.7μF ~ 22μF	
Capacitance tolerance	±10%	
Rated voltage (DC)	35V	
Climatic category	40/105/21	
Temperature range	-40 °C ~ + 105 °C	
Reference specification	IEC 60384-2 & *)Tested acc. with AEC-Q200	
	Qualified in accordance with UL94V-0	
Potting & Encapsulation material		

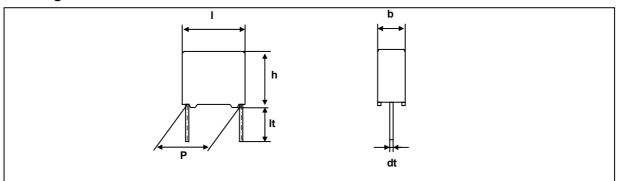
<sup>\*)</sup> Some test result does not meet AEC Q200, which is described in Supplement.

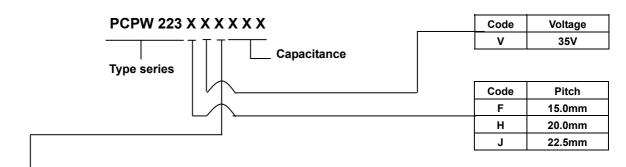
FEATURES	APPLICATIONS
. Low inductive wound cell of metalized(PET) fil	m . Blocking
. Supplied loose in box	. Bypassing/Coupling/Decoupling
	. RFI for automotive
	. High current applications

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

**PCPW 223** 

# **Ordering Information**





Available versions			Product (I <sub>max</sub> )			
Code	Code Packing method C – tol. Lead length & tol.	18.0	23.5	26.0		
Code		0 – 101.	Lead length & tol.	Pitch (P)		
1	Loose in box	±10%	It = 5.0±1.0mm	15.0	20.0	22.5
2	Loose in box	±10%	It = 25.0±2.0mm	15.0	20.0	22.5

# **Packing Information**

Smallest Packing Quantities	Loose in box	Loose in box
(SPQ)	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

**PCPW 223** 

 $V_{Rdc} = 35 V$ 

V <sub>Rdc</sub> – 35 V				
		Mass (g)	CATALOGUE NUMBER	
Сар.	h vh vi		PCPW 223	
(μF)	b <sub>max.</sub> x h <sub>max.</sub> x I <sub>max.</sub> (mm)		loose in box	
(24)	(11111)		It= 25.0 ± 2.0 mm	
			C – tol. ± 10%	
Pitch = 15.0 ± 0.4 mm		0 ± 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 ± 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 ± 0.4 mm		5 ± 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	
			1	

#### **MOUNTING**

#### **NORMAL USE**

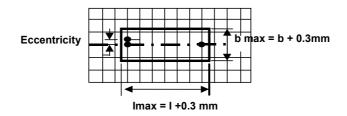
The capacitors are designed for mounting on printed-circuit boards. The capacitors packed in bandoliers are designed for mounting on printed-circuit boards by means of automatic insertion machines.

#### SPECIFIC METHOD OF MOUNTING TO WITHSTAND VIBRATIONAND 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 :  $h_{max} \leq h+0.3mm$

#### STORAGE TEMPERATURE

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

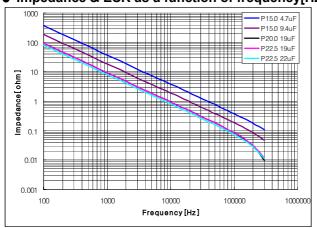
#### **RATINGS AND CHARACTERISTICS**

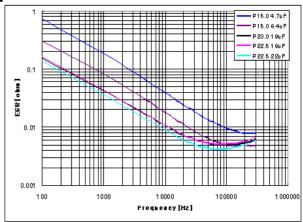
Unless otherwise specified all electrical values apply at an ambient temperature of 23  $\pm 1^{\circ}$ C, an atmospheric pressure of 86 to 106kPa and a relative humidity of 50  $\pm 2^{\circ}$ K.

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]



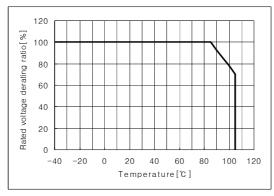


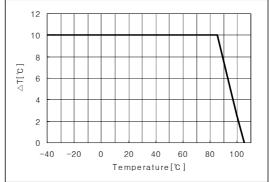
### Rated Voltage Pulse Load Slope(dV/dt)<sub>R</sub>

. 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

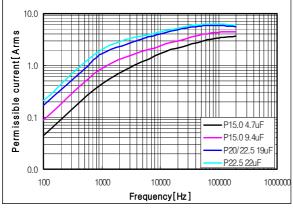
Rated voltage	MAXIMUM RATED VOLTAGE PULSE SLOPE (V/ $\mu$ s)			
Rated Voltage	P = 15.0 mm	P = 20.0 mm	P = 22.5mm	
35V	9.2	9.2	3.0	

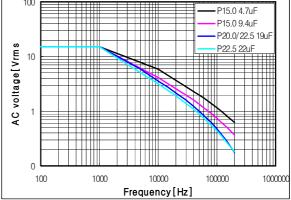
## • Maximum DC voltage & self heating temp. as a function of ambient temperature





### Maximum permissible current(T<sub>amb.</sub>< 85℃) or Voltage(Vrms) as a function of frequency</li>





**PCPW 223** 

### **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 PILKOR WK....

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

Marking on the top

Marking on the side

or

Marking on the top