### FEATURES

- · Low temperature coefficient
- · High stability and high insulation resistance
- · Wide frequency range
- · Ideal for high frequency circuits, and measuring instruments
- Electrodes and lead are spot welded to reduce series resistance
- · Low dissipation factor



23PW Series

23PS Series

### ■ CHARACTERISTICS

Item	Characteristics					
Operating Temperature Range	-40°C ~ +85°C					
Capacitance Tolerance	±5% standard, other tolerances available upon request, ask for details					
Standard Working Voltage (WV)	50, 125, 500					
Insulation Resistance @ 25°C	100G $\Omega$ min.					
Testing Voltage	300% of rated voltage for 1 minute					
Dissipation Factor	0.1% maximum when measured @ 1KHz, 25°C for C>330pF					
Quality Value (Q)	1,000 minimum when measured @ 1,000KHz, 25°C for C≤330pF					
Load Life Test	@+85°C, 150% of WV for 1,000 hrs: C change is ≤2%; DF (or Q) is 0.15% max. (or 500min.); IR is 50GΩ min.					
Lead Pull Test	Will withstand a pull of 1.0KG applied axially for 10 seconds					
Lead Bend Test	Will sustain 2 cycles of attaching a load of 0.5KG to lead, bending 90° from the direction of lead egress, then 180° in opposite direction and back to the starting point.					
Capacitance Drift	±0.5% maximum when cycled through the operating temperature range					
Lead Material	Tinned copper					
Humidity Test	@+40°C, 95% RH for 100 hrs: C change is ≤2%, DF is ≤0.15 or Q is ≥500, IR is ≥80GΩ					

## PART NUMBERING SYSTEM

2

Voltage

Series

W

Type

#

ø's

1

digit digit 1

1st

0

2nd

Capacitance (pF)

Tolerance

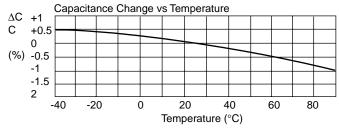
Voltage Code: 2 = 50

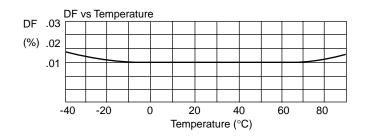
1 = 125

5 = 500

Tolerance Code:  $(blank) = \pm 5\%$  $K = \pm 10\%$  $M = \pm 20\%$ 

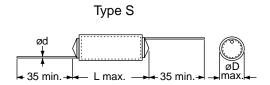
### **■ PERFORMANCE CURVE**

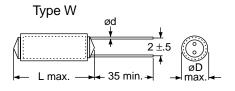






## DIMENSIONS





Unit: mm

VCD	≤50VDC			160250VDC			500630VDC		
C SIZE (PF)	D	L	dψ	D	L	dφ	D	L	dφ
100	6.0	12	0.4	6.0	12	0.4	6.0	12	0.4
120	6.0	12	0.4	6.0	12	0.4	6.0	12	0.4
150	6.0	12	0.4	6.0	12	0.4	6.0	12	0.4
180	6.0	12	0.4	6.0	12	0.4	6.0	12	0.4
220	6.0	12	0.4	6.0	12	0.4	6.0	12	0.4
270	6.0	12	0.4	6.0	12	0.4	6.0	12	0.4
330	6.0	12	0.4	6.0	12	0.4	6.0	12	0.4
390	6.0	12	0.4	6.0	12	0.4	6.0	12	0.4
470	6.0	12	0.4	6.0	12	0.4	6.5	12	0.4
560	6.0	12	0.4	6.0	12	0.4	6.5	12	0.4
680	6.0	12	0.4	6.0	12	0.4	7.0	12	0.4
820	6.0	12	0.4	6.0	12	0.4	7.0	12	0.4
1000	6.0	12	0.4	6.0	12	0.4	7.5	15	0.4
1200	6.0	12	0.4	6.0	12	0.4	7.5	15	0.4
1500	6.0	12	0.4	6.5	12	0.4	7.8	15	0.4
1800	6.5	12	0.4	6.5	12	0.4	8.0	15	0.4
2200	6.5	12	0.4	7.0	12	0.4	8.2	16	0.4
2700	6.5	12	0.4	7.0	12	0.4	8.5	16	0.4
3300	7.0	12	0.4	7.5	15	0.4	9.0	16	0.4
3900	7.0	12	0.4	8.0	15	0.4			
4700	7.5	14	0.4	8.0	15	0.4			
5600	7.5	14	0.4	8.5	15	0.4			
6800	8.0	14	0.4	9.0	15	0.4			
8200	8.5	14	0.4						
10000	9.0	14	0.4						

# **Mouser Electronics**

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