RF Power Plate Capacitors with Contoured Rim, Class 2 Ceramic

FEATURES

- Small size
- High reliability
- High capacitance values

APPLICATIONS

PS 20 to PS 55 plate capacitors made from class 2 ceramic dielectric can be used as coupling and bypass capacitors where low power ratings are required and larger capacitance changes with temperature can be tolerated.

QUICK REFERENCE DATA						
DESCRIPTION	VALUE					
Ceramic Class	2					
Ceramic Dielectric	Y5U (R3500)					
Type	PS 20	PS 30	PS 40	PS 55		
Voltage (V_p)	3500	3500	3500	2000	3500	4000
Min. Capacitance (pF)	1000	2200	4700	27 000	15 000	10 000
Max. Capacitance (pF)	1500	3300	6800	27 000	22 000	10 000
Mounting	Screw terminal					

MATERIAL

Capacitor elements made from class 2 ceramic dielectric with noble metal electrodes.

Connection terminals:
made from copper / brass, silver plated.

FINISH

Capacitor body completely protective lacquered.

MARKING

Type designator, capacitance value and tolerance, rated peak voltage, ceramic material code, production date code, manufacturer logo.

ACCESSORIES ADDED

Two screws and washers.

CAPACITANCE RANGE

1000 pF to 27 nF

CAPACITANCE TOLERANCE

(- 20 / + 40) %

CERAMIC DIELECTRIC

Y5U (R3500)

RATED VOLTAGE

- 2.0 kV_p
- 3.5 kV_p
- 4.0 kV_p

DIELECTRIC STRENGTH TEST

200 % of rated voltage, 50 Hz

DISSIPATION FACTOR

Max. 2.5 % (1 kHz)

INSULATION RESISTANCE

Min. 5000 MΩ (at 25 °C)

OPERATING TEMPERATURE RANGE

-25 °C to +85 °C

For technical questions, contact: powcap@vishay.com

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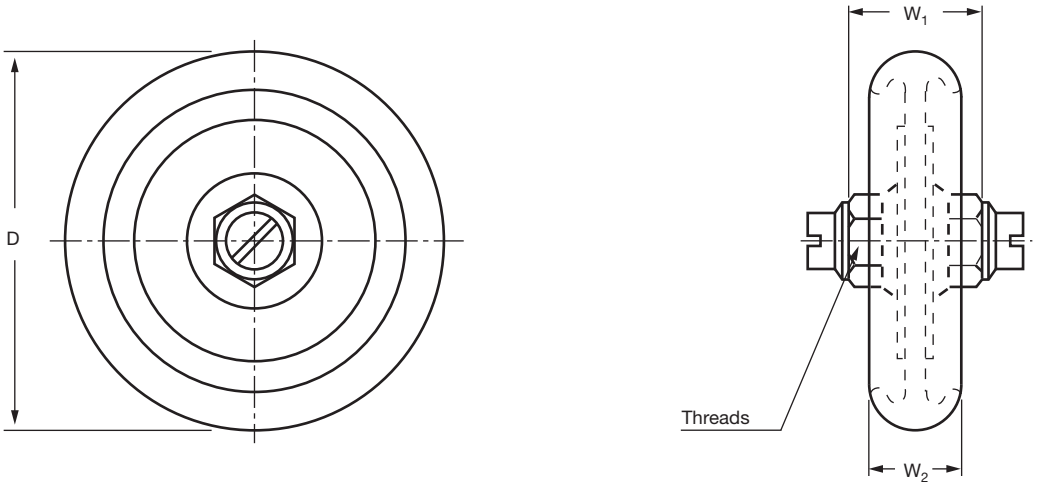
SAP PART NUMBER AND ELECTRICAL DATA

PART NUMBER	CERAMIC	CAP. VALUES (pF)	RATED VOLTAGE (kV_p)	RATED POWER [1] (kvar)	RATED CURRENT (A_{RMS})
TYPE PS 20					
PS0020VT10273BL1	Y5U (R3500)	1000	3.5	0.25	5.0
PS0020VT15273BL1		1500			
TYPE PS 30					
PS0030VT22273BL1	Y5U (R3500)	2200	3.5	0.5	10
PS0030VT33273BL1		3300			
TYPE PS 40					
PS0040VT47273BL1	Y5U (R3500)	4700	3.5	1.0	15
PS0040VT56273BL1		5600			
PS0040VT68273BL1		6800			
TYPE PS 55					
PS0055BD10373BL1	Y5U (R3500)	10 000	4.0	1.0	18
PS0055VT15373BL1		15 000	3.5		
PS0055VT22373BL1		22 000			
PS0055BB27373BL1		27 000	2.0		

Note

[1] The surface temperature during operation must not exceed +100 °C

DIMENSIONS in millimeters (inches)



TYPE	PS 20	PS 30	PS 40	PS 55
Diameter D	24 ± 1 (0.95 ± 0.04)	35 ± 1 (1.38 ± 0.04)	44 ± 1 (1.73 ± 0.04)	56 ± 1 (2.20 ± 0.04)
Thread size	M5	M5	M6	M6
Width $W_{1\ max.}$	23 (0.91)	25 (0.98)	23 (0.91)	22 (0.87)
Width $W_{2\ max.}$ [1]	17 (0.67)	17 (0.67)	16 (0.63)	15 (0.59)

Note

[1] Dimension W_2 will vary depending upon capacitance

RELATED DOCUMENTS

General Information	www.vishay.com/doc?22071

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