

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

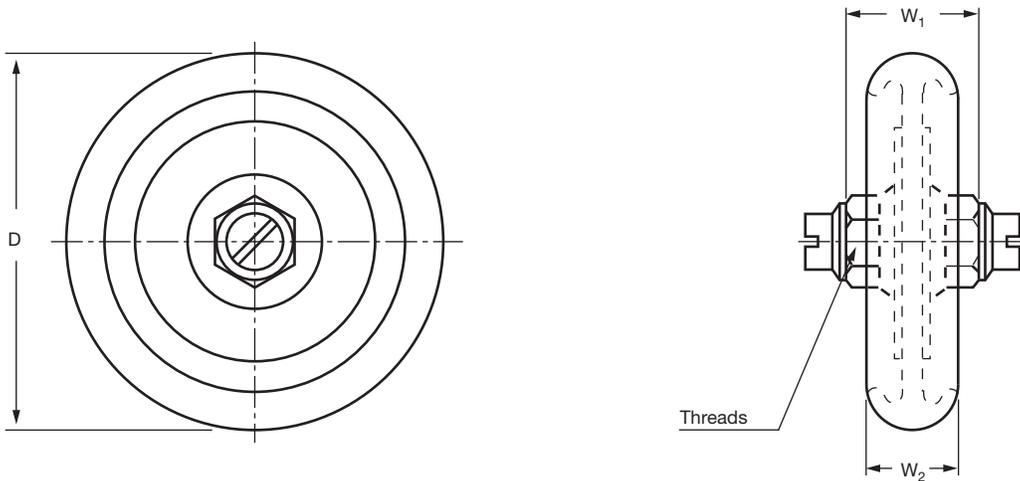


| SAP PART NUMBER AND ELECTRICAL DATA | | | | | |
|-------------------------------------|-------------|------------------|----------------------------------|-----------------------------------|-----------------------------------|
| PART NUMBER | CERAMIC | CAP. VALUES (pF) | RATED VOLTAGE (kV _p) | RATED 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 | | | |

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 W₂ will vary depending upon capacitance

RELATED DOCUMENTS

| | |
|---------------------|--|
| General Information | www.vishay.com/doc?22071 |
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