RF Power Plate Capacitors for Higher Voltages Class 1 Ceramic

**FEATURES**
- Low losses
- High reliability
- High voltage ratings

**APPLICATIONS**
- Industrial high frequency appliances
- Medical RF equipment
- Filter, bypass and coupling circuits

**CAPACITANCE RANGE**
50 pF to 2.5 nF

**CAPACITANCE TOLERANCE**
± 10 %

**CERAMIC DIELECTRICS**
- R16 (TCC + 100 ppm/K)
- R42 (TCC - 250 ppm/K)
- R85 (TCC - 750 ppm/K)

**RATED VOLTAGE**
- 15 kVpp (peak-to-peak voltage)
- 25 kVpp (peak-to-peak voltage)
- 27 kVpp (peak-to-peak voltage)
- 30 kVpp (peak-to-peak voltage)

**DIELECTRIC STRENGTH TEST**
200 % of rated AC voltage 50 Hz

**DISSIPATION FACTOR**
- R16: Max. 0.04 %
- R42, R85: Max. 0.05 %

Measuring frequencies:
1 MHz (C < 1 nF); 300 kHz or 100 kHz (≥ 1 nF)

**INSULATION RESISTANCE**
Min. 10 000 MΩ (at 25 °C)

**OPERATING TEMPERATURE RANGE**
-55 °C to +100 °C

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**MATERIAL**
Capacitor elements made from Class 1 ceramic dielectric with noble metal electrodes.
Flexible connection terminals made from copper/brass, silver plated, to allow for series and parallel interconnection

**FINISH**
Capacitor body completely protective laquered (FPZ)
The contoured insulating rim is additionally glazed (PEZ)

**MARKING**
Type designator, capacitance value and tolerance, rated RF voltage, ceramic material code, production date code, manufacturer logo

**ACCESSORIES ADDED**
Two screws and washers
### SAP PART NUMBER AND ELECTRICAL DATA

<table>
<thead>
<tr>
<th>PART NUMBER</th>
<th>CERAMIC</th>
<th>CAP. VALUES (pF)</th>
<th>RATED VOLTAGE (kVpp)</th>
<th>RATED VOLTAGE AT 50 °C (kVDC)</th>
<th>RATED VOLTAGE AT 70 °C (kVDC)</th>
<th>RATED POWER (1) AT 50 °C (kvar)</th>
<th>RATED POWER (1) AT 70 °C (kvar)</th>
<th>RATED CURRENT MAX. (A_RMS)</th>
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**Note**

(1) The surface temperature during operation must not exceed +100 °C

### DIMENSIONS in millimeters (inches)

**FPZ**

- **Diameter D_max.** 140 (5.51) ± 10 %
- **Width W1** 52 ± 3 (2.05 ± 0.12)
- **Width W2** 33 ± 3 (1.30 ± 0.12)
- **Thread size** M8

**PEZ**

- **Diameter D_max.** 140 (5.51) ± 10 %
- **Width W1** 52 ± 3 (2.05 ± 0.12)
- **Width W2** 30 ± 3 (1.18 ± 0.12)
- **Thread size** M8

For technical questions, contact: powcap@vishay.com

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