

RF Power Plate Capacitors for Higher Voltages Class 1 Ceramic



| QUICK REFERENCE DATA | | |
|-----------------------|----------------|---------|
| DESCRIPTION | VALUE | |
| Ceramic Class | 1 | |
| Ceramic Dielectric | R85 | |
| Type | FPE 200 | FPE 210 |
| Voltage (V_p) | 30 000 | |
| Min. Capacitance (pF) | 1000 | 1500 |
| Max. Capacitance (pF) | 1000 | 1500 |
| Mounting | Screw terminal | |

MATERIAL

Capacitor elements made from class 1 ceramic dielectric with noble metal electrodes.

Flexible connection terminals copper / brass, silver plated, to allow for series and parallel interconnection.

MARKING

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

FINISH

Noble metal electrodes and terminals protective lacquered. The contoured insulating rim is additionally glazed.

FEATURES

- Low losses
- High reliability
- High voltage ratings

APPLICATIONS

These high technology are designed for usage in high frequency heating and welding equipment where high voltage ratings are required.

CAPACITANCE RANGE

1000 pF to 1500 pF

CAPACITANCE TOLERANCE

± 20 %, ± 10 %

CERAMIC DIELECTRIC

R85 (TCC - 750 ppm/K)

RATED VOLTAGE

30 kV_p (= RF peak voltage + DC voltage)

DIELECTRIC STRENGTH TEST

50 000 V_{DC}, 5 minutes

30 000 V_{AC}, 50 Hz, 5 minutes

DISSIPATION FACTOR

Max. 0.05 %

Measuring frequencies:

300 kHz or 100 kHz

INSULATION RESISTANCE

Min. 10 000 MΩ (at 25 °C)

OPERATING TEMPERATURE RANGE

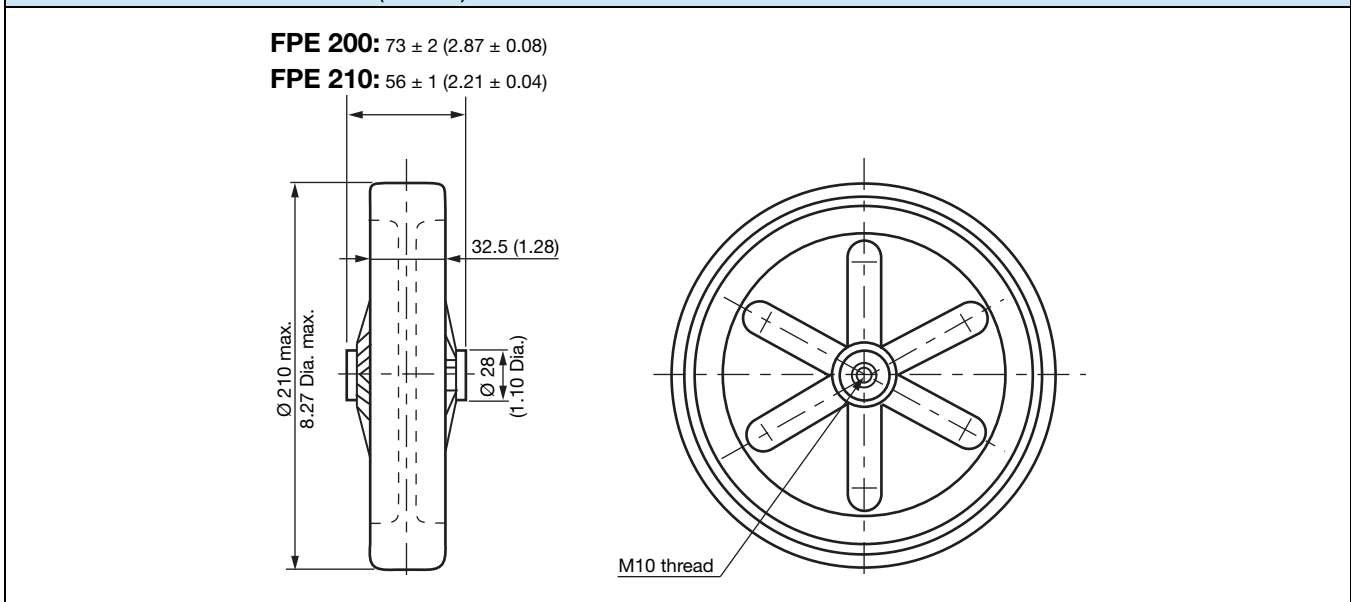
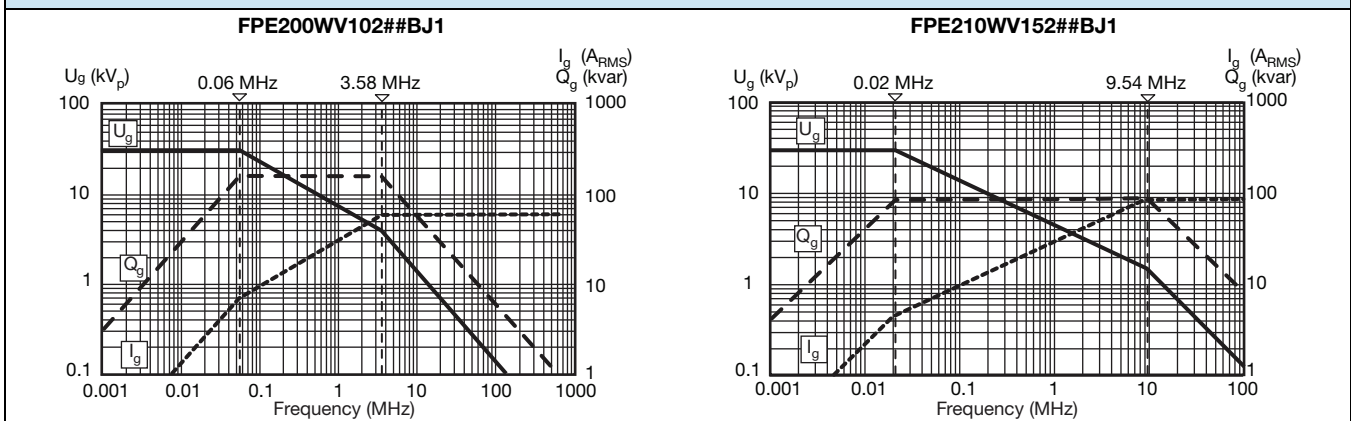
-55 °C to +100 °C

SAP PART NUMBER AND ELECTRICAL DATA

| PART NUMBER | CERAMIC | CAP. VALUE (pF) | RATED VOLTAGE (1) (kV _p) | RATED POWER (2) (kvar) | RATED CURRENT (A _{RMS}) |
|------------------|---------|-----------------|--------------------------------------|------------------------|-----------------------------------|
| FPE200WV102##BJ1 | R85 | 1000 | 30 | 160 | 60 |
| FPE210WV152##BJ1 | | 1500 | | 90 | 90 |

Notes

- ## 14th to 15th digit: capacitance tolerance code $\pm 20\% = 38$, $\pm 10\% = 36$
- (1) Rated voltage = RF peak value + DC voltage when min. 80% U_{DC}
- (2) The surface temperature during operation must not exceed +100 °C

DIMENSIONS in millimeters (inches)

DERATING DIAGRAMS

RELATED DOCUMENTS

General Information

www.vishay.com/doc?22071



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