

## 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<sub>p</sub> (= RF peak voltage + DC voltage)

### DIELECTRIC STRENGTH TEST

50 000 V<sub>DC</sub>, 5 minutes

30 000 V<sub>AC</sub>, 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

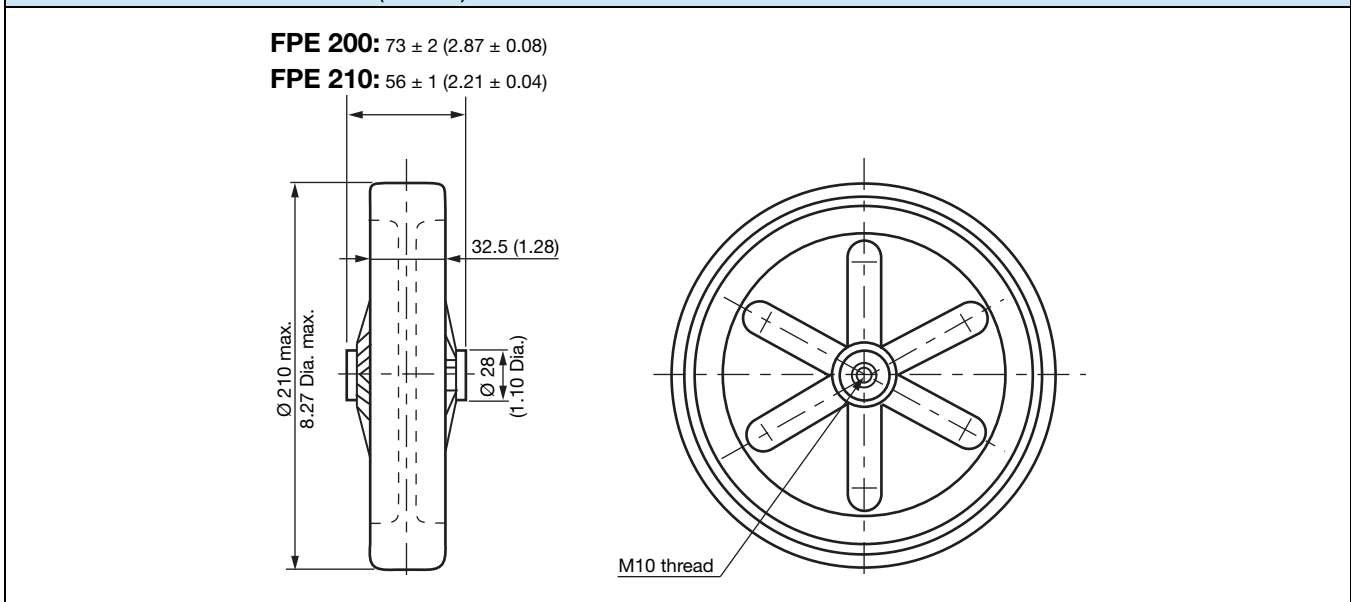
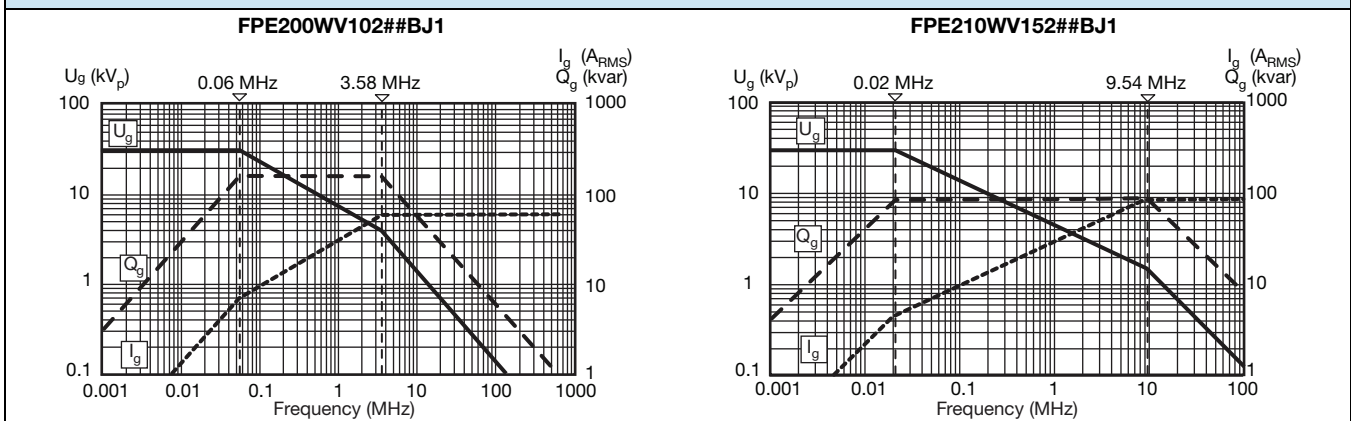
-55 °C to +100 °C

**SAP PART NUMBER AND ELECTRICAL DATA**

PART NUMBER	CERAMIC	CAP. VALUE (pF)	RATED VOLTAGE (1) (kV <sub>p</sub> )	RATED POWER (2) (kvar)	RATED CURRENT (A <sub>RMS</sub> )
FPE200WV102##BJ1	R85	1000	30	160	60
FPE210WV152##BJ1		1500		90	90

**Notes**

- ## 14<sup>th</sup> to 15<sup>th</sup> digit: capacitance tolerance code  $\pm 20\% = 38$ ,  $\pm 10\% = 36$
- (1) Rated voltage = RF peak value + DC voltage when min. 80% U<sub>DC</sub>
- (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](http://www.vishay.com/doc?22071)



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