

# 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 kV<sub>pp</sub> (peak-to-peak voltage)
- 25 kV<sub>pp</sub> (peak-to-peak voltage)
- 27 kV<sub>pp</sub> (peak-to-peak voltage)
- 30 kV<sub>pp</sub> (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

## QUICK REFERENCE DATA

DESCRIPTION	VALUE				
Ceramic Class	1				
Ceramic Dielectric	R16, R42, R85				
Type	FPZ 140		PEZ 140		
Voltage (V <sub>pp</sub> )	27 000	30 000	15 000	25 000	30 000
Min. Capacitance (pF)	200	50	1500	1000	600
Max. Capacitance (pF)	200	500	2500	1000	800
Mounting	Screw terminal				

## 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								
PART NUMBER	CERAMIC	CAP. VALUES (pF)	RATED VOLTAGE (kV <sub>PP</sub> )	RATED VOLTAGE AT 50 °C (kV <sub>DC</sub> )	RATED VOLTAGE AT 70 °C (kV <sub>DC</sub> )	RATED POWER <sup>(1)</sup> AT 50 °C (kvar)	RATED POWER <sup>(1)</sup> AT 70 °C (kvar)	RATED CURRENT MAX. (A <sub>RMS</sub> )
<b>TYPE FPZ 140</b>								
FPZ140WV50036BG1	R16	50	30	25	20	90	60	35
FPZ140WV10136BG1		100						
FPZ140WT20136BG1		200						
FPZ140WV25136BH1	R42	250	30	25	20	90	60	27
FPZ140WV30136BH1		300						
FPZ140WV40136BJ1	R85	400	30	25	20	90	60	35
FPZ140WV50136BJ1		500						
<b>TYPE PEZ 140</b>								
PEZ140WV60136BJ1	R85	600	30	25	25	90	60	35
PEZ140WV80136BJ1		800			20			
PEZ140BQ10236BJ1		1000			17			
PEZ140BJ15236BJ1		1500	15	13	10	90	60	45
PEZ140BJ20236BJ1		2000						
PEZ140BJ25236BJ1		2500						

**Note**

<sup>(1)</sup> The surface temperature during operation must not exceed + 100 °C

DIMENSIONS in millimeters (inches)					
<b>TYPE</b>	<b>FPZ140WV50036BG1</b>	<b>FPZ140WV10136BG1</b>	<b>FPZ140WT20136BG1</b>	<b>FPZ140WV25136BH1, FPZ140WV30136BH1, FPZ140WV40136BJ, FPZ140WV50136BJ1</b>	
Diameter D <sub>max.</sub>	140 (5.51) ± 10 %				
Width W <sub>1</sub>	52 ± 3 (2.05 ± 0.12)		50 ± 3 (2.97 ± 0.12)	52 ± 3 (2.05 ± 0.12)	
Width W <sub>2</sub>	33 ± 3 (1.30 ± 0.12)	29 ± 3 (1.14 ± 0.12)	27 ± 3 (1.06 ± 0.12)	29 ± 3 (1.14 ± 0.12)	
Thread size	M8				
<b>TYPE</b>	<b>PEZ140WV60136BJ1</b>	<b>PEZ140WV80136BJ1</b>	<b>PEZ140BQ10236BJ1</b>	<b>PEZ140BJ15236BJ1</b>	<b>PEZ140BJ20236BJ1, PEZ140BJ25236BJ1</b>
Diameter D <sub>max.</sub>	140 (5.51) ± 10 %				
Width W <sub>1</sub>	52 ± 3 (2.05 ± 0.12)	51 ± 3 (2.01 ± 0.12)	49 ± 3 (1.79 ± 0.12)	46 ± 3 (1.68 ± 0.12)	
Width W <sub>2</sub>	30 ± 3 (1.18 ± 0.12)			27 ± 3 (1.06 ± 0.12)	26 ± 3 (1.02 ± 0.12)
Thread size	M8				



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