

## RF Power Plate Capacitors with Flat Rim, Class 1 Ceramic



QUICK REFERENCE DATA					
DESCRIPTION	VALUE				
Ceramic Class	1				
Ceramic Dielectric	R42, R85	R85		R85	
Type	FPS 60		FPS 80		FPS 110
Voltage ( $V_p$ )	10 000	12 000	3500	7000	6000
Min. Capacitance (pF)	500	100	1000	500	1000
Max. Capacitance (pF)	500	300	1000	500	1000
Mounting	Screw terminal				

### MATERIAL

Capacitor elements made from class 1 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, production date code, ceramic material code, manufacturer logo

### ACCESSORIES ADDED

Two screws and washers

### FEATURES

- Low losses
- High reliability
- Small dimensions

### APPLICATIONS

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

### CAPACITANCE RANGE

100 pF to 1.0 nF

### CAPACITANCE TOLERANCE

± 10 %

### CERAMIC DIELECTRICS

- R42 (TCC - 250 ppm/K)
- R85 (TCC - 750 ppm/K)

### RATED VOLTAGE

- 3.5 kV<sub>p</sub>
- 6.0 kV<sub>p</sub>
- 7.0 kV<sub>p</sub>
- 10 kV<sub>p</sub>
- 12 kV<sub>p</sub>

### DIELECTRIC STRENGTH TEST

200 % of rated voltage (50 Hz)

### DISSIPATION FACTOR

Max. 0.05 %

Measuring frequencies:

1 MHz (< 1 nF); 300 kHz or 100 kHz (≥ 1 nF)

### INSULATION RESISTANCE

Min. 10 000 MΩ (at 25 °C)

### OPERATING TEMPERATURE RANGE

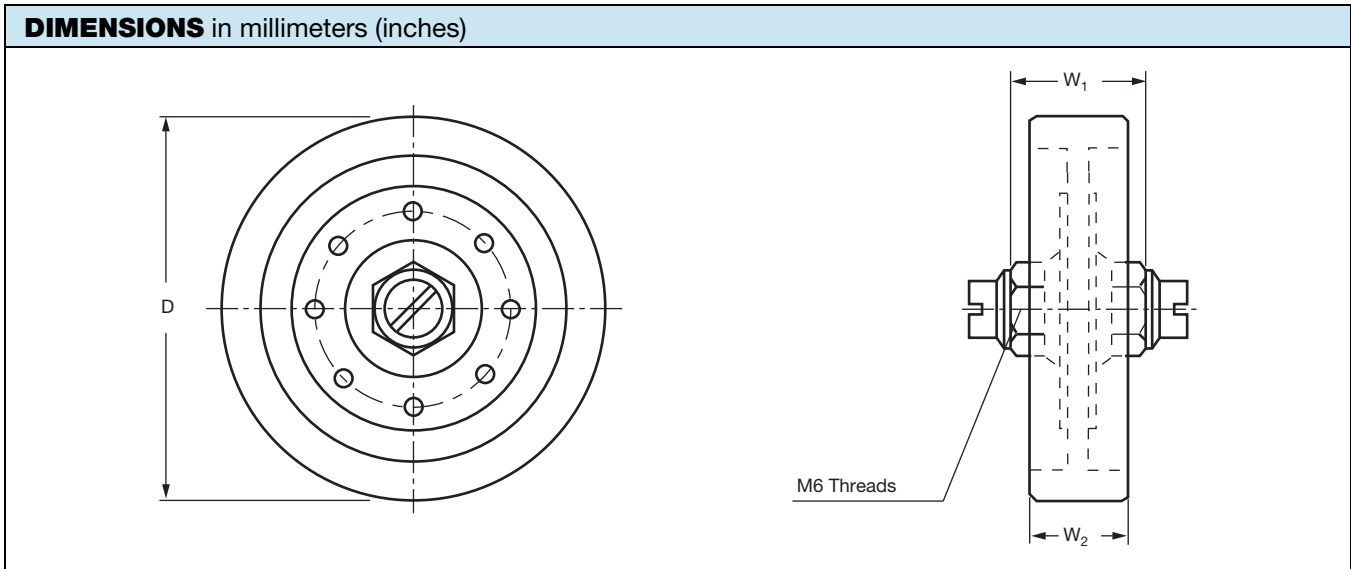
-55 °C to +100 °C



SAP PART NUMBER, ELECTRICAL AND DIMENSIONAL DATA								
PART NUMBER	CERAMIC	CAP. VALUE (pF)	RATED VOLTAGE (kV <sub>p</sub> )	RATED POWER (kvar) <sup>(1)</sup>	RATED CURRENT (A <sub>RMS</sub> )	DIA. D <sub>MAX.</sub> mm (inches)	WIDTH W <sub>1</sub> mm (inches)	WIDTH W <sub>2</sub> mm (inches)
<b>TYPE FPS 60</b>								
FPS060WF10136BH1	R42	100	12	10	13	62 (2.44)	29 ± 1 (1.14 ± 0.04)	20 ± 1 (0.79 ± 0.04)
FPS060WF20136BJ1	R85	200					30 ± 1 (1.18 ± 0.04)	21 ± 1 (0.83 ± 0.04)
FPS060WF25136BJ1		250					29 ± 1 (1.14 ± 0.04)	20 ± 1 (0.79 ± 0.04)
FPS060WF30136BJ1		300					27 ± 1 (1.06 ± 0.04)	18 ± 1 (0.71 ± 0.04)
FPS060BH50136BJ1	500	10	25 ± 1 (0.98 ± 0.04)	16 ± 1 (0.63 ± 0.04)				
<b>TYPE FPS 80</b>								
FPS080VY50136BJ1	R85	500	7.0	15	13	86 (3.39)	29 ± 3 (1.14 ± 0.12)	15 ± 3 (0.59 ± 0.12)
FPS080VT10236BJ1		1000	3.5	15	16		27 ± 3 (1.06 ± 0.12)	11 ± 3 (0.43 ± 0.12)
<b>TYPE FPS 110</b>								
FPS110BF10236BJ1	R85	1000	6	30	13	116 (4.57)	30 ± 3 (1.18 ± 0.12)	16 ± 3 (0.63 ± 0.12)

**Note**

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



**Note**

- Dimensions W<sub>2</sub> will vary depending upon capacitance value

RELATED DOCUMENTS	
General Information	<a href="http://www.vishay.com/doc?22071">www.vishay.com/doc?22071</a>



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