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Vishay Draloric

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



QUICK REFERENCE DATA							
DESCRIPTION	VALUE						
Ceramic Class	1						
Ceramic Dielectric	R42, R85		R85		R85		
Туре	FPS 60		FPS 80		FPS 110		
Voltage (V <sub>p</sub> )	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 M $\Omega$  (at 25 °C)

#### **OPERATING TEMPERATURE RANGE**

-55 °C to +100 °C

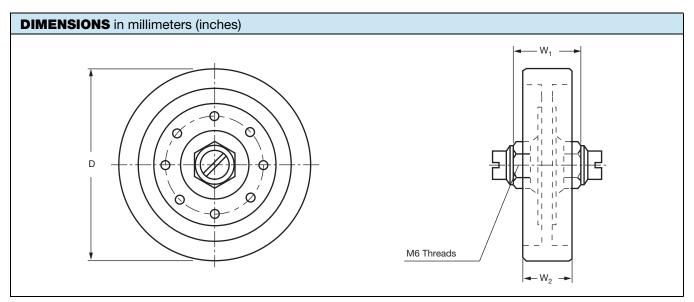
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SAP PART NUMBER, ELECTRICAL AND DIMENSIONAL DATA								
PART NUMBER	CERAMIC	CAP. VALUE (pF)	RATED VOLTAGE (kV <sub>p</sub> )	RATED POWER (kvar) <sup>(1)</sup>	RATED CURRENT (A <sub>RMS</sub> )	DIA. D <sub>MAX.</sub> mm (inches)	WIDTH W <sub>1</sub> mm (inches)	WIDTH W <sub>2</sub> mm (inches)
TYPE FPS 60								
FPS060WF10136BH1	R42	100		10	13	62 (2.44)	29 ± 1 (1.14 ± 0.04)	20 ± 1 (0.79 ± 0.04)
FPS060WF20136BJ1		200	12				30 ± 1 (1.18 ± 0.04)	21 ± 1 (0.83 ± 0.04)
FPS060WF25136BJ1	- R85	250	12				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)
TYPE FPS 80								
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)
TYPE FPS 110								
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  $^{\circ}\text{C}\,$ 



#### Note

• Dimensions W2 will vary depending upon capacitance value

RELATED DOCUMENTS	
General Information	www.vishay.com/doc?22071



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