

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_p
- 6.0 kV_p
- 7.0 kV_p
- 10 kV_p
- 12 kV_p

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

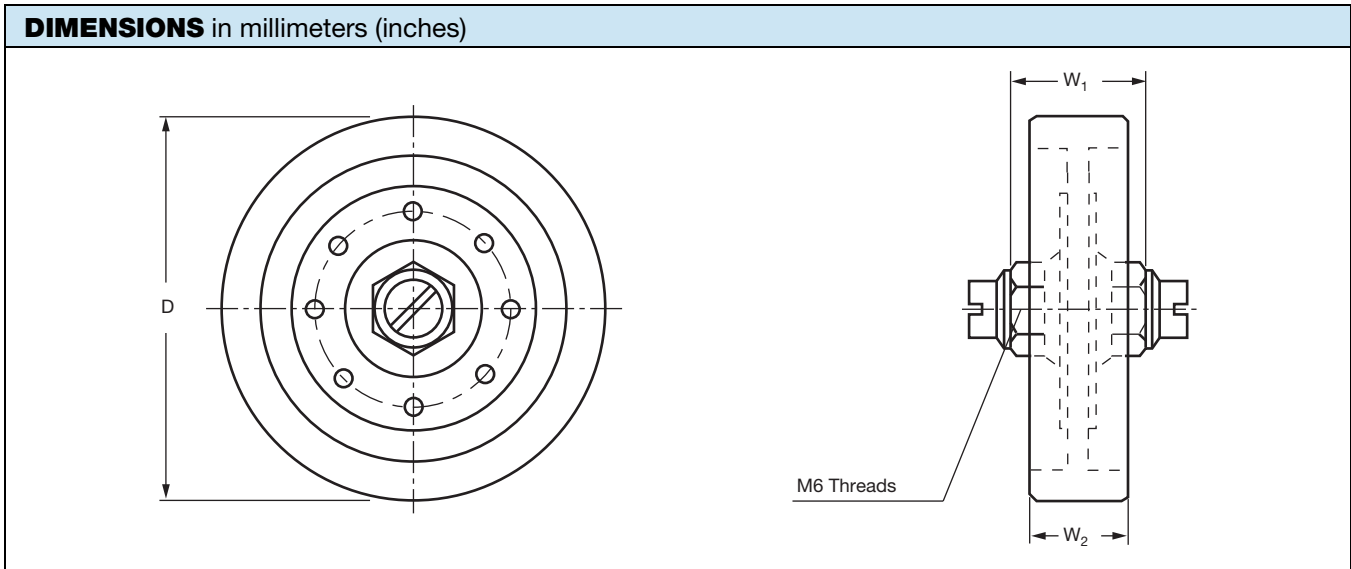
-55 °C to +100 °C



SAP PART NUMBER, ELECTRICAL AND DIMENSIONAL DATA								
PART NUMBER	CERAMIC	CAP. VALUE (pF)	RATED VOLTAGE (kV _p)	RATED POWER (kvar) ⁽¹⁾	RATED CURRENT (A _{RMS})	DIA. D _{MAX.} mm (inches)	WIDTH W ₁ mm (inches)	WIDTH W ₂ mm (inches)
TYPE FPS 60								
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)			
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

⁽¹⁾ The surface temperature during operation must not exceed +100 °C



Note

- Dimensions W₂ will vary depending upon capacitance value

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



Disclaimer

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Vishay"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product.

Vishay makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, Vishay disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on Vishay's knowledge of typical requirements that are often placed on Vishay products in generic applications. Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts. Product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein.

Hyperlinks included in this datasheet may direct users to third-party websites. These links are provided as a convenience and for informational purposes only. Inclusion of these hyperlinks does not constitute an endorsement or an approval by Vishay of any of the products, services or opinions of the corporation, organization or individual associated with the third-party website. Vishay disclaims any and all liability and bears no responsibility for the accuracy, legality or content of the third-party website or for that of subsequent links.

Except as expressly indicated in writing, Vishay products are not designed for use in medical, life-saving, or life-sustaining applications or for any other application in which the failure of the Vishay product could result in personal injury or death. Customers using or selling Vishay products not expressly indicated for use in such applications do so at their own risk. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay. Product names and markings noted herein may be trademarks of their respective owners.