

RF Power Plate Capacitors with Flat Rim, Class 1 Ceramic



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_{pp} (peak-to-peak voltage)
- 7.0 kV_{pp} (peak-to-peak voltage)
- 10 kV_p
- 12 kV_p
- 12 kV_{pp} (peak-to-peak voltage)

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

QUICK REFERENCE DATA

DESCRIPTION	VALUE		
Ceramic Class	1		
Ceramic Dielectric	R42, R85		
Type	FPS 60	FPS 80	FPS 110
Voltage (V _{DC})	10 000, 12 000	3500, 7000	12 000
Min. Capacitance (pF)	100	500	1000
Max. Capacitance (pF)	500	1000	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

FPS 60, FPS 80, FPS 110



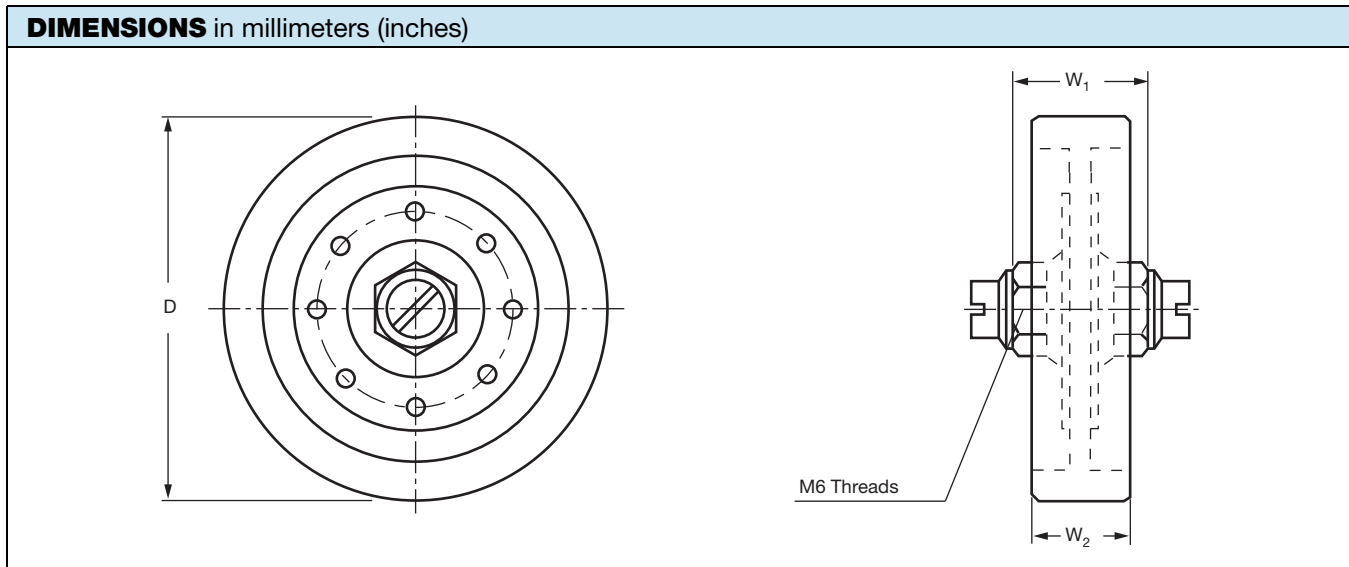
Vishay Draloric

RF Power Plate Capacitors with Flat Rim,
Class 1 Ceramic

SAP PART NUMBER, ELECTRICAL AND DIMENSIONAL DATA								
PART NUMBER	CERAMIC	CAP. VALUE (pF)	RATED VOLTAGE (kV _p) ⁽²⁾	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	80 (3.15)	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	12	30	13	110+0/-6 (4.33 + 0/- 0.24)	30 ± 3 (1.18 ± 0.12)	16 ± 3 (0.63 ± 0.12)

Notes

- (1) The surface temperature during operation must not exceed + 100 °C
- (2) Peak-to-peak voltage



Note

- Dimensions W₂ will vary depending upon capacitance value



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.

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 and agree to fully indemnify and hold Vishay and its distributors harmless from and against any and all claims, liabilities, expenses and damages arising or resulting in connection with such use or sale, including attorneys fees, even if such claim alleges that Vishay or its distributor was negligent regarding the design or manufacture of the part. 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.

Material Category Policy

Vishay Intertechnology, Inc. hereby certifies that all its products that are identified as RoHS-Compliant fulfill the definitions and restrictions defined under Directive 2011/65/EU of The European Parliament and of the Council of June 8, 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (EEE) - recast, unless otherwise specified as non-compliant.

Please note that some Vishay documentation may still make reference to RoHS Directive 2002/95/EC. We confirm that all the products identified as being compliant to Directive 2002/95/EC conform to Directive 2011/65/EU.