

RF Power Plate Capacitors with Contoured Rim, Class 2 Ceramic



FEATURES

- Small size
- High reliability
- High capacitance values

APPLICATIONS

PS 20 to PS 55 plate capacitors made from class 2 ceramic dielectric can be used as coupling and bypass capacitors where low power ratings are required and larger capacitance changes with temperature can be tolerated.

QUICK REFERENCE DATA						
DESCRIPTION	VALUE					
Ceramic Class	2					
Ceramic Dielectric	Y5U (R3500)					
Type	PS 20	PS 30	PS 40	PS 55		
Voltage (V_p)	3500	3500	3500	2000	3500	4000
Min. Capacitance (pF)	1000	2200	4700	27 000	15 000	10 000
Max. Capacitance (pF)	1500	3300	6800	27 000	22 000	10 000
Mounting	Screw terminal					

MATERIAL

Capacitor elements made from class 2 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, ceramic material code, production date code, manufacturer logo.

ACCESSORIES ADDED

Two screws and washers.

CAPACITANCE RANGE

1000 pF to 27 nF

CAPACITANCE TOLERANCE

(- 20 / + 40) %

CERAMIC DIELECTRIC

Y5U (R3500)

RATED VOLTAGE

- 2.0 kV_p
- 3.5 kV_p
- 4.0 kV_p

DIELECTRIC STRENGTH TEST

200 % of rated voltage, 50 Hz

DISSIPATION FACTOR

Max. 2.5 % (1 kHz)

INSULATION RESISTANCE

Min. 5000 MΩ (at 25 °C)

OPERATING TEMPERATURE RANGE

-25 °C to +85 °C

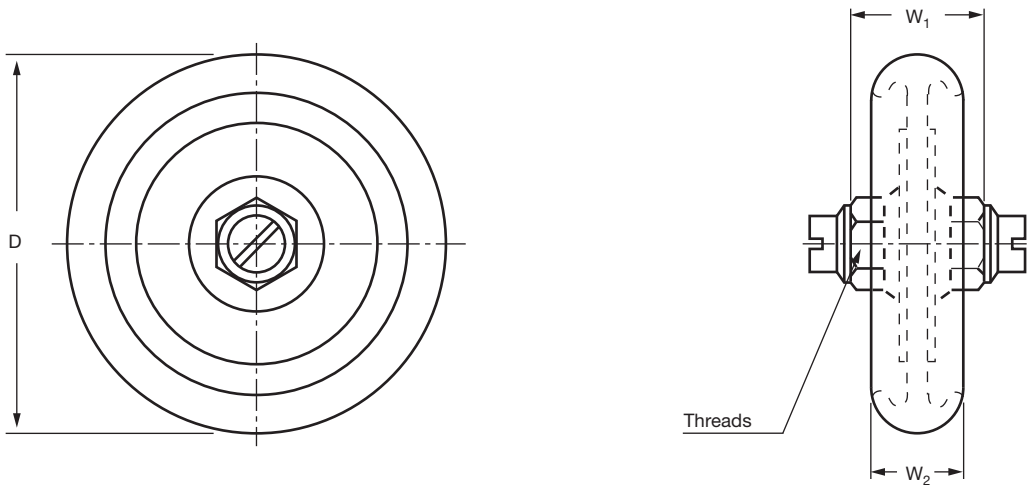


SAP PART NUMBER AND ELECTRICAL DATA					
PART NUMBER	CERAMIC	CAP. VALUES (pF)	RATED VOLTAGE (kV _p)	RATED POWER ⁽¹⁾ (kvar)	RATED CURRENT (A _{RMS})
TYPE PS 20					
PS0020VT10273BL1	Y5U (R3500)	1000	3.5	0.25	5.0
PS0020VT15273BL1		1500			
TYPE PS 30					
PS0030VT22273BL1	Y5U (R3500)	2200	3.5	0.5	10
PS0030VT33273BL1		3300			
TYPE PS 40					
PS0040VT47273BL1	Y5U (R3500)	4700	3.5	1.0	15
PS0040VT56273BL1		5600			
PS0040VT68273BL1		6800			
TYPE PS 55					
PS0055BD10373BL1	Y5U (R3500)	10 000	4.0	1.0	18
PS0055VT15373BL1		15 000	3.5		
PS0055VT22373BL1		22 000			
PS0055BB27373BL1		27 000			

Note

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

DIMENSIONS in millimeters (inches)



TYPE	PS 20	PS 30	PS 40	PS 55
Diameter D	24 ± 1 (0.95 ± 0.04)	35 ± 1 (1.38 ± 0.04)	44 ± 1 (1.73 ± 0.04)	56 ± 1 (2.20 ± 0.04)
Thread size	M5	M5	M6	M6
Width W ₁ max.	23 (0.91)	25 (0.98)	23 (0.91)	22 (0.87)
Width W ₂ max. ⁽¹⁾	17 (0.67)	17 (0.67)	16 (0.63)	15 (0.59)

Note

⁽¹⁾ Dimension W₂ will vary depending upon capacitance

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.

Vishay products are not designed for use in life-saving or life-sustaining applications or any application in which the failure of the Vishay product could result in personal injury or death unless specifically qualified in writing by Vishay. 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.