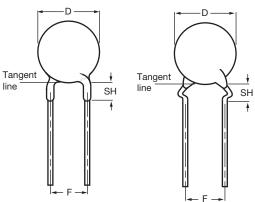


### Vishay BCcomponents

## Ceramic Disc Capacitors Class 1, 6 kV<sub>DC</sub>



Capacitors with 10 mm (0.40") lead spacing

QUICK REFERENCE DATA					
DESCRIPTION	CLASS 1 (C0G)				
Voltage (V <sub>DC</sub> )	6000				
Min. Capacitance (pF)	2				
Max. Capacitance (pF)	150				
Mounting	Through hole				

#### **MARKING**

Straight and kinked leaded versions are gold colored Marking indicates capacitance value and tolerance in accordance with "EIA 198", and voltage.

#### **OPERATING TEMPERATURE RANGE**

Class1, C0G; U2J, U2M, - 55 °C to + 125 °C

#### **TEMPERATURE COEFFICIENTS**

Class 1, C0G

#### **SECTIONAL SPECIFICATIONS**

Class 1, C0G, IEC 60384-8, EIA 198

#### **CLIMATIC CATEGORY**

Class 1, C0G; U2J, U2M, 55/125/21

#### **FEATURES**

- Low losses
- High stability
- High capacitance in small size
- Kinked (preferred) or straight leads
- Compliant to RoHS directive 2002/95/EC

# Ph



RoHS COMPLIANT

#### **APPLICATIONS**

- DC high voltage
- · Pulse high voltage
- LCD backlight inverter

#### **DESIGN**

The capacitors consist of a ceramic disc both sides of which are silver-plated. Connection leads are made of tinned copper having a diameter of 0.6 mm or 0.8 mm.

The capacitors may be supplied with kinked or straight leads with a lead spacing of 10 mm (0.40") and a lead length from 4 mm to 30 mm. The standard tolerance on capacitance is  $\pm$  5 % or  $\pm$  10 % for class 1 capacitors. Encapsulation is made of gold-colored epoxy-resin, flammable resistant in accordance with "UL 94 V-0".

#### **CAPACITANCE RANGE**

Class 1, at 1 MHz, 1.2  $V_{RMS}$ ; 2 pF to 150 pF

#### **RATED DC VOLTAGE**

6 kV

#### **DIELECTRIC STRENGTH**

According to IEC 384-8,  $1.5 \times U_R + 500 V_{DC}$  (9.5 kV<sub>DC</sub>)

#### INSULATION RESISTANCE AT 500 V<sub>DC</sub>

 $\geq$  10 000 M $\Omega$ 

#### **TOLERANCE ON CAPACITANCE**

 $\pm$  5 %;  $\pm$  10 %

Other tolerances available on request

#### **DISSIPATION FACTOR**

 $C \le 5 \text{ pF}$ , 0.55 % max. 10 pF  $\le C < 33 \text{ pF}$ , 20 x (150/C + 7) x 10<sup>-4</sup>  $C \ge 33 \text{ pF}$ ; 0.20 % max.

## **S** Series

## Vishay BCcomponents

## Ceramic Disc Capacitors Class 1, 6 kV<sub>DC</sub>



ORDERING INFORMATION, 6 kV <sub>DC</sub> , KINKED								
C (pF)	TOL. (%)	D <sub>MAX.</sub> (mm)	LEAD SPACING F (mm)	SH <sup>(1)</sup> (mm)	CLEAR TEXT CODE 13 <sup>TH</sup> DIGIT: 3 = BULK			
CLASS 1 CO	G							
2		7.5		4.0	S209D29C0KU6.K0R			
3	± 0.5				S309D29C0JU6.K0R			
5		6.5			S509D25U2JU6.K0R			
10					S100J25U2MU6.K0R			
12					S120J25U2MU6.K0R			
15		7.5	10.0		S150J29U2MU6.K0R			
18					S180J29U2MU6.K0R			
22					S220J29U2MU6.K0R			
27					S270J29U2MU6.K0R			
33	± 5	10.0			S330J39U2MU6.K0R			
39	± 5				S390J39U2MU6.K0R			
47					S470J39U2MU6.K0R			
68		12.5			S680J49U2MU6.K0R			
82					S820J49U2MU6.K0R			
100					S101J49U2MU6.K0R			
120		15.0			S121J59U2MU6.K0R			
150					S151J59U2MU6.K0R			

#### Notes

- (1) SH = Seated height
- Maximum thickness 6.0 mm
- Refer to outward kinked leads. Other styles available on request (straight or inline kinked leads).

PACKAGING							
PACKAGING TYPE	SIZE CODE	LEAD SPACE (mm)	VOLTAGE (V <sub>DC</sub> )	SPQ	BOX DIMENSIONS L x W x H (mm)		
Bulk (long lead L ≥ 25.4 mm)		10.0	6 kV	1000	- 245 x 120 x 65		
	25 to 47			1000			
				1000			
	53 to 75			500			

#### Note

• The capacitors are supplied in bulk packaging (cardboard boxes)

For technical questions, contact: CDC@vishay.com

Document Number: 28542 Revision: 07-Jan-10



## **Legal Disclaimer Notice**

Vishay

### **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. 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.