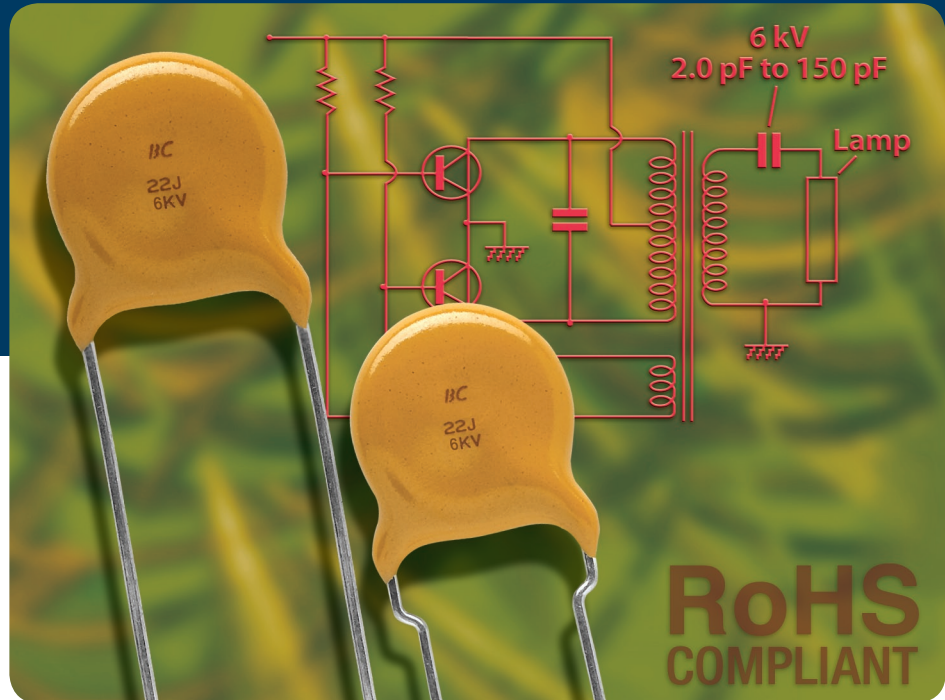




# SINGLE-LAYER DISC CAPACITORS

6 kV Series



## High-Voltage 6 kV Series

### KEY BENEFITS

- Complies with IEC 60384-8
- High reliability
- WEEE/RoHS compliance, according to EU directive 2002/95/EC
- Kinked (preferred) or straight leads
- Gold-colored epoxy resin coating, according to UL94V-0
- Small size
- Capacitance range: 2.0 pF to 150 pF
- Rated voltage: 6 kVdc
- Operating temperature: - 55 °C to + 125 °C
- Dielectric strength: 150 % of V rated + 500 Vdc (9.5 kV)

### APPLICATIONS

- High voltage dc applications
- High voltage pulse applications
- LCD backlight inverters

Datasheet is available on our web site at [www.vishay.com](http://www.vishay.com)  
for 6 kV Series - <http://www.vishay.com/doc?28542>

### Ceramic Disc Capacitors Class 1, 6 kV (DC)

- FEATURES**
- Low losses
  - High stability
  - High capacitance in small size
  - Kinked (preferred) or straight leads
  - Lead (Pb)-free available
- APPLICATIONS**
- DC high voltage
  - Pulse high voltage
  - LCD backlight inverter

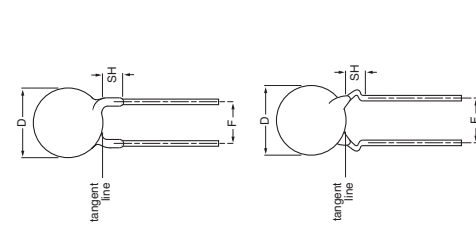


RoHS COMPLIANT

**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 (0.400 inch) and a lead length from 4 to 30 mm. The standard tolerance on capacitance is  $\pm 5\%$  or  $\pm 10\%$  for class 1 capacitors. Encapsulation is made of gold-coloured epoxy-resin, flammable resistant in accordance with "UL94V-0".



Capacitors with 10 mm (0.40 inch) lead spacing

**OPERATING TEMPERATURE RANGE:**  
Class 1 COG; U2J, U2M - 55 to +125 °C

**TEMPERATURE COEFFICIENTS:**  
Class 1

**SECTIONAL SPECIFICATIONS:**  
Class 1 IEC 60 384-8,  
EIA 198

**CLIMATIC CATEGORY:**  
Class 1 COG; U2J, U2M 55/125/21

**MARKING**

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

**ORDERING INFORMATION, 6 kV (DC), KINKED**

C (pF)	TOL (%)	D <sub>max</sub> (mm)	LEAD SPACING F (mm)	SH <sup>(2)</sup> (mm)	CLEAR TEXT CODE 19 <sup>th</sup> DIGIT: 3 = BULK
<b>CLASS 1</b>					
2	± 0.5 pF	7.5	10.0	4.8	S209D29C0K U6:K0R
3					S309D29C0C U6:K0R
5					S509D25L2 U6:K0R
10	6.5	7.5	10.0	4.8	S100L25L2 U6:K0R
12					S120L25L2 U6:K0R
15					S150L20L2 U6:K0R
18	7.5	10.0	10.0	4.8	S160L20L2 U6:K0R
22					S220L20L2 U6:K0R
27					S270L20L2 U6:K0R
33	± 5	10.0	10.0	4.8	S330L39U2 U6:K0R
39					S390L39U2 U6:K0R
47					S470L39U2 U6:K0R
68	12.5	15.0	10.0	4.8	S680L49U2 U6:K0R
82					S820L49U2 U6:K0R
100					S100L49U2 U6:K0R
120	15.0	15.0	10.0	4.8	S120L59U2 U6:K0R
150					S150L59U2 U6:K0R

**Notes**

1. Minimum thickness 6.0 mm.
2. SH = sealed height.
3. Refer to outward kinked leads. Other styles available on request (straight or inline kinked leads).

**PACKAGING**

PACKAGING TYPE	SIZE CODE	LEAD SPACE (mm)	VOLTAGE (VDC)	SPQ	BOX DIMENSIONS L x W x H (mm)
Bulk (long lead L ≥ 25.4 mm)	< 53	10.0	6 kV	1000	245 x 120 x 85
	53 to 75			500	

**Note**  
1. The capacitors are supplied in bulk packaging (cardboard boxes).

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