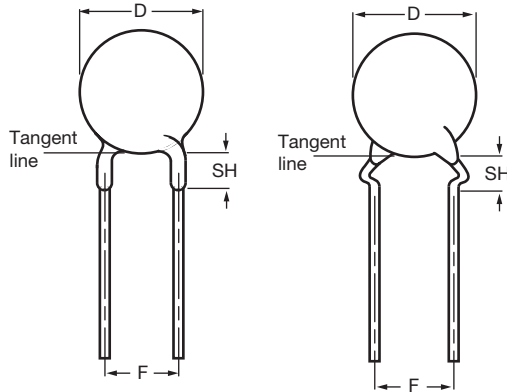


## Ceramic Disc Capacitors Class 1, 6 kV<sub>DC</sub>



Capacitors with 10 mm (0.40") lead spacing

**FEATURES**

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



**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".

| QUICK REFERENCE DATA  |               |
|-----------------------|---------------|
| DESCRIPTION           | CLASS 1 (C0G) |
| Voltage ( $V_{DC}$ )  | 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

**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**

$C \leq 5\ pF$ , 0.55 % max.

$10\ pF \leq C < 33\ pF$ ,  $20 \times (150/C + 7) \times 10^{-4}$

$C \geq 33\ pF$ ; 0.20 % max.

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

**Notes**

<sup>(1)</sup> 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<br>(mm) | VOLTAGE<br>(V <sub>DC</sub> ) | SPQ  | BOX DIMENSIONS<br>L x W x H<br>(mm) |
| Bulk<br>(long lead L ≥ 25.4 mm) | 25 to 47  | 10.0               | 6 kV                          | 1000 | 245 x 120 x 65                      |
|                                 |           |                    |                               | 1000 |                                     |
|                                 | 53 to 75  |                    |                               | 1000 |                                     |
|                                 |           |                    |                               | 500  |                                     |

**Note**

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



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