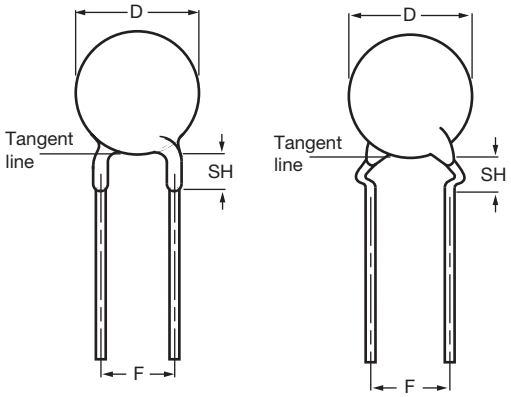
Ceramic Disc Capacitors
Class 1, 6 kV_{DC}



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

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

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 ± 5 % or ± 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 x U_R + 500 V_{DC} (9.5 kV_{DC})

INSULATION RESISTANCE AT 500 V_{DC}

≥ 10 000 MΩ

TOLERANCE ON CAPACITANCE

± 5 %; ± 10 %

Other tolerances available on request

DISSIPATION FACTOR

C ≤ 5 pF, 0.55 % max.

10 pF ≤ C < 33 pF, 20 x (150/C + 7) x 10^{-4}

C ≥ 33 pF; 0.20 % max.

ORDERING INFORMATION, 6 kV_{DC}, KINKED

C (pF)	TOL. (%)	$D_{MAX.}$ (mm)	LEAD SPACING F (mm)	SH [1] (mm)	CLEAR TEXT CODE 13TH DIGIT: 3 = BULK
CLASS 1 C0G					
2	± 0.5	7.5	10.0	4.0	S209D29C0KU6.K0R
3					S309D29C0JU6.K0R
5		6.5			S509D25U2JU6.K0R
10	± 5				S100J25U2MU6.K0R
12					S120J25U2MU6.K0R
15		7.5			S150J29U2MU6.K0R
18					S180J29U2MU6.K0R
22					S220J29U2MU6.K0R
27					S270J29U2MU6.K0R
33		10.0			S330J39U2MU6.K0R
39					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_{DC})	SPQ	BOX DIMENSIONS L x W x H (mm)
Bulk (long lead L ≥ 25.4 mm)	25 to 47	10.0	6 kV	1000	245 x 120 x 65
				1000	
				1000	
	53 to 75			500	

Note

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

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