

Lower Voltage Ceramic DC Disc Capacitors 1000 V_{DC} Precision Capacitors



FEATURES

- Ultra stable over temperature and voltage
- Used when the ultimate in stability is required
- Radial leads
- Ceramic singlelayer capacitor
- Material categorization: For definitions of compliance please see www.vishay.com/doc?99912


RoHS
COMPLIANT

APPLICATIONS

- Temperature compensating
- Resonant circuit

DESIGN

The capacitors consist of a ceramic disc of which both sides are silver-plated. Connection leads are made of tinned copper or tinned copper clad steel having diameters of 0.020" (0.51 mm) or 0.025" (0.64 mm).

The capacitors may be supplied with radial kinked or straight leads having lead spacing of 0.250" (6.35 mm) or 0.375" (9.5 mm).

Coating is made of flame retardant epoxy resin in accordance with "UL 94 V-0".

QUICK REFERENCE DATA					
DESCRIPTION	VALUE				
Ceramic Class	1				
Ceramic Dielectric	C0K	C0G	U2J	M3K	S3N
Voltage (V _{AC})	1000				
Min. Capacitance (pF)	1.0	3.0	33	560	680
Max. Capacitance (pF)	2.7	270	68	560	680
Mounting	Radial				

INSULATION RESISTANCE

Min. 1000 ΩF or 50 000 MΩ

TOLERANCE ON CAPACITANCE

± 5 %

DISSIPATION FACTOR

0.1 % max. at 1 MHz; 1 V

CATEGORY TEMPERATURE RANGE

(- 55 to + 125) °C

CLIMATIC CATEGORY ACC. TO EN 60068-1

55/125/21

OPERATING TEMPERATURE RANGE

(- 55 to + 105) °C

CAPACITANCE RANGE

1.0 pF to 680 pF

RATED VOLTAGE

1000 V_{DC}

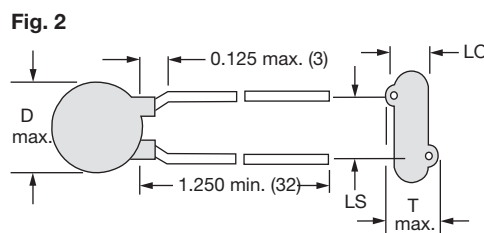
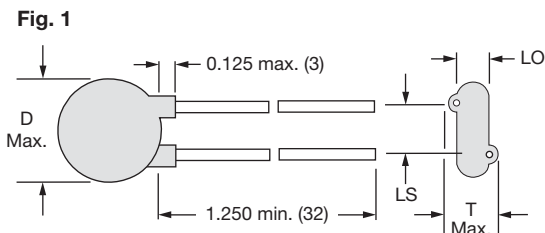
DIELECTRIC STRENGTH BETWEEN LEADS

Component test:

2500 V_{DC}, 2 s

CERAMIC DIELECTRIC

C0K, C0G, U2J, M3K, S3N (Class 1)

DIMENSIONS in inches (millimeters)

LEAD OFFSET "LO" (nominal)

1000 V_{DC}

0.050" (1.3 mm)

ORDERING INFORMATION, CERAMIC 1000 V_{DC} PRECISION CAPACITORS

C (pF)	TOL.	D DIAMETER INCH (mm)	T THICKNESS INCH (mm)	LS LEAD SPACE INCH (mm)	WIRE SIZE		FIG.	ORDERING CODE						
					AWG	INCH (mm)								
C0K (P100)														
1.0	± 0.5 pF	0.250 (6.4)	0.156 (4.0)	0.250 (6.4)	24	0.020 (0.51)	2	561R10TCCV10						
2.2								561R10TCCV22						
2.7								561R10TCCV27						
C0G (NP0)														
3.0	± 0.5 pF	0.250 (6.4)	0.156 (4.0)	0.250 (6.4)	24	0.020 (0.51)	2	561R10TCCV30						
3.3								561R10TCCV33						
3.9								561R10TCCV39						
4.7								561R10TCCV47						
5.0								561R10TCCV50						
5.6								561R10TCCV56						
6.8								561R10TCCV68						
8.2								561R10TCCV82						
10	± 5 %	0.290 (7.4)	0.156 (4.0)	0.250 (6.4)	24	0.020 (0.51)	2	561R10TCCQ10						
12								561R10TCCQ12						
15								561R10TCCQ15						
18								561R10TCCQ18						
20								561R10TCCQ20						
22								561R10TCCQ22						
25								561R10TCCQ25						
27								561R10TCCQ27						
30		0.370 (9.4)	0.156 (4.0)	0.250 (6.4)	22	0.025 (0.64)	1	561R10TCCQ30						
33								561R10TCCQ33						
39								561R10TCCQ39						
47								561R10TCCQ47						
50								0.440 (11.2)	0.156 (4.0)	0.250 (6.4)				561R10TCCQ50
56														561R10TCCQ56
68														561R10TCCQ68
82														561R10TCCQ82
100	0.560 (14.2)	0.156 (4.0)	0.375 (9.5)				561R10TCCT10							
120							561R10TCCT12							
150							561R10TCCT15							
180							561R10TCCT18							
220	0.760 (19.3)	0.156 (4.0)	0.375 (9.5)				561R10TCCT22							
270							561R10TCCT27							
U2J (N750)														
33	± 5 %	0.290 (7.4)	0.156 (4.0)	0.250 (6.4)	24	0.020 (0.51)	2	561R10TCUQ33						
68		0.370 (9.4)	0.156 (4.0)	0.250 (6.4)	22	0.025 (0.64)		561R10TCUQ68						
M3K (N1000)														
560	± 5 %	0.560 (14.2)	0.156 (4.0)	0.375 (9.5)	22	0.025 (0.64)	1	561R10TCUT56						
S3N (N3300)														
680	± 5 %	0.630 (16.0)	0.156 (4.0)	0.375 (9.5)	22	0.025 (0.64)	1	561R10TCUT68						

RELATED DOCUMENTS

General Information

www.vishay.com/doc?23140



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