

## Lower Voltage Ceramic DC Disc Capacitors 1000 V<sub>DC</sub> Precision Capacitors


**RoHS**  
COMPLIANT

**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](http://www.vishay.com/doc?99912)

**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 <sub>AC</sub> )	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<sub>DC</sub>
**DIELECTRIC STRENGTH BETWEEN LEADS**

Component test:

 2500 V<sub>DC</sub>, 2 s

**CERAMIC DIELECTRIC**

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

DIMENSIONS in inches (millimeters)	
<b>LEAD OFFSET "LO" (nominal)</b>	
1000 V <sub>DC</sub>	0.050" (1.3 mm)

ORDERING INFORMATION, CERAMIC 1000 V <sub>DC</sub> 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)		
<b>C0K (P100)</b>								
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
<b>C0G (NP0)</b>								
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								561R10TCCQ10
12								561R10TCCQ12
15	561R10TCCQ15							
18	561R10TCCQ18							
20	561R10TCCQ20							
22	561R10TCCQ22							
25	561R10TCCQ25							
27	561R10TCCQ27							
30	561R10TCCQ30							
33	561R10TCCQ33							
39	561R10TCCQ39							
47	561R10TCCQ47							
50	561R10TCCQ50							
56	561R10TCCQ56							
68	561R10TCCQ68							
82	561R10TCCQ82							
100	561R10TCCT10							
120	561R10TCCT12							
150	561R10TCCT15							
180	561R10TCCT18							
220	561R10TCCT22							
270	561R10TCCT27							
<b>U2J (N750)</b>								
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
<b>M3K (N1000)</b>								
560	± 5 %	0.560 (14.2)	0.156 (4.0)	0.375 (9.5)	22	0.025 (0.64)	1	561R10TCUT56
<b>S3N (N3300)</b>								
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	<a href="http://www.vishay.com/doc?23140">www.vishay.com/doc?23140</a>



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