# Lower Voltage Ceramic Disc Capacitors
# 1000 VDC Precision Capacitors

**Fig. 1**

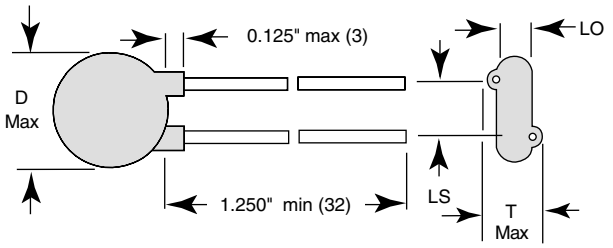
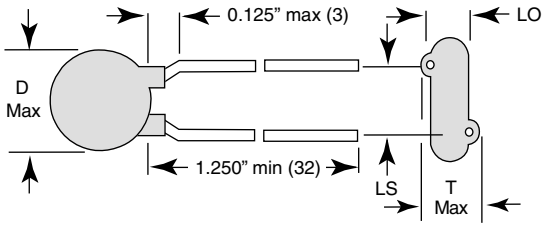



**Fig. 2**




| LEAD OFFSET 'LO" (NOMINAL) | |
|---|---|
| 1000 VDC | 0.050 (1.3 mm) |

### 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 EN60068-1:
55/125/21

### OPERATING TEMPERATURE RANGE:
(- 55 to + 105) °C

### FEATURES
- Ultra stable over temperature and voltage
- Used when the ultimate in stability is required

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 *"UL94V-0".*

### CAPACITANCE RANGE:
1.0 pF to 1000 pF

### RATED VOLTAGE:
1000 VDC

### DIELECTRIC STRENGTH BETWEEN LEADS:
Component test:
2500 VDC, 2 s

### CERAMIC DIELECTRIC:
C0K, C0G, U2J, M3K, S3N (Class 1)

## ORDERING INFORMATION, CERAMIC 1000 VDC PRECISION CAPACITORS

| C (pF) | TOL. (%) | D DIAMETER INCH (mm) | T THICKNESS INCH (mm) | LS LEAD SPACE | WIRE SIZE AWG | WIRE SIZE INCH (mm) | FIG. | ORDERING CODE |
|---|---|---|---|---|---|---|---|---|
| **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 % | | | | | | | 561R10TCCQ10 |
| 12 | | | | | | | | 561R10TCCQ12 |
| 15 | | | | | | | | 561R10TCCQ15 |
| 18 | | 0.290 (7.4) | 0.156 (4.0) | 0.250 (6.4) | | | | 561R10TCCQ18 |
| 20 | | | | | | | | 561R10TCCQ20 |
| 22 | | | | | | | | 561R10TCCQ22 |
| 25 | | | | | | | | 561R10TCCQ25 |
| 27 | | 0.370 (9.4) | 0.156 (4.0) | 0.250 (6.4) | | | | 561R10TCCQ27 |
| 30 | | | | | | | | 561R10TCCQ30 |
| 33 | | | | | | | | 561R10TCCQ33 |
| 39 | | | | | | | | 561R10TCCQ39 |
| 47 | | 0.440 (11.2) | 0.156 (4.0) | 0.250 (6.4) | | | 1 | 561R10TCCQ47 |
| 50 | | | | | | | | 561R10TCCQ50 |
| 56 | | | | | | | | 561R10TCCQ56 |
| 68 | | 0.490 (12.4) | 0.156 (4.0) | 0.250 (6.4) | 22 | 0.025 (0.64) | | 561R10TCCQ68 |
| 82 | | 0.490 (12.4) | 0.156 (4.0) | 0.375 (9.5) | | | | 561R10TCCQ82 |
| 100 | | 0.560 (14.2) | 0.156 (4.0) | 0.375 (9.5) | | | | 561R10TCCT10 |
| 120 | | | | | | | | 561R10TCCT12 |
| 150 | | 0.630 (16.0) | 0.156 (4.0) | 0.375 (9.5) | | | | 561R10TCCT15 |
| 180 | | 0.680 (17.3) | 0.156 (4.0) | 0.375 (9.5) | | | | 561R10TCCT18 |
| 220 | | 0.760 (19.3) | 0.156 (4.0) | 0.375 (9.5) | | | | 561R10TCCT22 |
| 270 | | 0.890 (22.6) | 0.156 (4.0) | 0.375 (9.5) | | | | 561R10TCCT27 |
| **U2J (N750)** | | | | | | | | |
| 33 | ± 5 % | 0.290 (7.4) | 0.156 (4.0) | 0.250 (6.4) | 24 | 0.020 (0.51) | 2 | 561R10TCUQ33 |
| 47 | | | | | | | | 561R10TCUQ47 |
| 68 | | 0.370 (9.4) | 0.156 (4.0) | 0.250 (6.4) | 22 | 0.025 (0.64) | | 561R10TCUQ68 |
| 100 | | | | | | | | 561R10TCUT10 |
| **M3K (N1000)** | | | | | | | | |
| 220 | ± 5 % | 0.440 (11.2) | 0.156 (4.0) | 0.250 (6.4) | 22 | 0.025 (0.64) | 1 | 561R10TCUT22 |
| 330 | | 0.490 (12.4) | 0.156 (4.0) | 0.250 (6.4) | | | | 561R10TCUT33 |
| 470 | | 0.560 (14.2) | 0.156 (4.0) | 0.375 (9.5) | | | | 561R10TCUT47 |
| 560 | | | | | | | | 561R10TCUT56 |
| **S3N (N3300)** | | | | | | | | |
| 680 | ± 5 % | 0.630 (16.0) | 0.156 (4.0) | 0.375 (9.5) | 22 | 0.025 (0.64) | 1 | 561R10TCUT68 |
| 1000 | | 0.680 (17.3) | 0.156 (4.0) | 0.375 (9.5) | | | | 561R10TCUD10 |

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