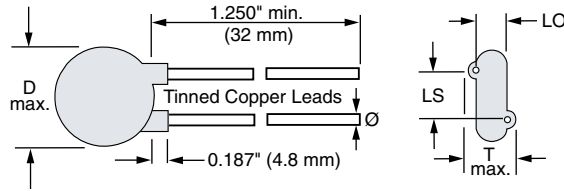


## High Voltage Ceramic Disc Capacitors 10 kVDC and 15 kVDC

Fig. 1



LEAD OFFSET 'LO' NOMINAL	
10 kVDC	0.20" (5.0 mm)
15 kVDC	0.30" (7.6 mm)

### INSULATION RESISTANCE

Min. 1000  $\Omega$ F or 200 000 M $\Omega$

### TOLERANCE ON CAPACITANCE

$\pm 20\%$  or  $+ 80\% / - 20\%$

### DISSIPATION FACTOR

0.2 % max. at 1 kHz; 1 V (Class 1)  
2.0 % max. at 1 kHz; 1 V (Class 2)

### CATEGORY TEMPERATURE RANGE

- 25 °C to + 85 °C

### CLIMATIC CATEGORY ACC. TO EN60068-1

25/85/21

### OPERATING TEMPERATURE RANGE

- 25 °C to + 105 °C

### FEATURES

- Low losses
- High capacitance in small sizes
- High stability
- Radial leads
- Compliant to RoHS directive 2002/95/EC



### APPLICATIONS

- TV and monitors
- SMPS
- DC and pulse high voltage
- X-Ray equipment

### DESIGN

The capacitors consist of a ceramic disc of which both sides are silver-plated. Connection leads are made of tinned copper having diameters of 0.032" (0.81 mm).

The capacitors may be supplied with straight leads having lead spacing of 0.375" (9.5 mm), 0.500" (12.7 mm) or 0.750" (19.2 mm).

The standard tolerances are  $\pm 20\%$  or  $+ 80\% / - 20\%$ .

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

### CAPACITANCE RANGE

100 pF to 3300 pF

### DIELECTRIC STRENGTH BETWEEN LEADS

10 kVDC      15 000 VDC, 2 s  
15 kVDC      24 000 VDC, 2 s  
(in dielectric fluid)

### CERAMIC DIELECTRIC

T3M (Class 1)  
X5F, Y5R, Y5U, Z5U (Class 2)

ORDERING INFORMATION, CERAMIC 10 kVDC								
C (pF)	TOL. (%)	D DIAMETER INCH (mm)	T THICKNESS INCH (mm)	LS LEAD SPACE INCH (mm)	WIRE SIZE		ORDERING CODE	
					AWG	INCH (mm)		
<b>T3M (N4700)</b>								
250	± 20 %	0.490 (12.4)	0.290 (7.4)	0.375 (9.5)	20	0.032 (0.81)	615R100GATT25	
500		0.680 (17.3)	0.320 (8.1)	0.500 (12.7)			615R100GATT50	
680		0.750 (19.1)	0.300 (7.6)				615R100GATT68	
820		0.810 (20.6)					615R100GATT82	
1000		0.980 (24.9)	0.320 (8.1)	615R100GATD10				
<b>X5F</b>								
100	± 20 %	0.680 (17.3)	0.370 (9.4)	0.500 (12.7)	20	0.032 (0.81)	615R100GAT10	
250			0.300 (7.6)				615R100GAT25	
500			0.345 (8.8)				615R100GAT50	
<b>Y5R</b>								
100	± 20 %	0.490 (12.4)	0.330 (8.4)	0.375 (9.5)	20	0.032 (0.81)	615R100GAST10	
250			0.340 (8.6)				615R100GAST25	
500			0.310 (7.9)				615R100GAST50	
1000			0.750 (19.1)	0.320 (8.1)			0.500 (12.7)	615R100GAD10
2500			0.980 (24.9)	0.330 (8.4)				615R100GATD25
<b>Y5U</b>								
1000	+ 80/- 20 %	0.680 (17.3)	0.330 (8.4)	0.500 (12.7)	20	0.032 (0.81)	615R100GASD10	
<b>Z5U</b>								
2500	+ 80/- 20 %	0.750 (19.1)	0.350 (8.9)	0.500 (12.7)	20	0.032 (0.81)	615R100GAD25	
3300		0.980 (24.9)	0.390 (9.9)				615R100GAD33	

ORDERING INFORMATION, CERAMIC 15 kVDC								
C (pF)	TOL. (%)	D DIAMETER INCH (mm)	T THICKNESS INCH (mm)	LS LEAD SPACE INCH (mm)	WIRE SIZE		ORDERING CODE	
					AWG	INCH (mm)		
<b>T3M (N4700)</b>								
100	± 20 %	0.490 (12.4)	0.470 (11.9)	0.500 (12.7)	20	0.032 (0.81)	615R150GATT10	
250		0.670 (17.0)	0.430 (10.9)	0.750 (19.1)			615R150GATT25	
390		0.750 (19.1)	0.425 (10.8)				615R150GATT39	
500		0.810 (20.6)	0.410 (10.4)				615R150GATT50	
750		0.980 (24.9)	0.350 (8.9)	615R150GATT75				
<b>X5F</b>								
100	± 20 %	0.670 (17.0)	0.430 (10.9)	0.750 (19.1)	20	0.032 (0.81)	615R150GAT10	
250			0.455 (11.6)				615R150GAT25	
<b>Y5R</b>								
100	± 20 %	0.490 (12.4)	0.490 (12.4)	0.500 (12.7)	20	0.032 (0.81)	615R150GAST10	
250			0.480 (12.2)				615R150GAST25	
500			0.670 (17.0)	0.430 (10.9)			0.750 (19.1)	615R150GAT50
1000			0.980 (24.9)	0.460 (11.7)				615R150GATD10
<b>Y5U</b>								
500	+ 80/- 20 %	0.490 (12.4)	0.375 (9.5)	0.500 (12.7)	20	0.032 (0.81)	615R150GAST50	
1000		0.670 (17.0)	0.420 (10.7)	0.750 (19.1)			615R150GAD10	
<b>Z5U</b>								
2200	+ 80/- 20 %	0.980 (24.9)	0.510 (13.0)	0.750 (19.1)	20	0.032 (0.81)	615R150GAD22	
2500			0.450 (11.4)				615R150GAD25	



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