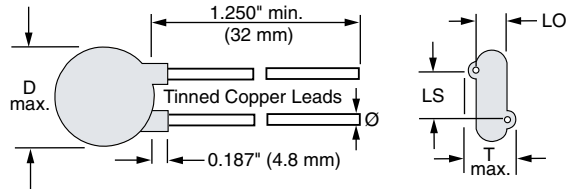


## High Voltage Ceramic Disc Capacitors 10 kVDC and 15 kVDC

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)

# 615R Series

Vishay Cera-Mite

High Voltage Ceramic Disc Capacitors  
10 kVDC and 15 kVDC



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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