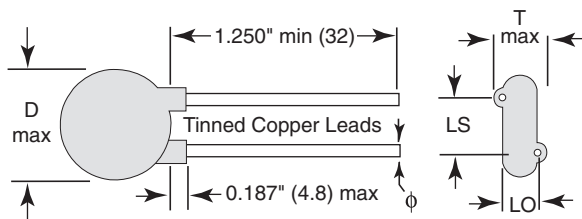


## High Voltage Ceramic Disc Capacitors 10 kVDC & 15 kVDC

Fig. 1



### LEAD OFFSET 'LO'

| 10 kVDC series NOMINAL | 0.20 (5.0 mm) |
|------------------------|---------------|
| 15 kVDC series NOMINAL | 0.30 (7.6 mm) |

### INSULATION RESISTANCE:

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

### TOLERANCE ON CAPACITANCE:

$\pm 20\%$ ; + 80 - 20 %

### DISSIPATION FACTOR:

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

### CATEGORY TEMPERATURE RANGE:

(- 25 to + 85) °C

### CLIMATIC CATEGORY ACC. TO EN60068-1:

25/085/21

### OPERATING TEMPERATURE RANGE:

(- 25 to + 105) °C

### FEATURES

- Low losses
- High capacitance in small size
- High stability



### APPLICATIONS

- TV & 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" (10.1 mm)

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

Coating is made of flame retardant epoxy resin in accordance with "UL94V-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 & 15 kVDC



| ORDERING INFORMATION, CERAMIC 10 kVDC |             |                            |                             |                     |           |              |                  |
|---------------------------------------|-------------|----------------------------|-----------------------------|---------------------|-----------|--------------|------------------|
| C<br>(pF)                             | TOL.<br>(%) | D<br>DIAMETER<br>INCH (mm) | T<br>THICKNESS<br>INCH (mm) | LS<br>LEAD<br>SPACE | WIRE SIZE |              | ORDERING<br>CODE |
|                                       |             |                            |                             |                     | AWG       | INCH (mm)    |                  |
| T3M (N4700)                           |             |                            |                             |                     |           |              |                  |
| 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    |
| X5F                                   |             |                            |                             |                     |           |              |                  |
| 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     |
| Y5R                                   |             |                            |                             |                     |           |              |                  |
| 100                                   | ± 20 %      | 0.490 (12.4)               | 0.330 (7.4)                 | 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 (7.4)                 |                     |           |              | 615R100GATD25    |
| Y5U                                   |             |                            |                             |                     |           |              |                  |
| 1000                                  | + 80/- 20 % | 0.680 (17.3)               | 0.330 (7.4)                 | 0.500 (12.7)        | 20        | 0.032 (0.81) | 615R100GASD10    |
| Z5U                                   |             |                            |                             |                     |           |              |                  |
| 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<br>(pF)                             | TOL.<br>(%) | D<br>DIAMETER<br>INCH (mm) | T<br>THICKNESS<br>INCH (mm) | LS<br>LEAD<br>SPACE | WIRE SIZE |              | ORDERING<br>CODE |
|                                       |             |                            |                             |                     | AWG       | INCH (mm)    |                  |
| T3M (N4700)                           |             |                            |                             |                     |           |              |                  |
| 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    |
| X5F                                   |             |                            |                             |                     |           |              |                  |
| 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     |
| Y5R                                   |             |                            |                             |                     |           |              |                  |
| 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    |
| Y5U                                   |             |                            |                             |                     |           |              |                  |
| 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     |
| Z5U                                   |             |                            |                             |                     |           |              |                  |
| 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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- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
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