



Gas Discharge Tube

3RD-8 Series

Gas Discharge Tube - 3RD-8Series

GDT introduction: Gas discharge tubes (GDT) use noble gasses enclosed in ceramic tubes to provide an alternate circuit path for voltage spikes. The ceramic envelope and with nickel connectors allow for high loads and Ruilon offers products that function at 20KA,40KA,50KA,60KA,100KA&150KA. The breakdown voltages of the devices have a wide range (up to 20% tolerance). Major applications are high frequency telecommunication lines, stations, security systems, HID and high quality Surge Protection Devices (SPD).



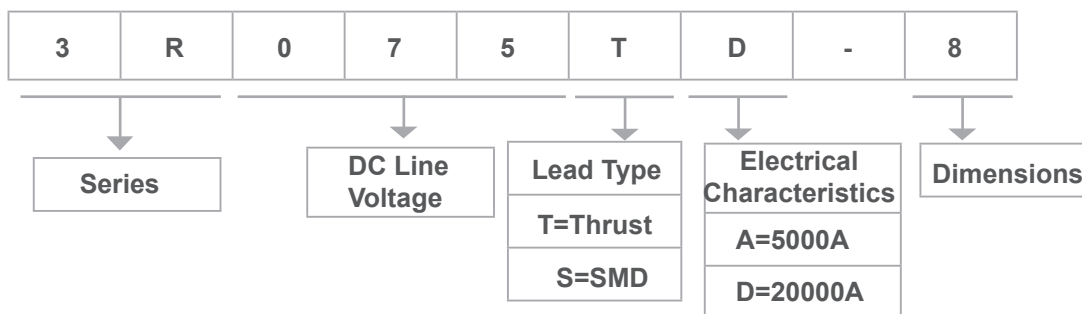
Features

1. RoHS & HF compliant
2. Rugged ceramic-metal construction
3. Available with or without leads
4. Available with fail-safe clip
5. DC spark-over voltage: 75~600V
6. Low capacitance
7. Agency recognition :UL
8. Operating temperature : -30°C ~ +85°C
Storage temperature: -40°C ~ +115°C

Recommended Applications

1. Cable Modem
2. xDSL
3. Set-Top Box
4. TV sets
5. Power supplier
6. Consumer electronics

Part Number Code



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Electrical Characteristics

| Part No. | | | DC Spark-over Voltage | Max. Impulse Breakdown Voltage | | Max. Impulse Discharge Current (8/20 μ s) | Impulse Life(10/1000 μ s) | Normal Alternating Discharge Current | DC Holdover Voltage | Minimum Insulation Resistance | Maximum Capacitance (1MHz) |
|-----------|-----------|------------|-----------------------|--------------------------------|--------------|---|-------------------------------|--------------------------------------|---------------------|-------------------------------|----------------------------|
| | | | | 100V/ μ s | 1KV/ μ s | | | | | | |
| T Series | S Series | T-F Series | (V) | (V) | (V) | (KA) | (Times) | (A) | (V) | (G Ω) | (pF) |
| 3R075TD-8 | 3R075SD-8 | 3R075TD-8F | 75 \pm 20% | 600 | 700 | 20 | 300 | 20 | 52 | 10 | 2 |
| 3R090TD-8 | 3R090SD-8 | 3R090TD-8F | 90 \pm 20% | 600 | 700 | 20 | 300 | 20 | 52 | 10 | 2 |
| 3R150TD-8 | 3R150SD-8 | 3R150TD-8F | 150 \pm 20% | 500 | 700 | 20 | 300 | 20 | 135 | 10 | 2 |
| 3R200TD-8 | 3R200SD-8 | 3R200TD-8F | 200 \pm 20% | 500 | 700 | 20 | 300 | 20 | 135 | 10 | 2 |
| 3R230TD-8 | 3R230SD-8 | 3R230TD-8F | 230 \pm 20% | 600 | 700 | 20 | 300 | 20 | 150 | 10 | 2 |
| 3R250TD-8 | 3R250SD-8 | 3R250TD-8F | 250 \pm 20% | 600 | 700 | 20 | 300 | 20 | 150 | 10 | 2 |
| 3R350TD-8 | 3R350SD-8 | 3R350TD-8F | 350 \pm 20% | 700 | 800 | 20 | 300 | 20 | 150 | 10 | 2 |
| 3R400TD-8 | 3R400SD-8 | 3R400TD-8F | 400 \pm 20% | 800 | 900 | 20 | 300 | 20 | 150 | 10 | 2 |
| 3R470TD-8 | 3R470SD-8 | 3R470TD-8F | 470 \pm 20% | 900 | 1000 | 20 | 300 | 20 | 150 | 10 | 2 |
| 3R600TD-8 | 3R600SD-8 | 3R600TD-8F | 600 \pm 20% | 1000 | 1100 | 20 | 300 | 20 | 150 | 10 | 2 |

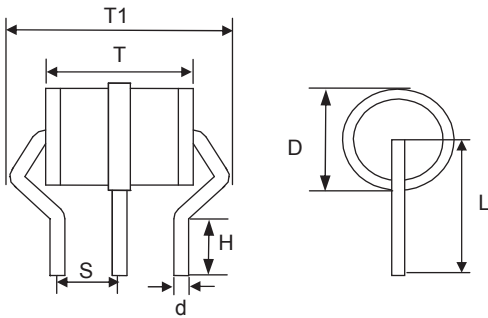
| DC Spark-over Voltage | DC Measuring Voltage |
|-----------------------|----------------------|
| 75-90V | 50V |
| 150-400V | 100V |
| 420-600V | 250V |

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Dimension

□ = T (Axial lead type)

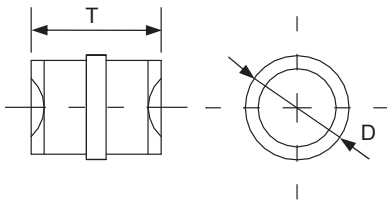
Unit:mm



| Item | Dimensions | |
|------|------------|-----------|
| | Spec. | Tolerance |
| D | 8.0 | +0.2/-0.8 |
| T | 10.0 | ±0.5 |
| T1 | 13.4 | +0.8/-0.5 |
| L | 7.5 | ±0.5 |
| S | 4.4 | ±0.4 |
| d | 1.0 | ±0.05 |
| H | 4.5 | Min. |

□ = S (No lead type)

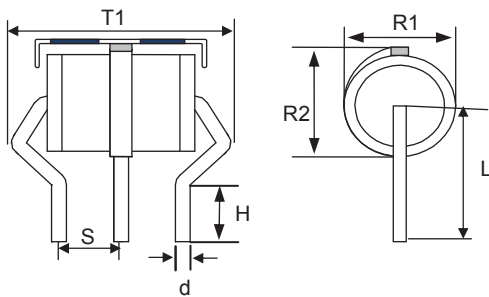
Unit:mm



| Item | Dimensions | |
|------|------------|-----------|
| | Spec. | Tolerance |
| D | 8.0 | +0.2/-0.8 |
| T | 10.0 | ±0.5 |

□ = F (No lead type)

Unit:mm

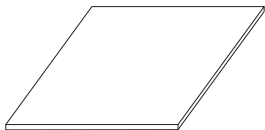
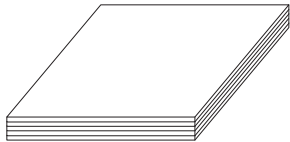
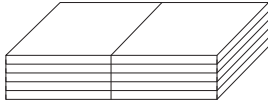


| Item | Dimensions | |
|------|------------|-----------|
| | Spec. | Tolerance |
| R1 | 8.1 | ±0.3 |
| R2 | 9.8 | ±0.4 |
| T1 | 13.4 | +0.8/-0.5 |
| L | 7.5 | ±0.5 |
| S | 4.4 | ±0.4 |
| d | 1.0 | ±0.05 |
| H | 4.5 | Min. |

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Packaging Bulk

Unit:mm

| Plastic Tray (200x210x10mm) | Inner Box (210x225x60mm) | Outside Box (450x245x345mm) |
|---|---|---|
|  |  |  |
| 100 PCS/ Plastic Tray | 500 PCS/ Box | 5,000 PCS/ Carton |

Warehouse Storage Conditions of Products

- Storage Conditions:
 1. Storage Temperature: -10°C~+40°C
 2. Relative Humidity: ≤75%RH
 3. Keep away from corrosive atmosphere and sunlight.
- Period of Storage: 1 year

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