

# GR-1218 SERIES GAS DISCHARGE TUBES

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).

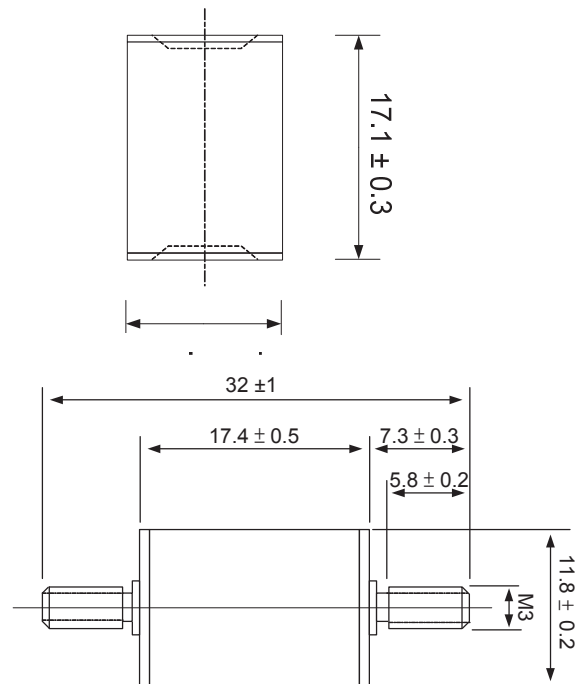


## Features

- Rugged ceramic-metal construction
- DC spark-over voltage: 230~2200V
- Low capacitance
- Agency recognition: UL / cUL
- Operating temperature : -30°C ~ +85°C Storage temperature: -40°C ~ +115°C

## Applications

- Power supplier
- Industrial equipment
- SPD Module



## Part Number Code

|        |   |                       |   |      |   |           |   |   |   |   |
|--------|---|-----------------------|---|------|---|-----------|---|---|---|---|
| S      | T | 2                     | 3 | 0    | H | -         | 1 | 2 | 1 | 8 |
| ↓      |   | ↓                     |   | ↓    |   | ↓         |   |   |   |   |
| Series |   | DC spark-over voltage |   | 60KA |   | Dimension |   |   |   |   |



| Part No.     | DC Spark-over Voltage | Maximum Impulse Breakdown Voltage |              | Max. Impulse Discharge Current (8/20 $\mu$ s) |         | Impulse Life (10/1000 $\mu$ s) | Normal Alternating Discharge Current |                 | DC Holdover Voltage | Minimum Insulation Resistance | Maximum Capacitance (1MHz) |
|--------------|-----------------------|-----------------------------------|--------------|---|---------|--------------------------------|--------------------------------------|-----------------|---------------------|-------------------------------|----------------------------|
|              | 100V/S                | 100V/ $\mu$ S                     | 1KV/ $\mu$ s | 1 times                                       | 5 times | 500 A                          | 50Hz 1Sec                            | Single 9 Cycles | <150ms              |                               |                            |
|              | (V)                   | (V)                               | (V)          | (KA)  |         | Times                          | (A)                                  |                 | (V)                 |                               |                            |
| GR230H-1218  | 230 $\pm$ 20%         | 600                               | 700          | 100   | 60      | 400                            | 60                                   | 300             | 135                 | 5                             | 10                         |
| GR250H-1218  | 250 $\pm$ 20%         | 600                               | 700          | 100   | 60      | 400                            | 60                                   | 300             | 135                 | 5                             | 10                         |
| GR300H-1218  | 300 $\pm$ 20%         | 700                               | 800          | 100   | 60      | 400                            | 60                                   | 300             | 150                 | 5                             | 10                         |
| GR350H-1218  | 350 $\pm$ 20%         | 800                               | 900          | 100   | 60      | 400                            | 60                                   | 300             | 150                 | 5                             | 10                         |
| GR420H-1218  | 420 $\pm$ 20%         | 900                               | 1000         | 100   | 60      | 400                            | 60                                   | 300             | 150                 | 5                             | 10                         |
| GR470H-1218  | 470 $\pm$ 20%         | 900                               | 1100         | 100   | 60      | 400                            | 60                                   | 300             | 150                 | 5                             | 10                         |
| GR600H-1218  | 600 $\pm$ 20%         | 1100                              | 1300         | 100   | 60      | 400                            | 60                                   | 300             | 150                 | 5                             | 10                         |
| GR700H-1218  | 700 $\pm$ 20%         | 1200                              | 1400         | 100   | 60      | 400                            | 60                                   | 300             | 150                 | 5                             | 10                         |
| GR800H-1218  | 800 $\pm$ 20%         | 1300                              | 1500         | 100   | 60      | 400                            | 60                                   | 300             | 150                 | 5                             | 10                         |
| GR1000D-1218 | 1000 $\pm$ 20%        | 1500                              | 1700         | 25  | 20      | 100                            | 20                                   | 120             | 150                 | 10                            | 1                          |
| GR1200D-1218 | 1200 $\pm$ 20%        | 1800                              | 2000         | 25  | 20      | 100                            | 20                                   | 120             | 150                 | 10                            | 1                          |
| GR1400D-1218 | 1400 $\pm$ 20%        | 2000                              | 2200         | 25  | 20      | 100                            | 20                                   | 120             | 150                 | 10                            | 1                          |
| GR1600D-1218 | 1600 $\pm$ 20%        | 2300                              | 2500         | 25  | 20      | 100                            | 20                                   | 120             | 150                 | 10                            | 1                          |
| GR2000D-1218 | 2000 $\pm$ 20%        | 2600                              | 2700         | 25  | 20      | 100                            | 20                                   | 120             | 150                 | 10                            | 1                          |
| GR2200D-1218 | 2200 $\pm$ 20%        | 2700                              | 2800         | 25  | 20      | 100                            | 20                                   | 120             | 150                 | 10                            | 1                          |

| DC Spark-over Voltage | DC Measuring Voltage |
|-----------------------|----------------------|
| 150-400V              | 100V                 |
| 420-800V              | 250V                 |
| 1000-1999V            | 500V                 |
| 2000-4000V            | 1000V                |