



# 3RLB-7 SERIES GAS DISCHARGE TUBE

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).

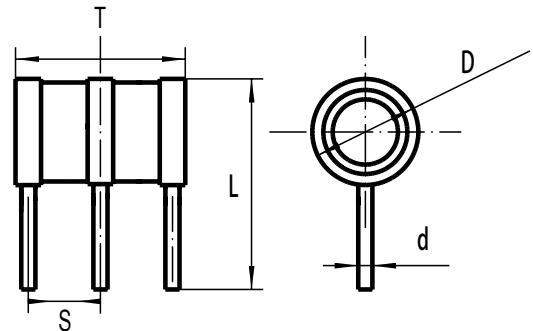


## Features

- Size: 11.5mm\*7.5mm
- DC Spark-over voltage: 75~800V
- Stable breakdown voltage.
- High insulation resistance.
- High holdover voltage.
- Large absorbing transient current capability.
- Low Capacitance
- Micro-Gap Design

## Applications

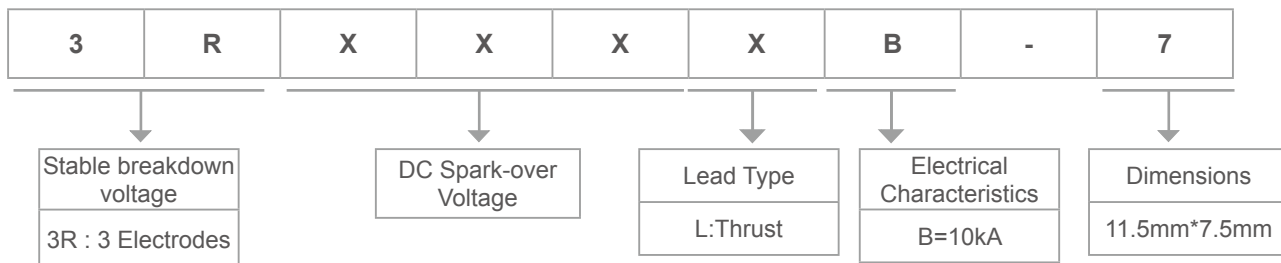
- Cable Modem
- xDSL
- Set-Top Box
- Satellite and CATV equipment
- Power supplier
- Consumer electronics
- General telecom equipment



Unit:mm

| Item | Dimensions |           |
|------|------------|-----------|
|      | Spec.      | Tolerance |
| D    | 7.5        | ±0.2      |
| T    | 11.5       | ±0.2      |
| L    | 15         | ±1        |
| S    | 4.4        | ±0.2      |
| d    | 1.0        | ±0.05     |

## Part Number Code





## Electrical Characteristics

| Part Number | DC Spark-over Voltage | Max. 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 | 10 times                                      | 100A                          | 50Hz,1Sec                            | <150ms              |                               |                            |
|             | (V)                   | (V)                            | (V)          | (KA)  | (Times)                       | (A)                                  | (V)                 |                               |                            |
| 3R075LB-7   | 75 $\pm$ 20%          | 600                            | 700          | 10  | 300                           | 10                                   | 52                  | 1                             | 2                          |
| 3R090LB-7   | 90 $\pm$ 20%          | 600                            | 700          | 10  | 300                           | 10                                   | 52                  | 1                             | 2                          |
| 3R150LB-7   | 150 $\pm$ 20%         | 500                            | 700          | 10  | 300                           | 10                                   | 135                 | 1                             | 2                          |
| 3R200LB-7   | 200 $\pm$ 20%         | 500                            | 700          | 10  | 300                           | 10                                   | 135                 | 1                             | 2                          |
| 3R230LB-7   | 230 $\pm$ 20%         | 600                            | 700          | 10  | 300                           | 10                                   | 150                 | 1                             | 2                          |
| 3R250LB-7   | 250 $\pm$ 20%         | 600                            | 700          | 10  | 300                           | 10                                   | 150                 | 1                             | 2                          |
| 3R350LB-7   | 350 $\pm$ 20%         | 700                            | 800          | 10  | 300                           | 10                                   | 150                 | 1                             | 2                          |
| 3R400LB-7   | 400 $\pm$ 20%         | 800                            | 900          | 10  | 300                           | 10                                   | 150                 | 1                             | 2                          |
| 3R470LB-7   | 470 $\pm$ 20%         | 900                            | 1000         | 10  | 300                           | 10                                   | 150                 | 1                             | 2                          |
| 3R600LB-7   | 600 $\pm$ 20%         | 1000                           | 1100         | 10  | 300                           | 10                                   | 150                 | 1                             | 2                          |

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