

## Gas Discharge Tube (GDT) Data Sheet

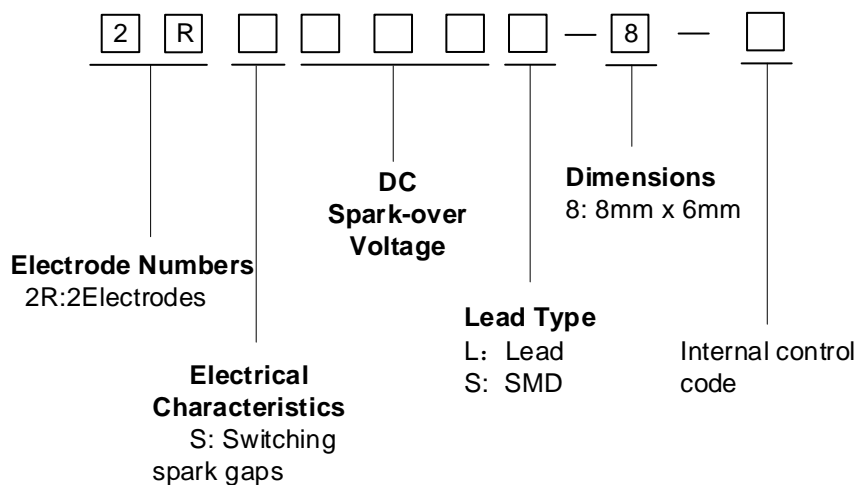
### Features

- Provide ultra-fast response to surge voltage from slow-rising surge of 100V/s to rapid-rising surge of 1KV/μs
- Low capacitance ( ≤1.5pF )
- High holdover voltage
- Stable breakdown voltage
- Large absorbing transient current capability
- Surface mounted gas arrester
- Micro-Gap Design
- Operating and Storage Temperature : -40°C ~ +125°C
- Meets MSL Level 1, per J-STD-020

### Applications

- Telephone Interface, Line cards
- Data communication equipment
- Line test equipment
- Repeaters, Modems

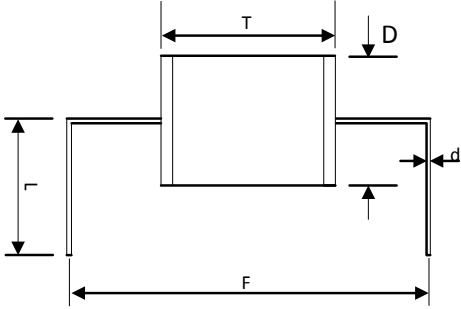
### Part Number Code



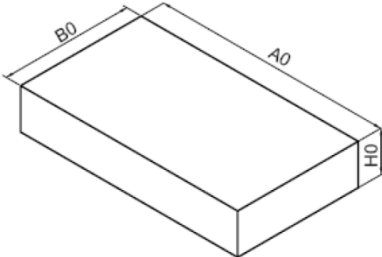
### Electrical Characteristics

| Part Number | DC Spark-over Voltage | Switching Operations @25° C | Test Voltage (v) | Minimum Insulation Resistance |           | Maximum Capacitance | Peak dischargecurrent (A) | Device Marking Code |
|-------------|-----------------------|-----------------------------|------------------|-------------------------------|-----------|---------------------|---------------------------|---------------------|
|             | 100V/S                | Times                       |                  | Test Voltage (GΩ)             | (1MHz 1V) |                     |                           |                     |
|             | (v)                   |                             |                  | DC(V)                         |           | (pF)                |                           |                     |
| 2RS800L-8   | 800±20%               | 10 <sup>5</sup>             | 1000             | 100                           | 1         | 1.5                 | 400                       | KG8<br>800          |

### Dimensions

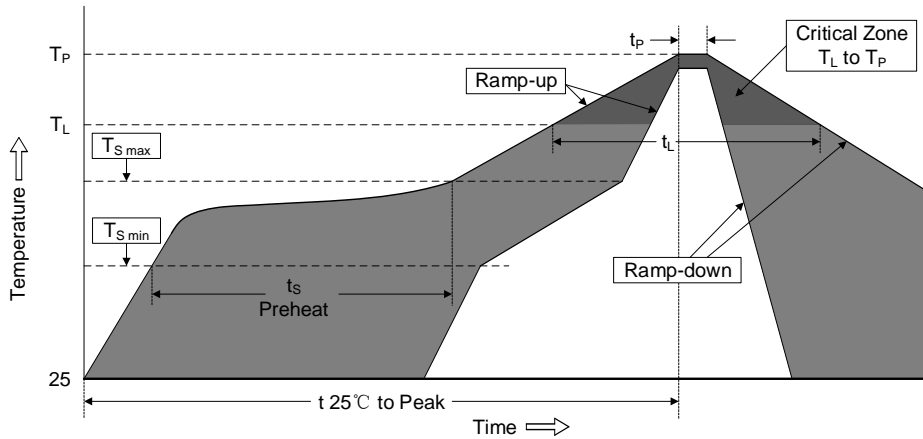
|  | Symbol | Dimension (mm) |
|--|--------|----------------|
|  | D      | 8.00±0.50      |
|  | T      | 6.00±0.50      |
|  | d      | 0.80±0.10      |
|  | L      | 8.00±1.00      |
|  | F      | 10.00±1.00     |

### Packaging

|  | Symbol | Dimension (mm)   |
|---|--------|------------------|
|   | A0     | 270 ± 2.0        |
|   | B0     | 150 ± 2.0        |
|   | H0     | 50 ± 2.0         |
|   |        | Quantity:1000pcs |

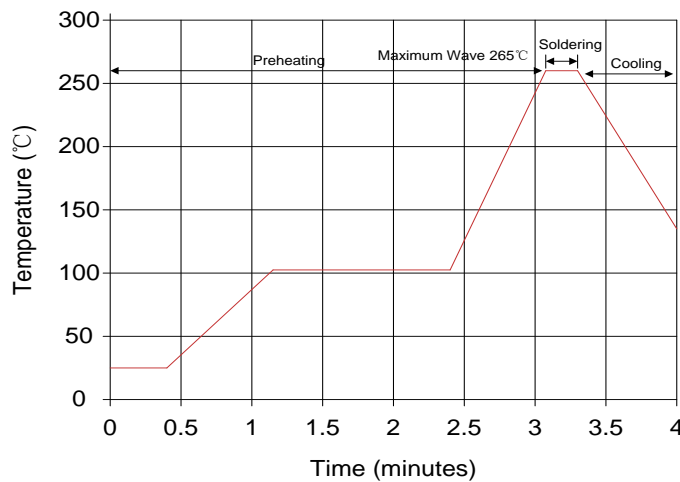
## Soldering Recommendation

### Reflow Soldering



| Profile Feature                                      | Pb-Free Assembly |
|--|------------------|
| Average ramp-up rate ( $T_L$ to $T_P$ )              | 3°C/second max.  |
| Preheat  |                  |
| -Temperature Min ( $T_{S\ min}$ )                    | 150°C            |
| -Temperature Max ( $T_{S\ max}$ )                    | 200°C            |
| -Time (min to max) ( $t_s$ )                         | 60-180 seconds   |
| $T_{S\ max}$ to $T_L$                                |                  |
| -Ramp-up Rate  | 3°C/second max.  |
| Time maintained above:                               |                  |
| -Temperature ( $T_L$ )                               | 217°C            |
| -Time ( $t_L$ )                                      | 60-150 seconds   |
| Peak Temperature ( $T_P$ )                           | 260°C            |
| Time within 5°C of actual Peak Temperature ( $t_p$ ) | 20-40 seconds    |
| Ramp-down Rate                                       | 6°C/second max.  |
| Time 25°C to Peak Temperature                        | 8 minutes max.   |

### Wave Soldering



| Item             | Conditions       |
|------------------|------------------|
| Peak Temperature | 265°C            |
| Dipping Time     | 10 seconds(max.) |
| Soldering        | 1 time           |