

Gas Discharge Tube: GB8 Series



3-Electrode $\Phi 8.0$ x T10 mm Type

■ Features

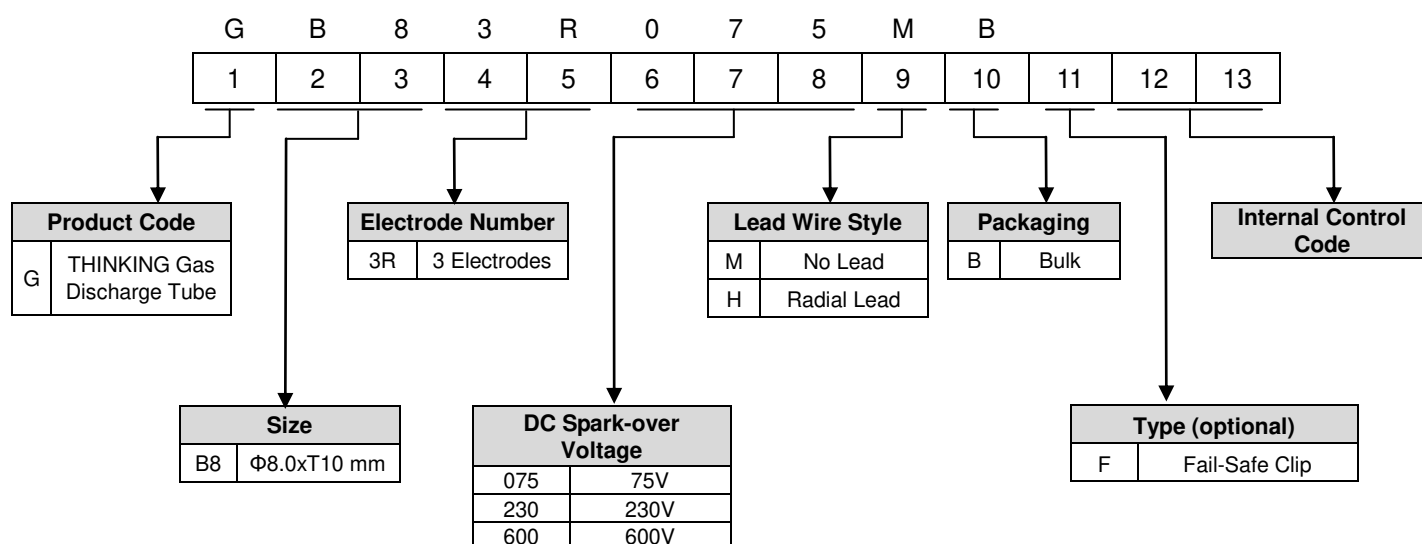
1. RoHS & HF compliant
2. Rugged ceramic-metal construction
3. Available with or without leads
4. Available with fail-safe clip
5. DC spark-over voltage: 75~600V
6. Low capacitance
7. Agency recognition: UL
8. Operating temperature: $-40^{\circ}\text{C} \sim +105^{\circ}\text{C}$
Storage temperature: $-40^{\circ}\text{C} \sim +115^{\circ}\text{C}$



■ Recommended Applications

1. Cable modem
2. xDSL
3. Set-top box
4. TV sets
5. Power supply
6. Consumer electronics

■ Part Number Code



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■ 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) | Safety Approvals |
|---------------|-----------------------|--------------------------------|--------------|---|--------------------------------|--------------------------------------|---------------------|-------------------------------|----------------------------|------------------|
| | 100V/S | 100V/ μ s | 1KV/ μ s | 10 times | 200 A | 50Hz, 1Sec | <150ms | | | |
| | (V) | (V) | (V) | (KA) | Times | (A) | (V) | | | |
| GB83R075□□(F) | 75 \pm 20% | 600 | 700 | 20 | 130 | 20 | 52 | 10 | 2 | √ |
| GB83R090□□(F) | 90 \pm 20% | 600 | 700 | | | | 52 | | | √ |
| GB83R145□□(F) | 145 \pm 20% | 500 | 700 | | | | 52 | | | √ |
| GB83R200□□(F) | 200 \pm 20% | 500 | 700 | | | | 135 | | | √ |
| GB83R230□□(F) | 230 \pm 20% | 600 | 700 | | | | 135 | | | √ |
| GB83R250□□(F) | 250 \pm 20% | 600 | 700 | | | | 135 | | | √ |
| GB83R350□□(F) | 350 \pm 20% | 700 | 800 | | | | 150 | | | √ |
| GB83R400□□(F) | 400 \pm 20% | 800 | 900 | | | | 150 | | | √ |
| GB83R470□□(F) | 470 \pm 20% | 900 | 1000 | | | | 150 | | | √ |
| GB83R600□□(F) | 600 \pm 20% | 1000 | 1100 | | | | 150 | | | √ |

Note1 : The first □ is style of lead wire, the second □ is packaging.

Note2 : F = With fail-safe clip for optional.

Note 3: UL 497B File No: E245070

Note 4: Insulation resistance test conditions:

| DC Spark-over Voltage | DC Measuring Voltage |
|-----------------------|----------------------|
| 70-150V | 50V |
| 151-400V | 100V |
| 401-600V | 250V |

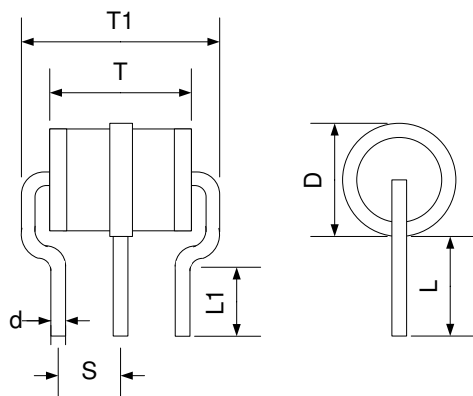
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3-Electrode $\Phi 8.0 \times T10$ mm Type

■ Dimensions

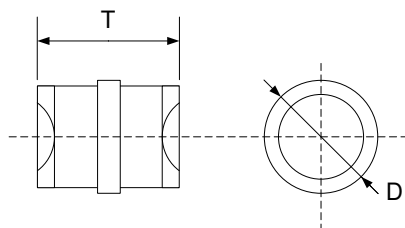
□ = H (Radial Lead Type)



(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 |
| L1 | 4.5 | Min |
| S | 4.4 | ± 0.4 |
| d | 1.0 | ± 0.05 |

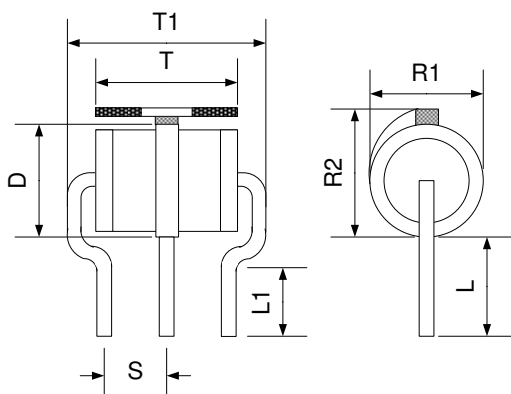
□ = M (No Lead Type)



(Unit: mm)

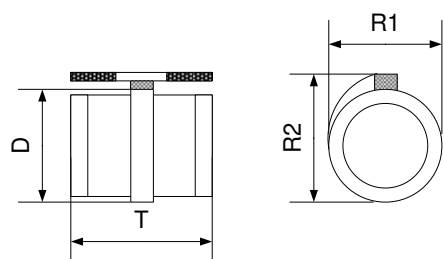
| Item | Dimensions | |
|------|------------|-----------|
| | Spec. | Tolerance |
| D | 8.0 | +0.2/-0.8 |
| T | 10.0 | ± 0.5 |

F = with fail-safe clip for optional



(Unit: mm)

| Item | Dimensions | |
|------|------------|------------|
| | Spec. | Tolerance |
| D | 8.0 | +0.2/-0.8 |
| T | 10.0 | ± 0.5 |
| R1 | 8.1 | ± 0.3 |
| R2 | 9.8 | ± 0.4 |
| T1 | 13.4 | +0.8/-0.5 |
| L | 7.5 | ± 0.5 |
| L1 | 4.5 | Min |
| S | 4.4 | ± 0.4 |
| d | 1.0 | ± 0.05 |



(Unit: mm)

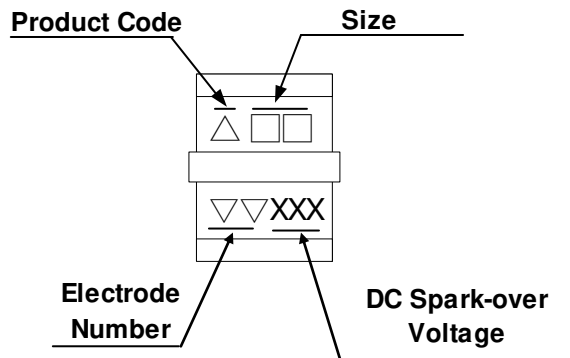
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|------|------------|-----------|
| | Spec. | Tolerance |
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| R2 | 9.8 | ± 0.4 |

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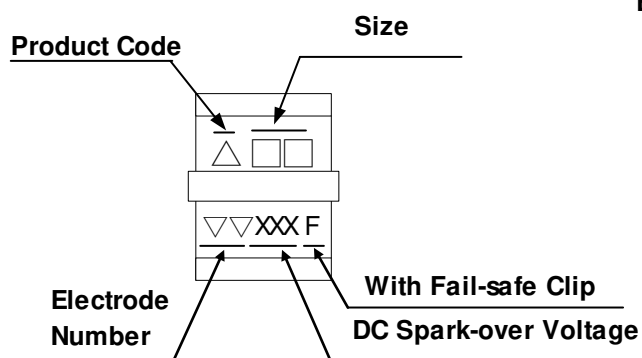
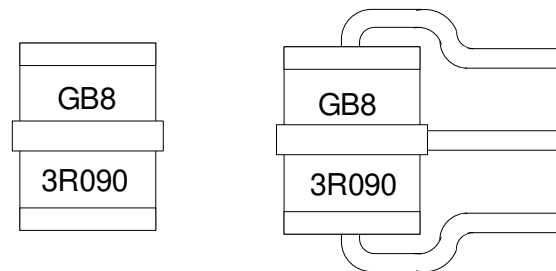
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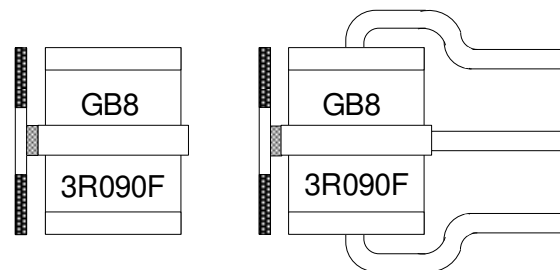
■ Marking



Example



Example



■ Packaging

● Bulk :

Quantity: 100 pcs per PVC Box, and 500 pcs per Inner Box

Quantity (MPQ): 500pcs

■ Warehouse Storage Conditions of Products

● Storage Conditions:

1. Storage Temperature: $-10^{\circ}\text{C} \sim +40^{\circ}\text{C}$
2. Relative Humidity: $\leq 75\% \text{RH}$
3. Keep away from corrosive atmosphere and sunlight.

● Period of Storage: 1 year