

Gas Discharge Tube Features

- Size Design $\Phi 5.5 \times 6 \text{mm}$
- High Current Handling Capability 5,000A @ 8/20 μs
- Low Capacitance and Insertion Loss
- Fast Response and Long Service Life
- Reliable to Protect Electrostatic Surge
- Moisture sensitivity level: Level 1

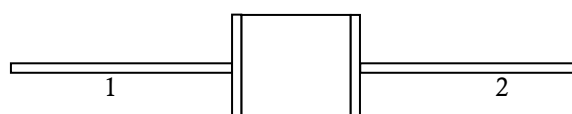
Exterior





Application information

- AC Power

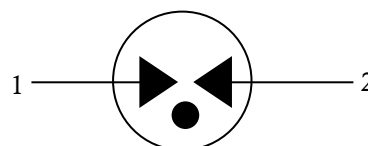
Package (Top View)



Agency Approvals

| Icon | Description |
|---|--|
| RoHS | Compliance with 2011/65/EU |
| HF | Compliance with IEC61249-2-21:2003 |
|  | Mean lead free |
|  | Compliance with UL1449, Certificated E337906 |

Schematic Symbol



Electrical Parameter

| | | | |
|---|----------------------------------|--|--------------------|
| DC Breakdown Voltage ^{1) 2)} | 100V/s | 640-960 | V |
| Impulse Spark-over Voltage | At 1kV/ μs | for 99 % of measured values ≤ 1600 | V |
| | At 1kV/ μs | Typical values of distribution ≤ 1500 | V |
| Impulse Discharge Current ³⁾ | 8/20 μs ± 5 times | 5 | KA |
| Arc Voltage | At 1A | ~ 15 | V |
| Insulation Resistance | DC=100V | ≥ 1 | G Ω |
| Capacitance at 1 MHz | V _{DC} =0.5V | ≤ 1 | pF |
| Weight | | ~ 0.75 | g |
| Operating and storage Temperature | | -40-125 | $^{\circ}\text{C}$ |
| Marking | | Bencent Logo, Voltage and date code | |

1) At delivery AQL 0.65 level II ISO 2859

2) In ionized mode

3) Terms and current waveforms in accordance with ITU-T Rec. K. 12; IEC 61643-21

Gas Discharge Tube

Version: A3 2020-12-21

Part Numbering System

B5G 800 L
(1) (2) (3)

- (1) Bencent 2-Electrode DIP Gas Discharge Tube with dimension: $\Phi 5.5 \times 6$ (D×L) (mm)
(2) DC Breakdown Voltage, e.g., 800=800V
(3) Surge Rating @8/20 μ s, L=5kA

Product Characteristics

| | |
|-----------------|-----------------------------------|
| Lead Material | Copper |
| Body Material | Ceramics Iron-nickel electrode |
| Terminal Finish | 100% Matte-Tin Plated |

Environmental Reliability Characteristics

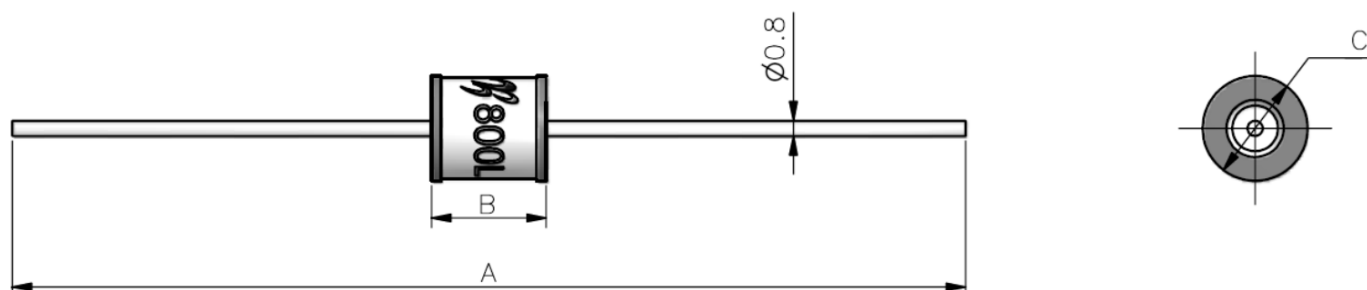
| Testing items | Technical standards |
|-------------------------------|---|
| High Temperature Storage Test | Temperature: 125°C Time: 2H |
| Low Temperature Storage Test | Temperature: -40°C Time: 2H |
| Vibration | Frequency: 10-500Hz Amplitude: 0.15mm Time: 45mins |
| Resistance of soldering heat | Temperature: 260 \pm 5°C Time of dip soldering: 10s, 1time |

Note: Up-screen program can be specified by customer's request via contacting Bencent service

Solderability test

| | | |
|---------------|-------------------------|-----------------|
| Solderability | Solder Pot Temperature: | 245°C \pm 5°C |
| | Solder Dwell Time: | 4-6 seconds |

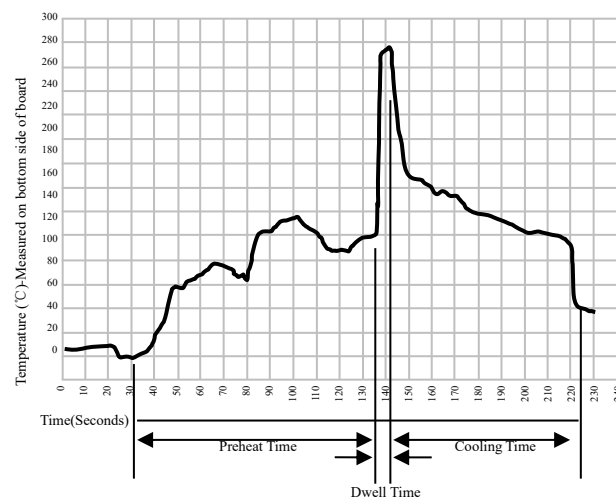
Product Dimensions



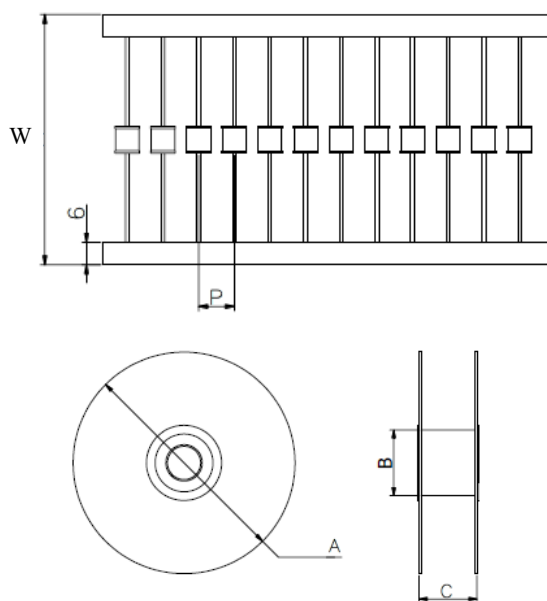
| REF | mm | inch |
|-----|--------------------|----------------------|
| A | 62 \pm 2 | 2.441 \pm 0.079 |
| B | 6 \pm 0.2 | 0.236 \pm 0.008 |
| C | $\Phi 5.5 \pm 0.2$ | $\Phi 5.5 \pm 0.008$ |

Wave Soldering profile

| Wave Soldering Condition | | Pb-Free assembly |
|--------------------------|-------------------|------------------|
| Pre Heat | Temperature Min | 100°C |
| | Temperature Max | 150°C |
| | Time (min to max) | 60 – 180 secs |
| Solder Pot Temperature | | 280°C Max |
| Solder Dwell Time | | 2-5 seconds |



Package Reel Information



| REF | mm | inch |
|-----|--------|--------------|
| W | 65±3 | 2.559±0.118 |
| P | 10±1 | 0.394±0.039 |
| A | Φ340±2 | 13.386±0.079 |
| B | Φ83±2 | 3.268±0.079 |
| C | 73±3 | 2.874±0.118 |

| OUTLINE | REEL (PCS) | PER CARTON (PCS) | CARTON SIZE(mm) | | |
|---------|------------|------------------|-----------------|-----|-----|
| | | | L | W | H |
| TAPING | 1250 | 7500 | 480 | 350 | 360 |