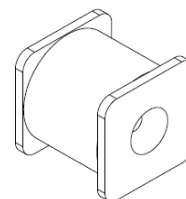
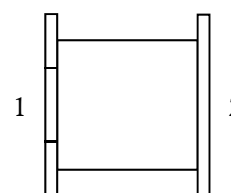




**Gas Discharge Tube
Features**

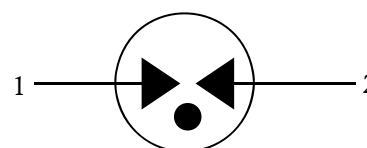
- Size Design 7.0×6.0×6.0mm
- High Current Handling Capability 10,000A @ 8/20μs
- Low Capacitance and Insertion Loss
- Fast Response and Long Service Life
- Reliable to Protect Electrostatic Surge
- Moisture sensitivity level: Level 1

Exterior

Application information

- Coaxial Port

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 UL497B, Certificated E232249 |

Schematic Symbol

Electrical Parameter

| | | | |
|---|-----------------------|--------------------------------|---------|
| DC Breakdown Voltage ^{1) 2)} | 100V/s | 230±20% | V |
| Impulse Spark-over Voltage | At 1kV/μs | for 99 % of measured values | ≤ 800 V |
| | At 1kV/μs | Typical values of distribution | ≤ 750 V |
| Impulse Discharge Current ³⁾ | 8/20μs ±5times | 10,000 | A |
| Arc Voltage | At 1A | ~12 | V |
| Insulation Resistance | DC=100V | ≥1 | GΩ |
| Capacitance at 1MHz ⁴⁾ | V _{DC} =0.5V | ≤0.45 | pF |
| Weight | | ~0.8 | g |
| Operating and storage Temperature | | -40-90 | °C |
| Marking | | Without | |

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

4) Tested by Tonghui LCR meter

Part Numbering System

BW XXX M
 (1) (2) (3)

(1) Bencent SMD Gas Discharge Tube in 7×6×6 (L×W×H) (mm)

(2) DC Breakdown Voltage, e.g., 231=23×10¹=230V

(3) Tolerance is DC Breakdown Voltage, M=±20%, N=±30%

Product Characteristics

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

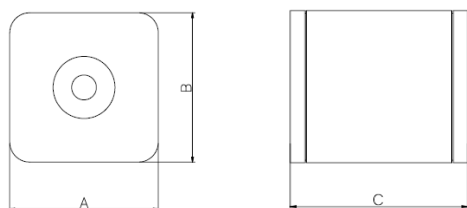
Environmental Reliability Characteristics

| Testing items | Technical standards |
|-------------------------------|--|
| High Temperature Storage Test | Temperature: 90°C Time: 2H |
| Low Temperature Storage Test | Temperature: -40°C Time: 2H |
| Vibration | Frequency: 10-500Hz Amplitude: 0.15mm Time: 45min |
| Resistance of soldering heat | Temperature: 260±5°C Time of dip soldering: 10s, 1times |

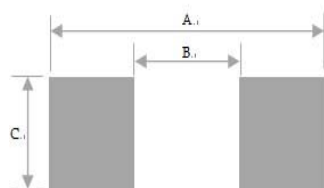
Note: Up-screen program can be specified by customer's request via contacting Bencent service

Solderability test

| | | | |
|---------------|-------------------------|-------------|--------------------------|
| Solderability | Solder Pot Temperature: | 245°C±5°C | Lead-Free Recommendation |
| | Solder Dwell Time: | 4-6 seconds | |

Product Dimensions


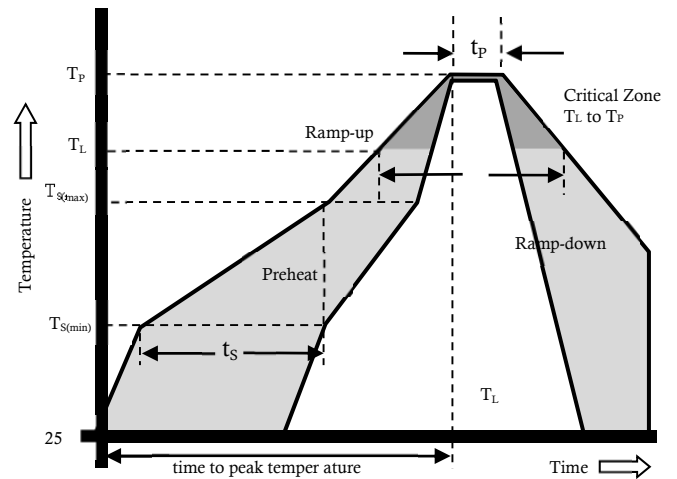
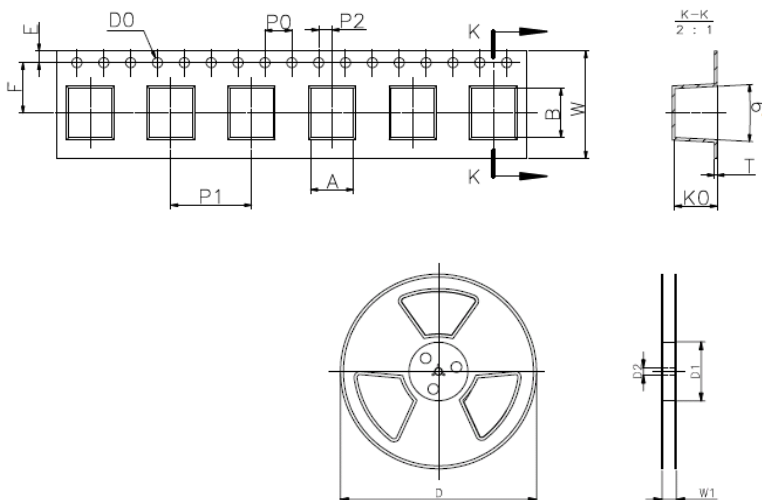
| REF | Mm | inch |
|-----|-------|------------|
| A | 6±0.5 | 0.236±0.02 |
| B | 6±0.5 | 0.236±0.02 |
| C | 7±0.5 | 0.276±0.02 |

Recommended soldering pad


| REF | Mm | inch |
|-----|-----|-------|
| A | 9 | 0.354 |
| B | 5 | 0.197 |
| C | 6.6 | 0.260 |

Reflow Profile

| Reflow Condition | | Pb-Free assembly |
|--|--|------------------|
| Pre Heat | Temperature Min | 150°C |
| | Temperature Max | 200°C |
| | Time (min to max) | 60 – 180 secs |
| Average ramp up rate (Liquids) Tamp (T _L) to peal | | 3°C/second max |
| T _S (max) to T _L - Ramp-up Rate | | 3°C/second max |
| Reflow | - Temperature (T _L) (Liquids) | 217°C |
| | - Temperature (T _L) | 60 – 150 seconds |
| Peak Temperature (T _p) | | 260+0/-5 °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 (T _p) | | 8 minutes Max. |
| Do not exceed | | 260°C |


Package Reel Information


| REF | mm | inch |
|-----|----------------------------------|---|
| A | 6.4±0.2 | 0.252±0.008 |
| B | 7.3±0.2 | 0.287±0.008 |
| D0 | 1.5±0.2 | 0.059±0.008 |
| E | 1.75±0.2 | 0.069±0.008 |
| F | 7.5±0.2 | 0.295±0.008 |
| P0 | 4±0.2 | 0.157±0.008 |
| P1 | 12±0.5 | 0.472±0.020 |
| P2 | 2±0.2 | 0.079±0.008 |
| W | 16±0.5 | 0.630±0.020 |
| K0 | 6.3±0.2 | 0.248±0.008 |
| T | 0.4±0.05 | 0.016±0.002 |
| D | Φ330±2 | Φ12.99±0.079 |
| D1 | Φ100 ⁺¹ ₋₂ | Φ3.94 ^{+0.039} _{-0.078} |
| D2 | Φ13±0.15 | 0.512±0.006 |
| W1 | 16.5±0.4 | 0.65±0.016 |

Package Box Information

| Outline | Reel (PCS) | INSIDE CARTON (PCS) | Per Carton (PCS) | Carton Size(mm) | | |
|---------|---------------|------------------------|---------------------|-----------------|-----|-----|
| | | | | L | W | H |
| Box | 800 | 1600 | 12800 | 360 | 360 | 380 |