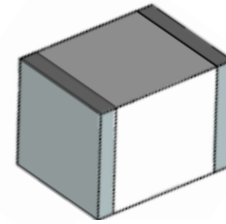
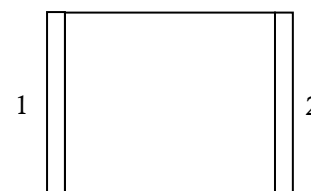



**Gas Discharge Tube
Features**

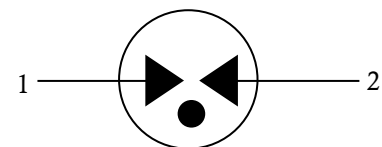
- Small Size Design 2.9×2.1×1.9mm
- Current Handling Capability 6kV @ 10/700us
- Low Capacitance and Insertion Loss
- Fast Response and Long Service Life
- Reliable to Protect Electrostatic Surge
- Moisture sensitivity level: Level 1

Exterior

SMD
Application information

- RS485/232/422
- Internet

Package (Top View)

Agency Approvals

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

Schematic Symbol

Electrical Parameter

| | | | |
|-----------------------------------|-------------------|--------------------------------|--------|
| DC Breakdown Voltage 1)2) | 100V/s | 280-520 | V |
| Impulse Spark-over Voltage | At 1kV/μs | for 99 % of measured values | ≤ 1000 |
| | At 1kV/μs | Typical values of distribution | ≤950 |
| Impulse Discharge Voltage 3) | 10/700μs, ±5Times | 6000 | V |
| AC Discharge Current | 600V,600Ω, 0.2s | 10 | Times |
| Arc Voltage | At 1A | ~10 | V |
| Insulation Resistance | DC=100V | ≥1 | GΩ |
| Capacitance at 1 MHz | VDC=0.5V | ≤0.5 | pF |
| Weight | | ~0.062 | g |
| Operating And Storage Temperature | | -40-125 | °C |
| Marking | | Without | |

1) At delivery AQL 0.65 level II ISO 2859

2) In ionized mode

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

Gas Discharge Tube

Part Numbering System

BG 401 N
 (1) (2) (3)
 (1) Bencent Gas Discharge Tube
 (2) Series: DC Breakdown Voltage, e.g.: 401=40×10¹=400V
 (3) Tolerance of DC Breakdown Voltage, M=±20%, N=±30%, the Specific tolerance is decided by the table of“Electrical Parameter”

Product Characteristics

| | |
|-----------------|-----------------------------|
| Lead Material | Copper or iron nickel alloy |
| Body Material | Ceramics |
| Terminal Finish | 100% Matte-Tin Plated |

Environmental Reliability Characteristics

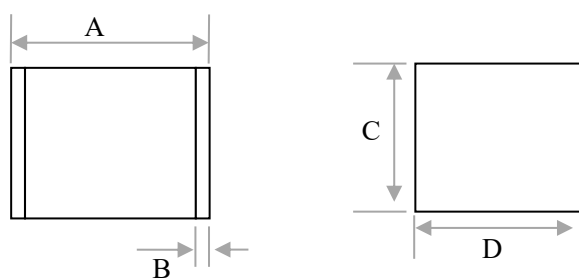
| Testing items | Technical standards |
|-------------------------------|---|
| High Temperature Storage Test | Temperature: 125°C Time:2H |
| Low Temperature Storage Test | Temperature: -40°C Time:2H |
| Vibration | Frequency: 10-500Hz Amplitude: 0.15mm Time: 45mins |
| Resistance of soldering heat | Temperature: 260±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

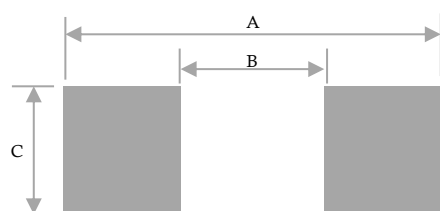
| | | |
|---------------|-------------------------|-------------|
| Solderability | Solder Pot Temperature: | 245°C ± 5°C |
| | Solder Dwell Time: | 4-6 seconds |

Product Dimensions



| REF | mm | inch |
|-----|---------|-------------|
| A | 2.9±0.3 | 0.114±0.012 |
| B | 0.3±0.2 | 0.011±0.008 |
| C | 1.9±0.2 | 0.075±0.008 |
| D | 2.1±0.2 | 0.084±0.008 |

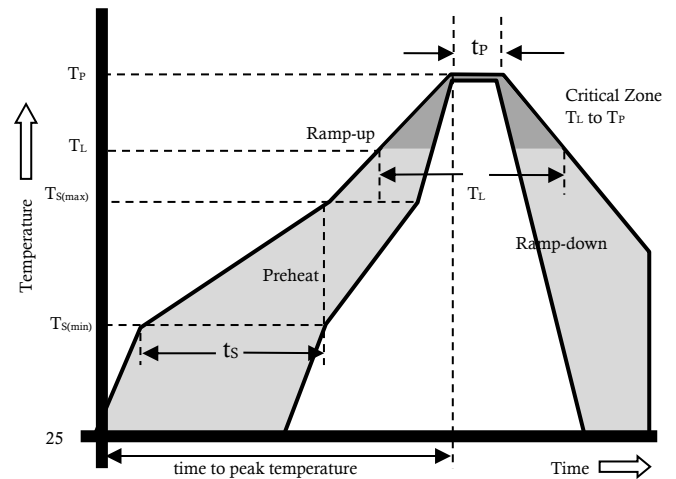
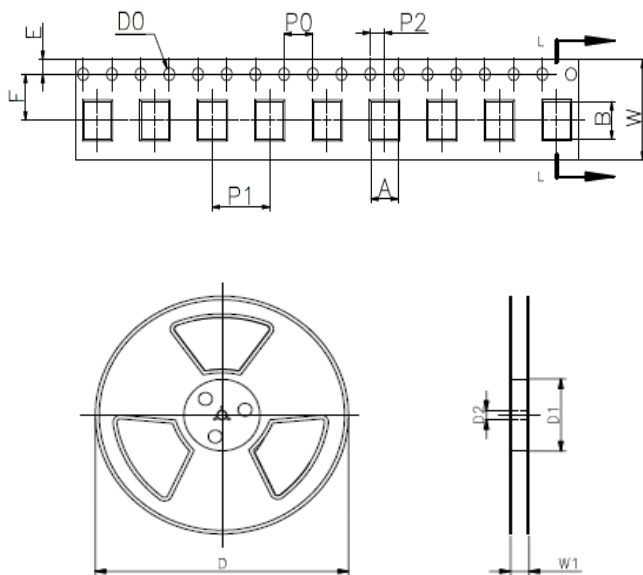
Recommended Soldering Pad



| REF | mm | inch |
|-----|-----|-------|
| A | 3.1 | 0.122 |
| B | 2.0 | 0.079 |
| C | 2.3 | 0.091 |

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) Tmp (TL) to peak | | 3°C/second max |
| Ts(max) to TL - Ramp-up Rate | | 3°C/second max |
| Reflow | - Temperature (TL) (Liquids) | 217°C |
| | - Temperature (TL) | 60 – 150 seconds |
| Peak Temperature (TP) | | 260+0/-5 °C |
| Time within 5°C of actual peak Temperature (tp) | | 8 – 20 seconds |
| Ramp-down Rate | | 6°C/second max |
| Time 25°C to peak Temperature (TP) | | 8 minutes Max. |
| Do not exceed | | 260°C |


Package Reel Information


| REF | mm | inch |
|-----|----------|--------------|
| A | 2.4±0.1 | 0.094±0.004 |
| B | 3.2±0.1 | 0.130±0.004 |
| D0 | Φ1.5±0.2 | Φ0.059±0.008 |
| P0 | 4.0±0.2 | 0.157±0.008 |
| P2 | 2.0±0.2 | 0.079±0.008 |
| P1 | 4.0±0.2 | 0.156±0.008 |
| E | 1.75±0.2 | 0.069±0.008 |
| F | 5.5±0.2 | 0.217±0.008 |
| W | 12.0±0.2 | 0.472±0.008 |
| D | Φ178±2 | Φ7.008±0.079 |
| D1 | Φ58Min | Φ2.28Min |
| D2 | Φ13±0.2 | 0.512±0.008 |
| W1 | 16.8±0.2 | 0.496±0.008 |

| Outline | Reel (PCS) | Per Carton (PCS) | Reel Diameter (mm) | Carton Size(mm) | | |
|---------|------------|------------------|--------------------|-----------------|-----|-----|
| | | | | L | W | H |
| TAPING | 2,000 | 60,000 | 178 | 390 | 370 | 220 |

单击下面可查看定价，库存，交付和生命周期等信息

[>>Bencent \(槟城\)](#)