

Features

- Size Design $\Phi 5.5 \times 6 \text{mm}$
- High Current Handling Capability 3000A @ 8/20 μ s
- Low Capacitance and Insertion Loss
- Fast Response and Long Service Life
- Moisture sensitivity level: Level 1
- Current Limiting, available 1-30A @600VAC

Application Information

- AC Power


Exterior



Package (Top View)



Agency Approvals

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

Schematic Symbol



Electrical Parameter

| | | | |
|---|----------------------------|--|--------------------|
| DC Breakdown Voltage ^{1) 2)} | 100V/s | >480 | V |
| Impulse Spark-over Voltage | 1000V/ μ s | for 99 % of measured values ≤ 1300 | V |
| | | Typical values of distribution ≤ 1200 | V |
| Impulse Discharge Current ³⁾ | 8/20 μ s ± 5 times | 3 | KA |
| Arc Voltage | at 1A | ~ 15 | V |
| Insulation Resistance | DC=100V | ≥ 1 | G Ω |
| Capacitance at 1 MHz | V _{DC} =0.5V | ≤ 1.5 | pF |
| Weight | | ~ 0.8 | g |
| Operating and storage Temperature | | -40-125 | $^{\circ}\text{C}$ |
| Marking | | Bencent Logo 600 | |

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

Open Characteristic

| | | | | |
|-------------------|-----|-----|-----|-----|
| Voltage Rating(V) | 600 | 600 | 600 | 600 |
| Ampere Rating(A) | 1 | 10 | 20 | 30 |
| Open Time(S) Max. | 10 | 3 | 1 | 0.8 |

Note: Heat shrinkable tube and encapsulating are not recommended to use on the surface of BGO product.

Bencent Composite Product

Version: A2 2018-11-8

Part Numbering System

BGO 6000 A03 -L B 2
(1) (2) (3) (4) (5) (6)

- (1)Bencent Open GDT
(2)Rated DC Breakdown Voltage,6000:600*10⁰=600V
(3)Surge Rating, A03: 8/20 μ s 3000A
(4)Structure, L: Axial Lead
(5)Dimension, B: Φ 5.5 \times 6mm
(6)Pin Number, 2pin

Product Characteristics

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

Environmental Reliability Characteristics

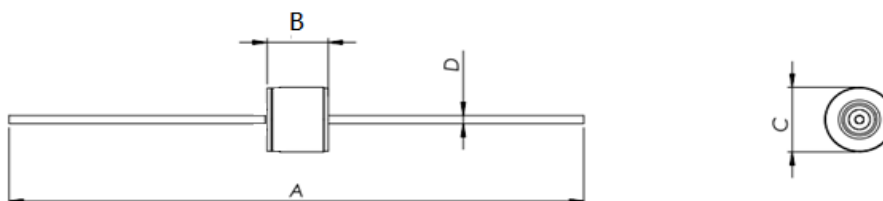
| Testing items | Technical standards |
|-------------------------------|--|
| High Temperature Storage Test | Temperature:125 $^{\circ}$ C Time:2H |
| Low Temperature Storage Test | Temperature: -40 $^{\circ}$ C Time:2H |
| Vibration | Frequency: 10-500Hz Amplitude: 0.15mm Time: 45mins |
| Resistance of soldering heat | Temperature: 260 \pm 5 $^{\circ}$ 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 $^{\circ}$ C \pm 5 $^{\circ}$ C |
| | Solder Dwell Time: | 4-6 seconds |

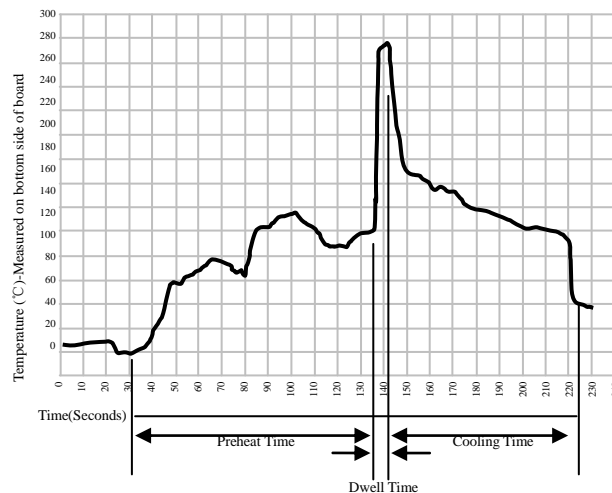
Product Dimensions



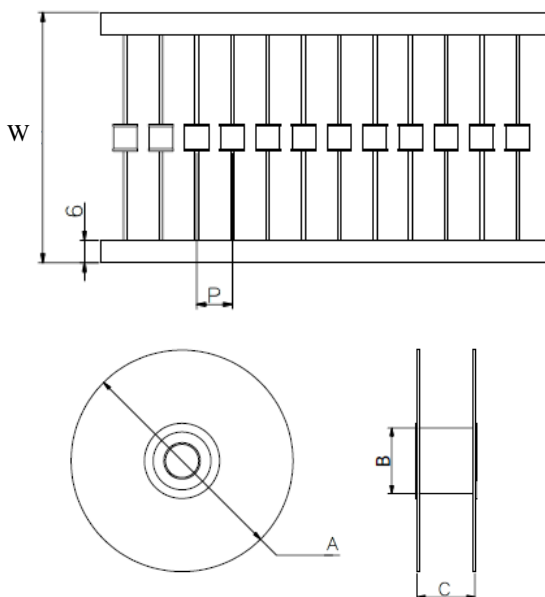
| REF | Mm | inch |
|-----|----------------------|---------------------------|
| A | 62 \pm 2 | 2.441 \pm 0.079 |
| B | 6.0 \pm 0.5 | 0.236 \pm 0.02 |
| C | Φ 5.5 \pm 0.2 | Φ 0.217 \pm 0.01 |
| D | Φ 0.8 \pm 0.1 | Φ 0.0315 \pm 0.004 |

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 | | 270°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 | Φ13.386±0.079 |
| B | Φ83±2 | Φ3.268±0.079 |
| C | 73±3 | 2.874±0.118 |

| OUTLINE | REEL (PCS) | PER CARTON (PCS) | CARTON SIZE(mm) | | |
|---------|------------|------------------|-----------------|-----|-----|
| | | | L | W | H |
| TAPING | 1000 | 6000 | 480 | 350 | 360 |