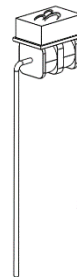


## Gas Discharge Tube Features

- Size Design 8.8mm\*6.2mm\*8.7mm
- High Current Handling Capability 3kA @ 8/20μs
- Fast Response and Long Service Life
- Moisture Sensitivity Level: Level 1
- Low impulse Voltage

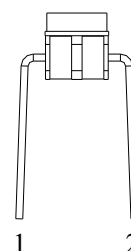
## Exterior



## Application information

- AC Power

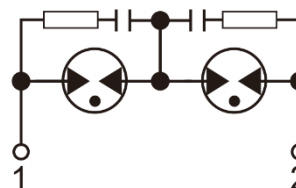
## Package (Top View)



## Agency Approvals

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

## Schematic Symbol



## Electrical Parameter

|                                             |                       |                                       |     |
|---------------------------------------------|-----------------------|---------------------------------------|-----|
| DC Breakdown Voltage <sup>1) 2)</sup>       | 100V/s                | 3200~4800                             | V   |
| Impulse Spark-over Voltage <sup>1) 2)</sup> | At 1kV/μs             | for 99 % of measured values ≤ 3000    | V   |
|                                             |                       | Typical values of distribution ≤ 2500 | V   |
| Impulse Discharge Current <sup>3)</sup>     | 8/20μs ±5times        | 3                                     | kA  |
| Arc Voltage <sup>4)</sup>                   | At 1A                 | ~100                                  | V   |
| Insulation Resistance                       | DC=100V               | ≥1                                    | GΩ  |
| Capacitance at 100Hz                        | V <sub>DC</sub> =1V   | ~500                                  | pF  |
| Hi-pot Test <sup>1) 2)</sup>                | I <sub>D</sub> =0.5mA | ≥2000                                 | VAC |
| Operating and storage Temperature           |                       | -40~105                               | ℃   |
| Marking                                     |                       | Bencent Logo                          |     |

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) Only GDT, without trigger module

## Part Numbering System

BXD 3000 SA03 M - D  
(1) (2) (3) (4) (5)

(1)Bencent pulse sensitive Gas Discharge Tube

(2)DC Breakdown Voltage, e.g.,3200~4800V

(3)SA03:3kA

(4)M:20%

(5) “D” means the special structure of this type

## Product Characteristics

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

## Environmental Reliability Characteristics

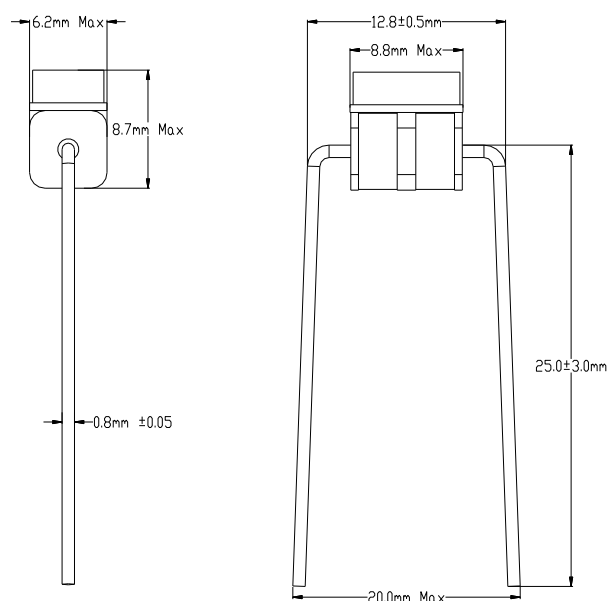
| Testing items                 | Technical standards                                       |
|-------------------------------|-----------------------------------------------------------|
| High Temperature Storage Test | Temperature: 105℃<br>Time:2H                              |
| Low Temperature Storage Test  | Temperature: -40℃<br>Time:2H                              |
| Vibration                     | Frequency: 10-100Hz      Amplitude: 0.15mm<br>Time: 45min |
| Resistance of soldering heat  | Temperature: 260±5℃<br>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±5℃      |
|               | Solder Dwell Time:      | 4-6 seconds |

## Product Dimensions

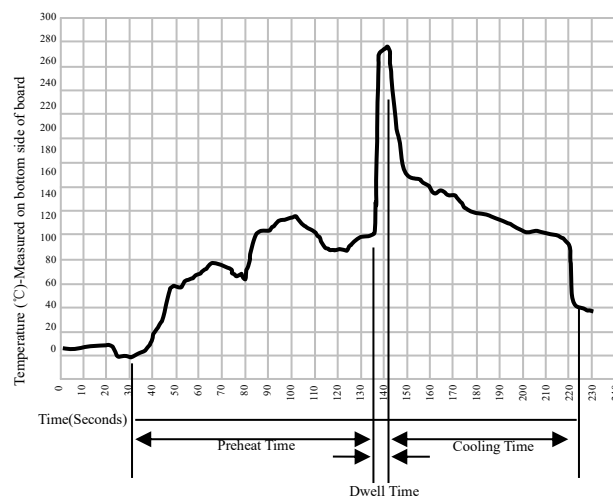


## Wave Solderingprofile

| 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   |                   | 260°C Max        |
| Solder Dwell Time        |                   | 2-5 seconds      |

### Notice:

This product does not support reflux welding.



## Packaging Information

| Manner of packing | Blister Box (PCS) | Inner Carton (PCS) | Per Carton (PCS) | Inner Box Diameter (mm) | Carton Size(mm) |     |     |
|-------------------|-------------------|--------------------|------------------|-------------------------|-----------------|-----|-----|
|                   |                   |                    |                  |                         | L               | W   | H   |
| Box-packed        | 45                | 630                | 3780             | 210*180*110             | 390             | 370 | 220 |