

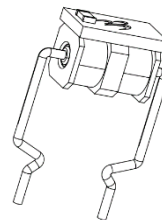
Features

- Size Design 8.5mm*5.2mm*6.8mm
- High Current Handling Capability 3,000A@1.2/50us-8/20μs
- Fast Response and Long Service Life
- Reliable to Protect Electrostatic Surge
- Low impulse Voltage
- Moisture Sensitivity Level: Level 1

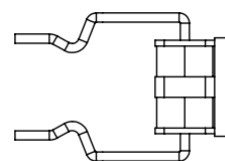
Application information

- AC Power

Exterior



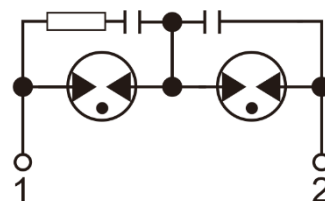
Package (Top View)



Agency Approvals

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

Schematic Symbol



Electrical Parameter

DC Breakdown Voltage ^{1) 2)}	100V/s	3200~5200	V
Impulse Spark-over Voltage ³⁾	At 1kV/μs	for 99 % of measured values ≤ 4000	V
		Typical values of distribution ≤ 3500	V
Impulse Discharge Current ³⁾	1.2/50us-8/20μs 6kV/2Ω±5times	3	kA
Arc Voltage ⁴⁾	At 1A	~100	V
Insulation Resistance	DC=1000V	≥100	MΩ
Capacitance at 100Hz	V _{DC} =1V	~6	pF
Hi-pot Test	I _D =3mA	≥2000	VAC
Operating and storage Temperature		-40~105	°C
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 S A03 M - 05

(1) (2) (3) (4) (5) (6)

(1)Bencent pulse sensitive Gas Discharge Tube

(2)DC Breakdown Voltage

(3)S:SMD

(4)A03:3kA

(5) Tolerance of DC Breakdown Voltage, M=+30%,-20%,the Specific tolerance is decided by the table of “Electrical Parameter”

(6) “05” 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

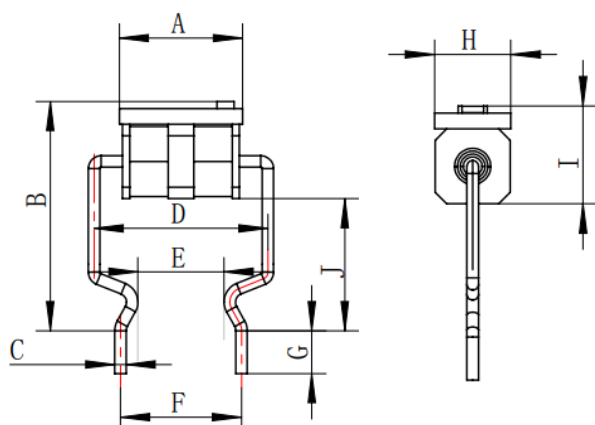
Testing items	Technical standards
High Temperature Storage Test	Temperature: 105℃ Time:2H
Low Temperature Storage Test	Temperature: -40℃ Time:2H
Vibration	Frequency: 10-500Hz Amplitude: 0.15mm Time: 45min
Resistance of soldering heat	Temperature: 260±5℃ Time of dip soldering: 10s, 1time

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

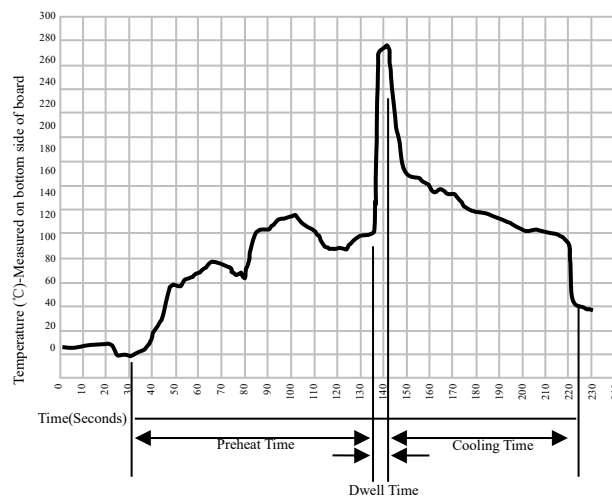
Product Dimensions



REF	mm	inch
A	8.5±0.5	0.335±0.020
B	16.0±1.0	0.630±0.039
C	Φ0.8	Φ0.031
D	12.2±1.0	0.480±0.039
E	6 ^{+1.0} _{-0.0}	0.236 ^{+0.039} _{-0.000}
F	8.5±0.5	0.335±0.020
G	3.0±0.5	0.118±0.020
H	5.2 ^{+0.3} _{-0.1}	0.205 ^{+0.012} _{-0.004}
I	6.8±0.3	0.236±0.012
J	9.0±0.5	0.354±0.020

Reflow 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

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