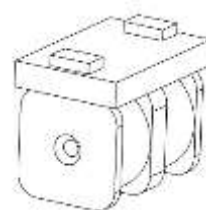


- Size Design 9.0mm*5.5mm*7.0mm
- High Current Handling Capability 3kA @ 8/20μs
- Fast Response and Long Service Life
- Reliable to Protect Electrostatic Surge
- Moisture sensitivity level: Level 1
- Low impulse Voltage

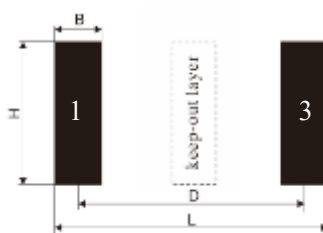


Application information

- AC Power

Package (Top View)

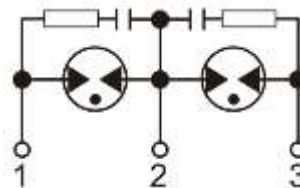
L	9.4mm
H	5.0mm
B	2.2mm
D	7.2 mm



Agency Approvals

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

Schematic Symbol



Notice: The second feet is keep-out layer;

Electrical Parameter

DC Breakdown Voltage ^{1) 2)}	100V/s	2400~3600	V
Impulse Spark-over Voltage ^{1) 2)}	At 1kV/μs	for 99 % of measured values ≤ 3000	V
		Typical values of distribution ≤ 2500	V
Impulse Discharge Current ³⁾	8/20μs ±5times	3	kA
Arc Voltage	At 1A	~35	V
Insulation Resistance	DC=100V	≥1	GΩ
Capacitance at 1 MHz	V _{DC} =0.5V	≤500	pF
Hi-pot Test	I _D =10mA	≥1500	VAC
Weight		~1.5	g
Operating and storage Temperature		-40~90	°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

Part Numbering System

BXD 3000 S A03 M 03

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

(1)Bencent pulse sensitive Gas Discharge Tube

(2)DC Breakdown Voltage, e.g.,2400=3600V

(3)S:SMD D:DIP

(4)A03:3kA

(5)M:20% K:10%

(6) “03” means the special structure of this type

Product Characteristics

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

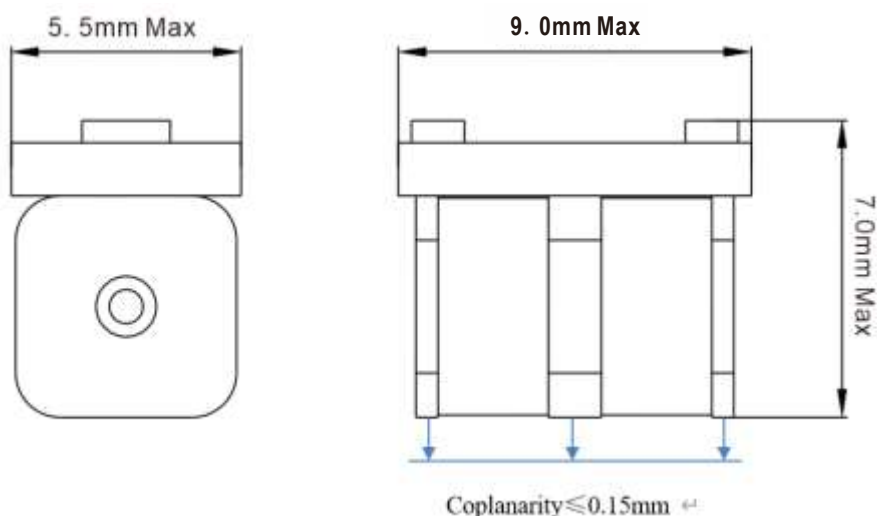
Environmental Reliability Characteristics

Testing items	Technical standards
High Temperature Storage Test	Temperature: 90℃ Time:2H
Low Temperature Storage Test	Temperature: -40℃ Time:2H
Vibration	Frequency: 10-100Hz Amplitude: 0.15mm Time: 45min
Resistance of soldering heat	Temperature: 250±5℃ Time of dip soldering: 10s, 1time

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

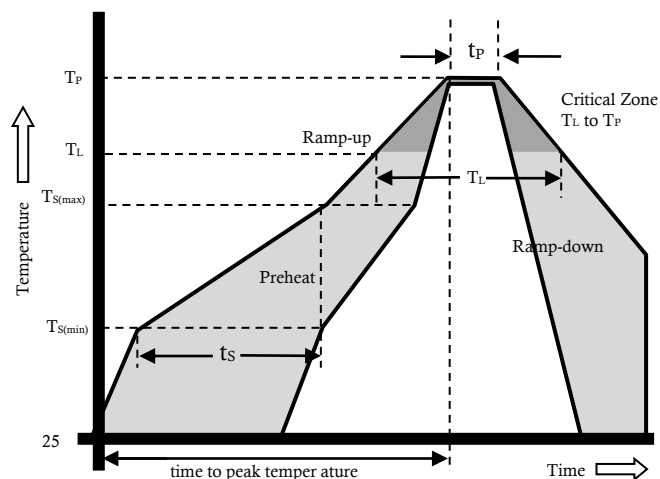
Solderability test

Solderability	Solder Pot Temperature:	245℃ ± 5℃
	Solder Dwell Time:	4-6 seconds

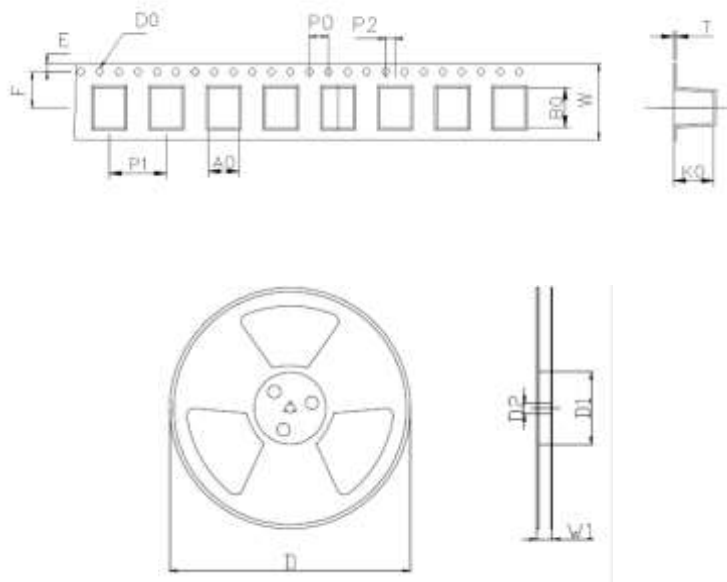
Product Dimensions


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) T _{amp} (T _L) to peak		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)		250+0/-5 °C
Time within 5°C of actual peak Temperature (t _p)		~10 seconds
Ramp-down Rate		6°C/second max
Time 25°C to peak Temperature (T _P)		8 minutes Max.
Do not exceed		250°C



Package Reel Information



REF	mm	inch
A0	7.3±0.2	0.287±0.008
B0	9.4±0.2	0.370±0.008
P0	4.0±0.2	0.157±0.008
P1	12±0.2	0.472±0.008
P2	2.0±0.2	0.079±0.008
E	1.75±0.2	0.069±0.008
F	11.5±0.2	0.453±0.008
K0	7.3±0.2	0.287±0.008
T	0.4±0.2	0.016±0.008
D0	Φ1.5±0.2	Φ0.059±0.008
W	24.0±0.3	0.945± 0.012
D	Φ330.0	Φ13.0
D1	Φ100Min	Φ3.937Min
D2	Φ13±0.5	Φ0.512±0.020
W1	24.8±2.0	0.976±0.078

Outline	Reel (PCS)	Per Carton (PCS)	Reel Diameter (mm)	Carton Size(mm)		
				L	W	H
TAPING	500	8000	330	360	360	385