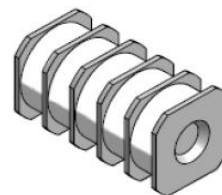


Gas Discharge Tube Features

- High Current Handling Capability 15,000A @ 8/20μs
- Low Capacitance and Insertion Loss
- Fast Response and Long Service Life
- Moisture sensitivity level: Level 1

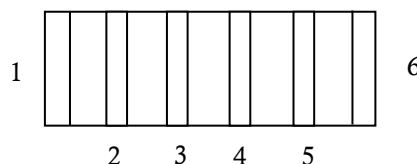
Exterior



Application Information

- DC-48V Power Port

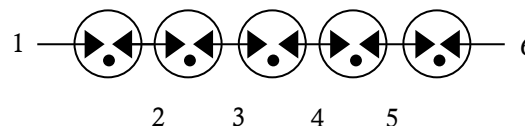
Package (Top View)



Agency Approvals

Icon	Description
RoHS	Compliance with 2011/65/EU
HF	Compliance with IEC 61249-2-21:2003
	Mean lead free

Schematic Symbol



Electrical Parameter

DC Breakdown Voltage ^{1) 2)} (pin1-6)	100V/s	700-1450	V
DC Breakdown Voltage ^{1) 2)} (pin1-2, pin2-3, pin3-4, pin4-5, pin5-6)	100V/s	140-290	V
Impulse Spark-Over Voltage (pin1-6) ³⁾	1.2/50μs - 8/20μs: 6kV/3kA	≤1100	V
Impulse Discharge Current ⁴⁾	8/20μs, ±5times	15	kA
Insulation Resistance	DC100V	≥1	GΩ
Maximum DC Working Voltage		60	V
Arc Voltage	At 50 A	≥60	V
Capacitance at 1 MHz	V _{DC} =0.5V	≤1.5	pF
Operating and storage Temperature		-40-125	°C
Weight		~2.3	g
Marking		Without	

1) At delivery AQL 0.65 level II ISO 2859

2) In ionized mode

3) With 470pF capacitor trigger

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

Part Numbering System

BD 122 - J
(1) (2) (3)

(1) Bencent Multi-pole Arrester Stack

(2) Max DC Breakdown Voltage, e.g., 122=12×10²=1200V

(3) “-J” is stand for special customer requirements

Product Characteristics

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

Environmental Reliability Characteristics

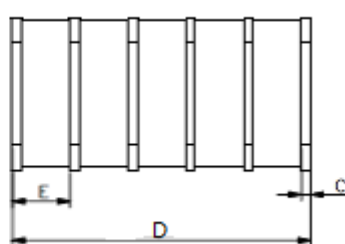
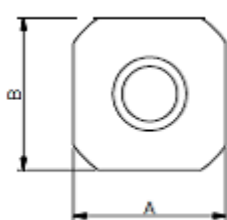
Testing items	Technical standards
High Temperature Storage Test	Temperature: 125℃ Time: 2H
Low Temperature Storage Test	Temperature: -40℃ Time: 2H
Vibration	Frequency: 10-500Hz Amplitude: 0.15mm Time: 45mins
Resistance of soldering heat	Temperature: 260±5℃ Time of dip soldering: 10s, 1time

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

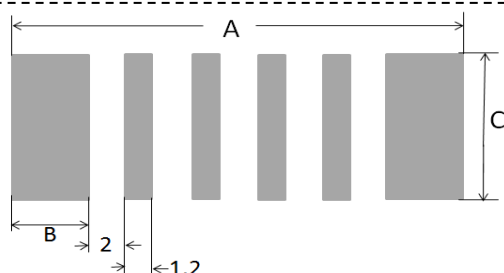
Product Dimensions



Coplanarity < 0.15mm

REF	mm	inch
A	6±0.2	0.236±0.008
B	6±0.2	0.236±0.008
C	0.5±0.05	0.020±0.002
D	16.5±0.5	0.650±0.020
E	3.2±0.2	0.126±0.008

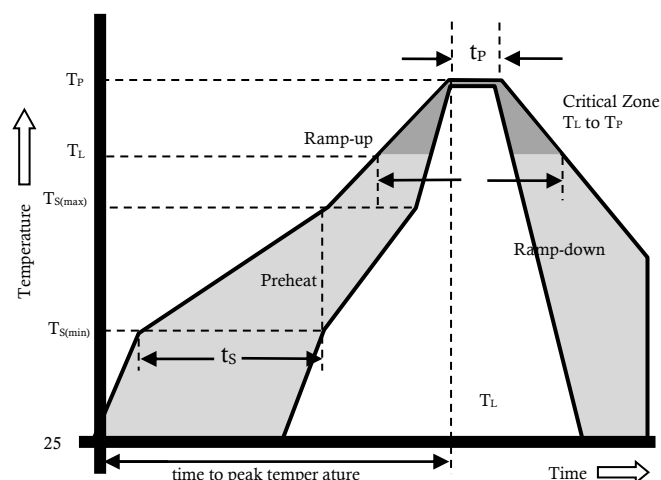
Recommended Soldering Pad



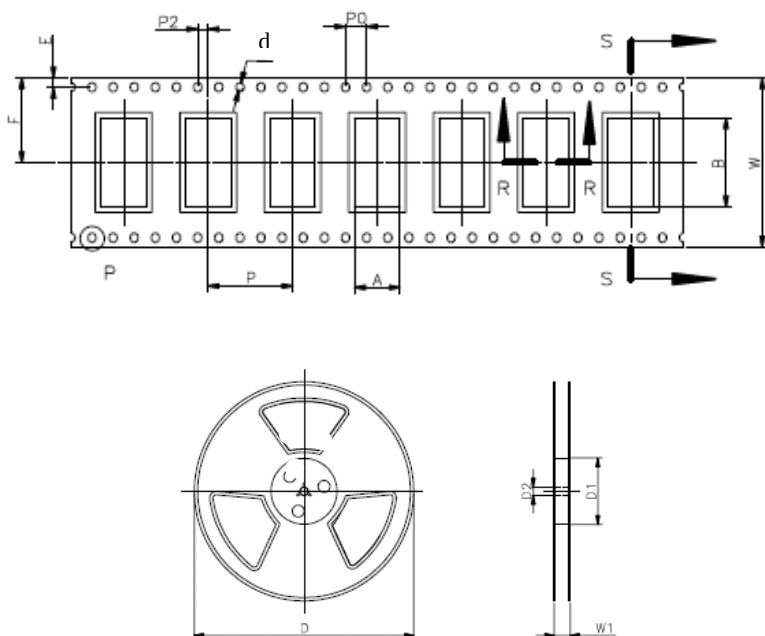
REF	mm	inch
A	23	0.906
B	4.1	0.161
C	6	0.236

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)		260+0/-5 °C
Time within 5°C of actual peak Temperature (t _p)		20 – 40 seconds
Ramp-down Rate		6°C/second max
Time 25°C to peak Temperature (T _p)		8 minutes Max.
Do not exceed		260°C



Package Reel Information



REF	mm	inch
W	32±0.3	1.260±0.012
A	6.5±0.2	0.256±0.008
B	17.5±0.2	0.661±0.008
P	12±0.1	0.472±0.004
P0	4±0.1	0.157±0.004
P2	2±0.1	0.079±0.004
d	Φ1.5 ^{+0.1} ₋₀	Φ0.059 ^{+0.004} ₋₀
E	1.75±0.1	0.069±0.004
F	16±0.1	0.797±0.004
W1	36±2.0	1.89±0.079
D	Φ330.2	Φ13
D1	Φ100±1	Φ3.94±0.039
D2	Φ13±0.15	0.512±0.006

OUTLINE	BOX/REEL (PCS)	INSIDE CARTON (PCS)	PER CARTON (PCS)	CARTON SIZE(mm)		
				L	W	H
TAPING	500	500	2000	360	360	220