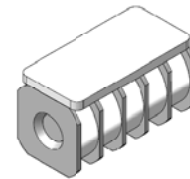
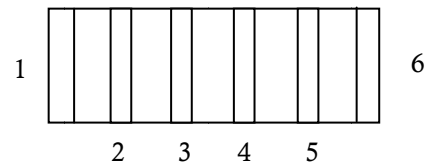




**Features**

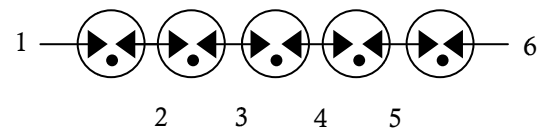
- High Current Handling Capability 20,000A @ 8/20  $\mu$  s
- Low Capacitance and Insertion Loss
- Fast Response and Long Service Life
- Moisture sensitivity level: Level 1

**Exterior**

**Application information**

- Wireless Base Station
- DC-48V Power Port

**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
	Compliance with UL1449, Certificated E337906

**Schematic Symbol**

**Electrical Parameter**

DC Breakdown Voltage <sup>1) 2)</sup> (pin1-6)	100V/s	700-1300	V
DC Breakdown Voltage <sup>1) 2)</sup> (pin1-2,pin2-3,pin3-4,pin4-5,pin5-6)	100V/s	160-300	V
Impulse Spark-Over Voltage (pin1-6)	1.2/50 $\mu$ s -8/20 $\mu$ s: 6KV/3KA	$\leq$ 2300	V
Impulse Spark-Over Voltage (pin1-2,pin2-3,pin3-4,pin4-5,pin5-6)	1.2/50 $\mu$ s -8/20 $\mu$ s: 6KV/3KA	for 99 % of measured values $\leq$ 650	V
		Typical values of distribution $\leq$ 600	V
Impulse Discharge Current <sup>3)</sup>	8/20 $\mu$ s, $\pm$ 5times	20	KA
Insulation Resistance	DC100V	$\geq$ 1	G $\Omega$
Capacitance at 1 MHz	V <sub>DC</sub> =0.5V	$\leq$ 1.5	pF
Arc Voltage	At 1 A	$>$ 60	V
Operating and storage Temperature		-40-90	$^{\circ}$ C
Weight		$\sim$ 5.35	g
Marking		Without	

1) At delivery AQL 0.65 level II, GB/T 2828.1-2003

2) In ionized mode

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

**Part Numbering System**

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

(1) Bencent Multi-pole Arrester Stack

(2) DC Breakdown Voltage, e.g., 122=12×10<sup>2</sup>=1200V

(3) “-1” is stand for dimensions of 8.3mm×9.5mm×16.5mm

**Product Characteristics**

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

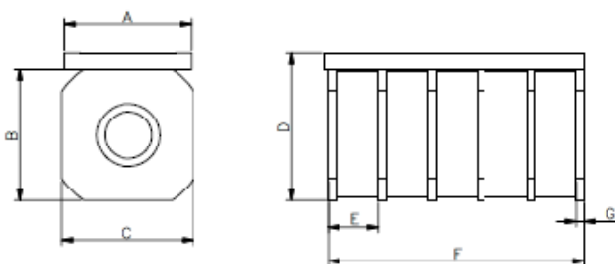
**Environmental Reliability Characteristics**

Testing items	Technical standards
High Temperature Storage Test	Temperature: 85°C Time: 2H
Low Temperature Storage Test	Temperature: -40°C Time: 2H
Vibration	Frequency: 10-500Hz Amplitude: 0.15mm Time: 45mins
Resistance of soldering heat	Temperature: 260±5°C Time of dip soldering: 10s, 1time

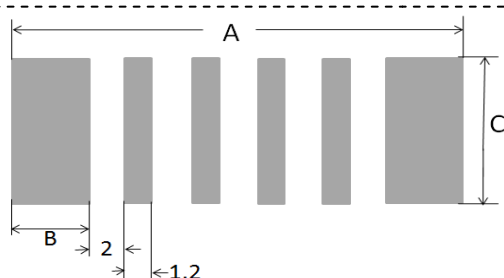
Note: Up-screen program can be specified by customer's request via contacting Bencent service

**Solderability test**

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

**Product Dimensions**


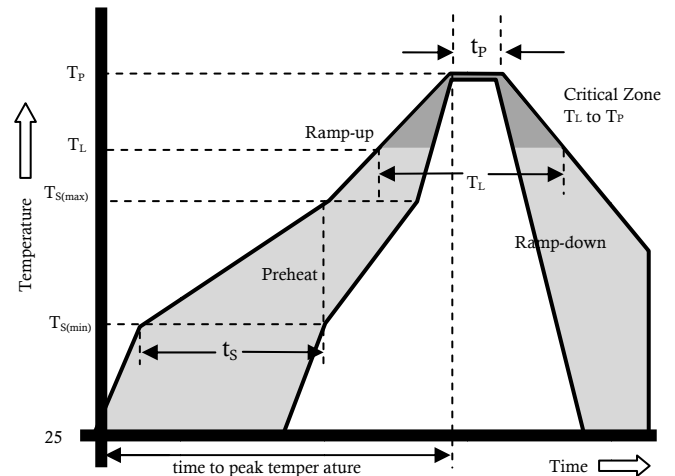
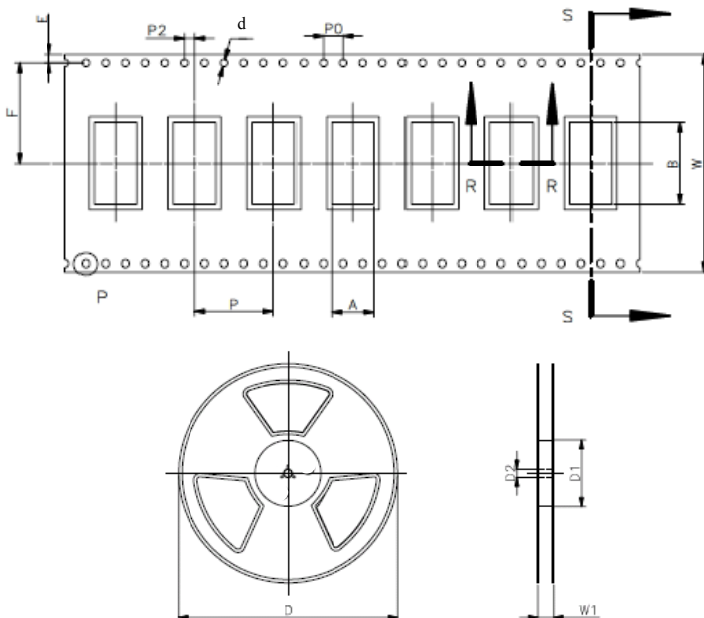
REF	mm	inch
A	8±0.2	0.315±0.008
B	8.3±0.2	0.327±0.008
C	8.3±0.2	0.327±0.008
D	9.5±0.2	0.374±0.008
E	3.2±0.2	0.126±0.008
F	16.5±0.5	0.65±0.02
G	0.5±0.05	0.02±0.002

**Recommended Soldering Pad**


REF	mm	inch
A	23	0.906
B	4.1	0.161
C	8.5	0.335

**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	44±0.3	1.733±0.012
A	8.6±0.1	0.339±0.004
B	16.8±0.1	0.661±0.004
P	16±0.1	0.63±0.004
P0	4±0.1	0.157±0.004
P2	2±0.1	0.079±0.004
d	Φ1.5 <sup>+0.1</sup> <sub>-0</sub>	Φ0.059 <sup>+0.004</sup> <sub>-0</sub>
E	1.75±0.1	0.069±0.004
F	20.25±0.1	0.797±0.004
W1	48±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	250	250	750	360	360	220