

### Features

- Size Design  $\Phi 5.5 \times 6\text{mm}$
- High Current Handling Capability 5,000A @ 8/20 $\mu$  s
- Low Capacitance and Insertion Loss
- Fast Response and Long Service Life
- Reliable to Protect Electrostatic Surge
- Moisture sensitivity level: Level 1

### Exterior





### Application Information

- xDSL

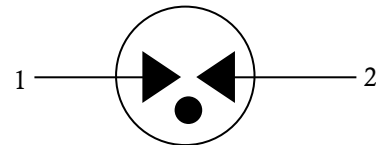
### Package (Top View)



### 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 UL497B, Certificated E232249

### Schematic Symbol



### Electrical Parameter

DC Breakdown Voltage <sup>1) 2)</sup>	100V/s	376-564	V
Impulse Spark-over Voltage	At 1kV/ $\mu$ s	for 99 % of measured values $\leq 850$	V
	At 1kV/ $\mu$ s	Typical values of distribution $\leq 800$	V
Impulse Discharge Current <sup>3)</sup>	8/20 $\mu$ s $\pm 5$ times	5	KA
Arc Voltage	At 1A	$\sim 15$	V
Insulation Resistance	DC=100V	$\geq 1$	G $\Omega$
Capacitance at 1 MHz	V <sub>DC</sub> =0.5V	$\leq 1$	pF
Weight		$\sim 0.75$	g
Operating and storage Temperature		-40-90	$^{\circ}\text{C}$
Marking		Bencent Logo, Voltage and date code;	

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**

B5G    470    L  
(1)    (2)    (3)

- (1) Bencent 2-Electrode DIP Gas Discharge Tube with dimension:  $\Phi 5.5 \times 6$  (D×L) (mm)
- (2) DC Breakdown Voltage, e.g., 470=470V
- (3) Surge Rating @8/20 $\mu$  s, L=5KA

**Product Characteristics**

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

**Environmental Reliability Characteristics**

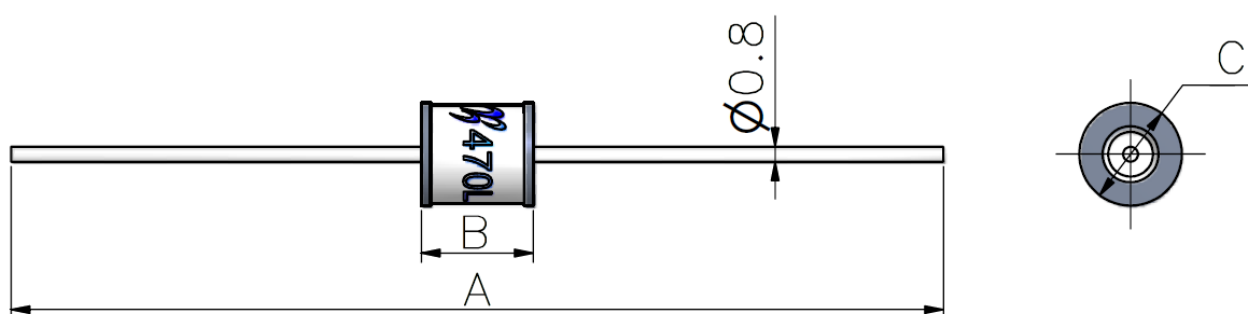
Testing items	Technical standards
High Temperature Storage Test	Temperature: 90°C Time: 2H
Low Temperature Storage Test	Temperature: -40°C Time: 2H
Vibration	Frequency: 10-500Hz Amplitude: 0.15mm Time: 45mins
Resistance of soldering heat	Temperature: 260±5°C Time of dip soldering: 10s, 1time

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

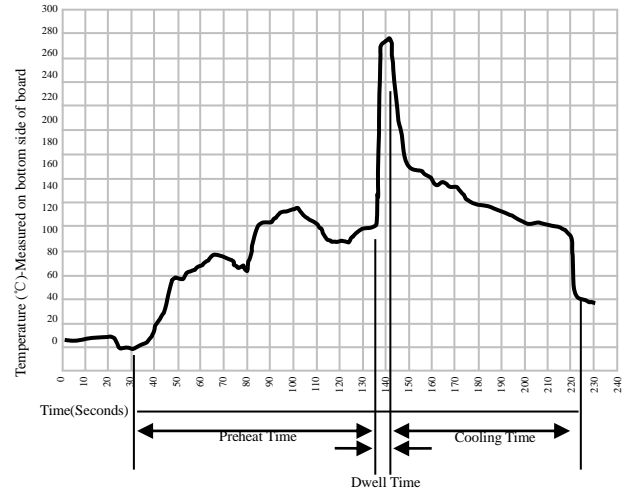
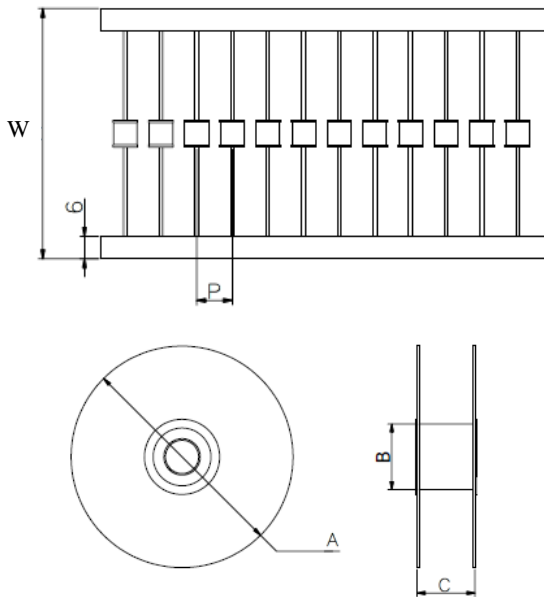
**Product Dimensions**



REF	mm	inch
A	62 ± 2	2.441 ± 0.079
B	6 ± 0.2	0.236 ± 0.008
C	$\Phi 5.5 \pm 0.2$	$\Phi 0.217 \pm 0.008$

**Wave Soldering Profile**

Reflow 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**


REF	mm	inch
W	65±3	2.559±0.118
P	10±1	0.394±0.039
A	Φ340±2	Φ13.386±0.079
B	Φ83±2	Φ3.268±0.079
C	73±3	2.874±0.118

OUTLINE	REEL (PCS)	PER CARTON (PCS)	CARTON SIZE(mm)		
			L	W	H
TAPING	1250	7500	480	350	360