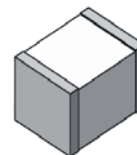


Features

- Small Size Design EIA 1206 3.2×1.6×1.6mm
- Current Handling Capability 500A @ 8/20 μ s
- Low Capacitance and Insertion Loss
- Fast Response and Long Service Life
- Reliable to Protect Electrostatic Surge
- Moisture sensitivity level: Level 1

Exterior

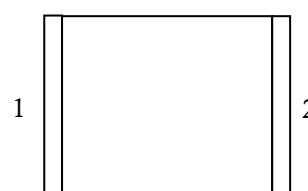


SMD

Application information

- Ethernet

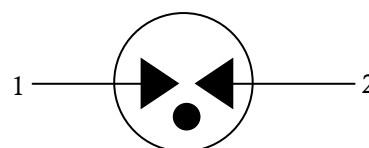
Package (Top View)



Agency Approvals

Icon	Description
RoHS	Compliance with 2011/65/EU
HF	Compliance with IEC61249-2-21:2003
	Mean lead free
	UL Certificated E232249

Schematic Symbol



Electrical Parameter

DC Breakdown Voltage ¹⁾²⁾	100V/s	400 ± 30%	V
Impulse Spark-over Voltage	At 1kV/ μ s	for 99 % of measured values ≤ 1100	V
	At 1kV/ μ s	Typical values of distribution : ≤ 950	V
Impulse Discharge Current ³⁾	10/700 μ s ±5times	6,000	V
	8/20 μ s ±5times	500	A
Arc Voltage	At 1A	~8	V
Insulation Resistance	DC=100V	≥1	GΩ
Capacitance at 1MHz	VDC=0.5V	≤0.6	pF
Weight		~0.04	g
Operating And Storage Temperature		-40-90	℃
Marking		Without	

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

2) In ionized mode

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

Gas Discharge Tube

Version: A1 2014-04-08

Part Numbering System

BS 401 N

(1) (2) (3)

(1)Bencent Gas Discharge Tube

(2) Series: DC Breakdown Voltage,

e.g.: 401=40×10¹=400V

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

Product Characteristics

Lead Material	Fe-Ni Alloy
Body Material	Ceramics
Terminal Finish	100% Matte-Tin Plated

Environmental Reliability Characteristics

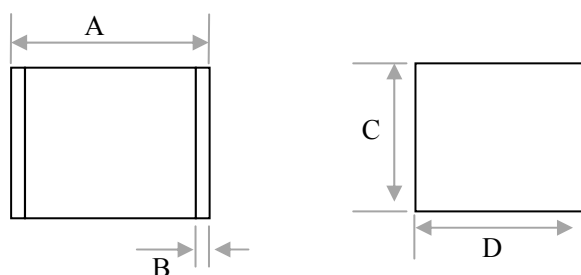
Testing items	Technical standards
High Temperature Storage Test	Temperature: 85℃ Time:2H
Low Temperature Storage Test	Temperature: -40℃ Time:2H
Vibration	Frequency: 10-500Hz Amplitude: 0.15mm Time: 45min
Resistance of soldering heat	Temperature: 260±5℃ Time of dip soldering: 10s, 1time

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

Solderability Test

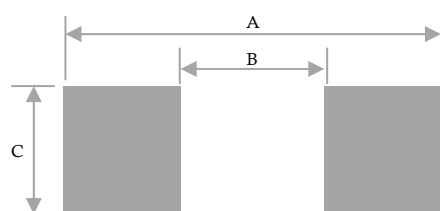
Solderability	Solder Pot Temperature:	245℃±5℃
	Solder Dwell Time:	4-6 seconds

Product Dimensions



REF	mm	inch
A	3.2±0.3	0.126±0.013
B	0.3±0.2	0.013±0.008
C	1.6±0.2	0.063±0.008
D	1.6±0.2	0.063±0.008

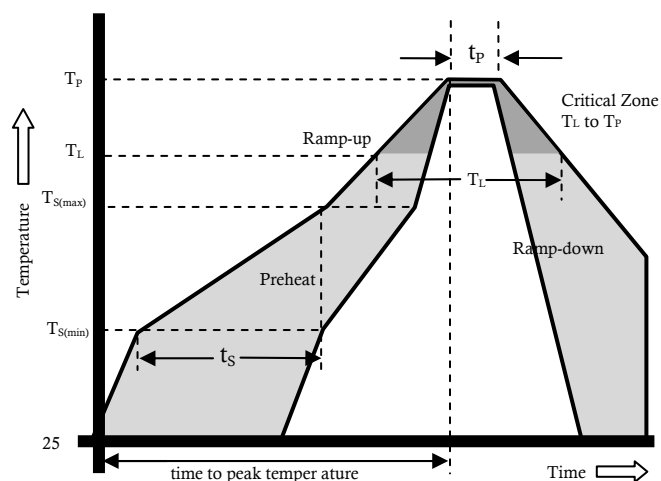
Recommended Soldering Pad



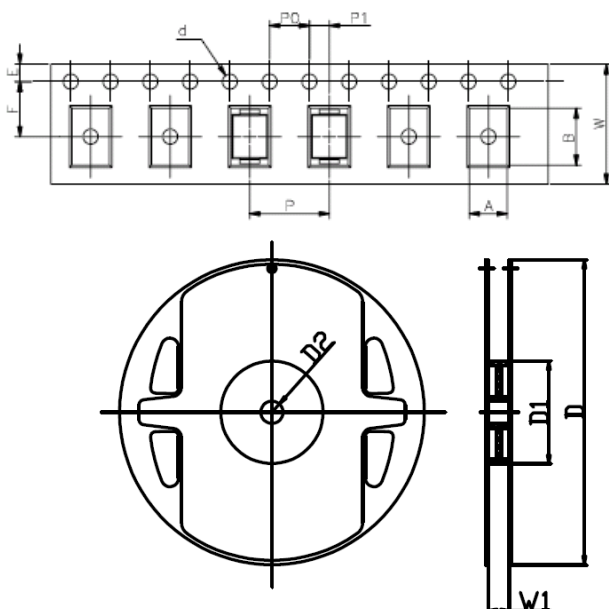
REF	mm	inch
A	4.5	0.177
B	2.0	0.079
C	1.8	0.070

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)		~6 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
A	1.9±0.2	0.074±0.008
B	3.6±0.2	0.141±0.008
d	Φ1.5±0.2	Φ0.059±0.008
P0	4.0±0.2	0.157±0.008
P1	2.0±0.2	0.079±0.008
P	4.0±0.2	0.156±0.008
E	1.75±0.2	0.069±0.008
F	5.5±0.2	0.217±0.008
W	12.0±0.2	0.472±0.008
D	Φ178±2	Φ7.008±0.079
D1	Φ50Min	Φ1.97Min
D2	Φ13±2	0.512±0.079
W1	12.6±2	0.496±0.079

Outline	Reel (PCS)	Per Carton (PCS)	Reel Diameter (mm)	Carton Size(mm)		
				L	W	H
TAPING	2,000	60,000	178	390	370	220