

»Features

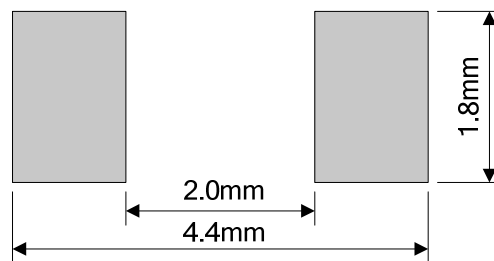
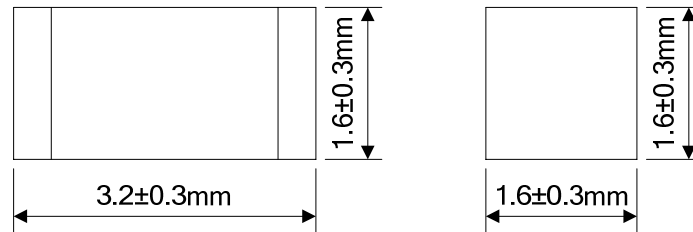
- High insulation resistance
- 4KV 10/700µs maximum surge rating in accordance with ITU-TK.21
- Ultra low capacitance (<0.8pF)
- Surface mounted gas arrester
- Size 3216(1206)
- 0.5KA surge capability tested with 8/20µs pulse as defined by IEC 61000-4-5
- Meets MSL level 1
- Storage and operating temperature: -40 ~ +85°C



»Applications

- Communication equipment
- CATV equipment
- Test equipment
- Data lines
- Power supplies
- Telecom SLIC protection
- Broadband equipment
- ADSL equipment, including ADSL2+
- XDSL equipment
- Satellite and CATV equipment
- General telecom equipment

»Device Dimensions (Unit: mm)

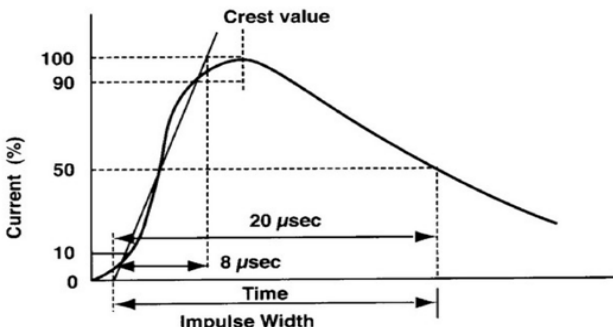


Recommended Pad Size

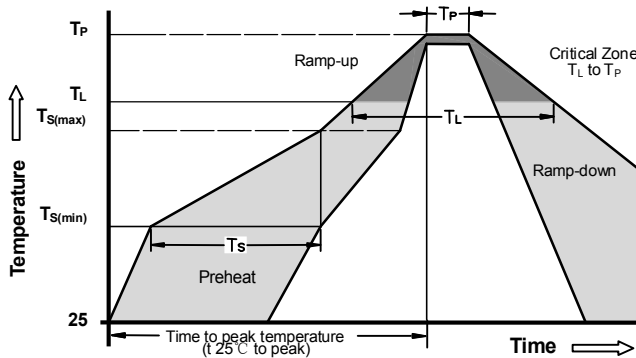
»ElectricalCharacteristics

Part Number	DC Spark-over Voltage	Maximum Impulse Spark-over Voltage	Minimum Insulation Resistance	Maximum Capacitance	Impulse withstanding Voltage Capacity	Nominal Impulse Discharge Current
	@100V/S	@1KV/ μ s		@1MHz	@10/700 μ s \pm 5 times	@8/20 μ s \pm 5 times
BSA151N	150V \pm 30%	750V	1 G Ω (at 50V DC)	0.5pF	4KV	0.5KA
BSA201N	200V \pm 30%	950V	1 G Ω (at 100V DC)	0.5pF		0.5KA
BSA231N	230V \pm 30%	950V	1 G Ω (at 100V DC)	0.5pF		0.5KA
BSA301N	300V \pm 30%	950V	1 G Ω (at 100V DC)	0.5pF		0.5KA
BSA351N	350V \pm 30%	950V	1 G Ω (at 100V DC)	0.5pF		0.5KA
BSA401N	400V \pm 30%	1050V	1 G Ω (at 100V DC)	0.5pF		0.5KA
BSA471N	470V \pm 30%	1050V	1 G Ω (at 100V DC)	0.5pF		0.5KA

»Electrical Rating

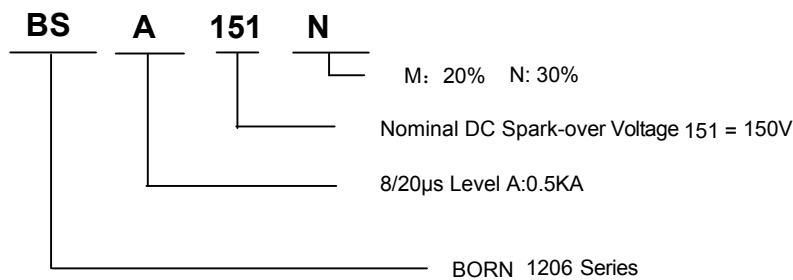
Item	Test Condition / Description	Requirement
DC Spark-over Voltage	The voltage is measured with a slowly rate of rise $dv / dt=100V/s$	To meet the specified value
Impulse Spark-over Voltage	The maximum impulse spark-over voltage is measured with a rise time of $dv / dt=100V//\mu$ s or $1KV/\mu$ s	
Insulation Resistance	The resistance of gas tube shall be measured each terminal each other terminal, please see above spec.	
Capacitance	The capacitance of gas tube shall be measured each terminal to each other terminal. Test frequency:1MHz	
Nominal Impulse Discharge Current	<p>The maximum current applying a waveform of 8/20μs that can be applied across the terminals of the gas tube. One hour after the test is completed, re-testing of the DC spark-over voltage does not exceed $\pm 40\%$ of the nominal DC spark-over voltage. Dwell time between pulses is 3 minutes.</p> 	

»Recommended solderingprofile



Reflow Condition		Pb - Free assembly
Pre Heat	-Temperature Min($T_{s(min)}$)	150°C
	-Temperature Max($T_{s(max)}$)	200°C
	- Time (min to max) (t_s)	60 -180 Seconds
Average ramp up rate (Liquidus Temp T_L) to peak		3°C/second max
$T_{s(max)}$ to T_L - Ramp-upRate		5°C/second max
Reflow	- Temperature (T_L)(Liquidus)	217°C
	- Time (min to max) (t_s)	60 -150 Seconds
Peak Temperature(T_P)		260 +0/-5°C
Time within 5°C of actual peak Temperature (t_p)		10 - 30 Seconds
Ramp-down Rate		6°C/second max
Time 25°C to peak Temperature (T_P)		8 minutes Max
Do not exceed		260°C

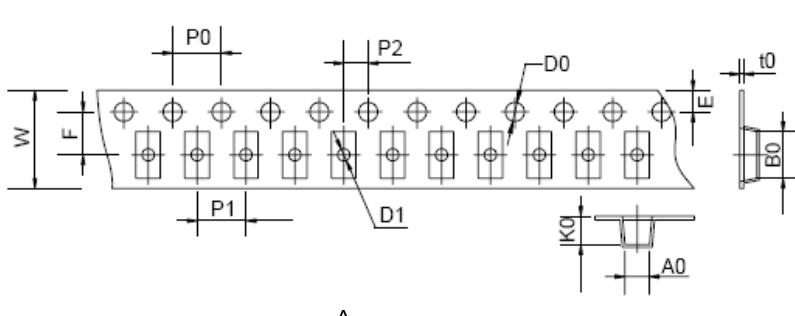
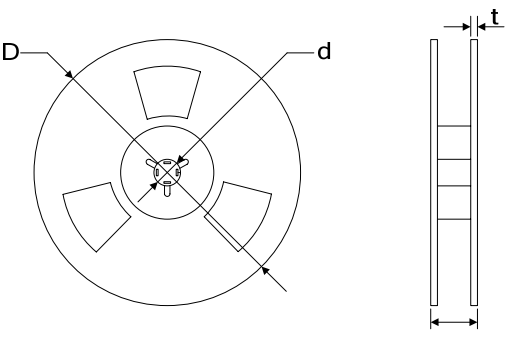
»Part Numbering



»Cautions and warnings

- Gas discharge tubes (GDT) must not be operated directly in power supply networks.
- Gas discharge tubes (GDT) may become hot in case of longer periods of current stress (danger ofburning).
- Gas discharge tubes (GDT) may be used only within their specified values. In the event of overload, the head contacts may fail or the component may be destroyed.
- Damaged Gas discharge tubes (GDT) must not be re-used.

»Packaging

Tape	Items	Dimension (mm)		
		Spec.	Tolerance	
 <p>A</p>	W	8.00	±0.20	
	P0	4.00	±0.10	
	P1	4.00	±0.10	
	P2	2.00	±0.10	
	D0	1.55	±0.50	
	D1	1.00	±0.50	
	E	1.75	±0.10	
	F	3.50	±0.10	
	A0	2.00	±0.10	
	K0	2.00	±0.10	
	B0	3.80	±0.10	
	t0	0.30	±0.10	
	<p>Reel</p> 	D	170.00	±2.00
		d	13.00	±0.50
		L	12.00	±2.00
t		1.20	±0.20	
Quantity: 2500pcs				