

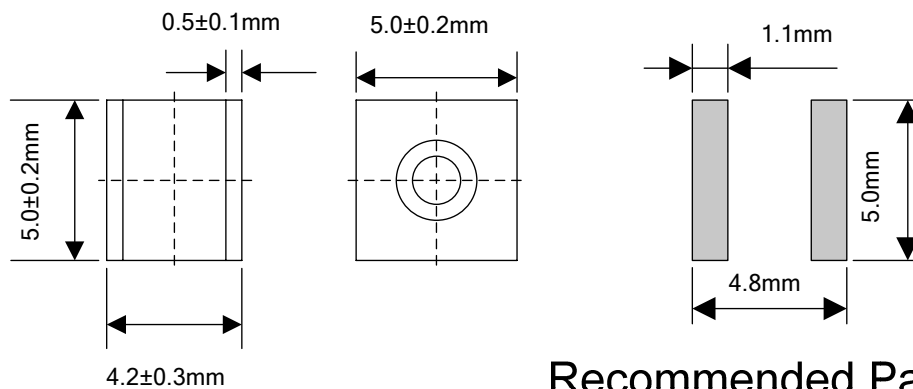
»Features

- High insulation resistance
- 6KV 10/700µs maximum surge rating in accordance with ITU-TK.21
- Ultra low capacitance (<1.0pF)
- Surface mounted gas arrester
- Size :5.0mm*5.0mm*4.2mm
- 5.0KA 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)

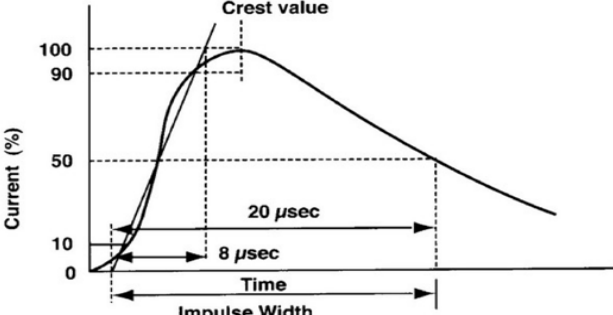


Recommended Pad Size

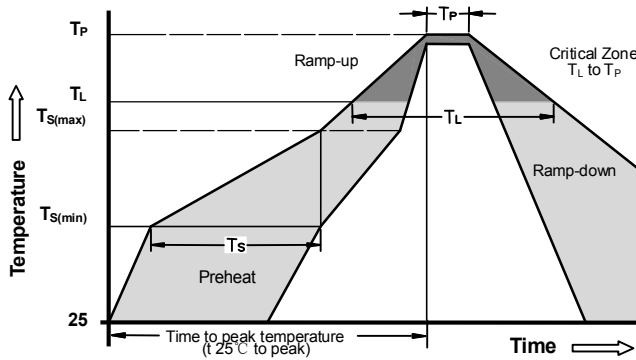
»ElectricalCharacteristics

| 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 |
| BWF750N | 75V \pm 30% | 700V | 1 G Ω (at 25V DC) | 1.0pF | 6KV | 5.0KA |
| BWF900N | 90V \pm 30% | 700V | 1 G Ω (at 50V DC) | 1.0pF | | 5.0KA |
| BWF151N | 150V \pm 30% | 700V | 1 G Ω (at 50V DC) | 1.0pF | | 5.0KA |
| BWF231N | 230V \pm 30% | 700V | 1 G Ω (at 100V DC) | 1.0pF | | 5.0KA |
| BWF301N | 300V \pm 30% | 800V | 1 G Ω (at 100V DC) | 1.0pF | | 5.0KA |
| BWF351N | 350V \pm 30% | 850V | 1 G Ω (at 100V DC) | 1.0pF | | 5.0KA |
| BWF401N | 400V \pm 30% | 900V | 1 G Ω (at 100V DC) | 1.0pF | | 5.0KA |
| BWF471N | 470V \pm 30% | 1000V | 1 G Ω (at 250V DC) | 1.0pF | | 5.0KA |
| BWF601N | 600V \pm 30% | 1200V | 1 G Ω (at 250V DC) | 1.0pF | | 5.0KA |
| BWF801N | 800V \pm 30% | 1600V | 1 G Ω (at 250V DC) | 1.0pF | | 3.0KA |
| BWF102N | 1000V \pm 30% | 1800V | 1 G Ω (at 500V DC) | 1.0pF | | 3.0KA |

»Electrical Rating

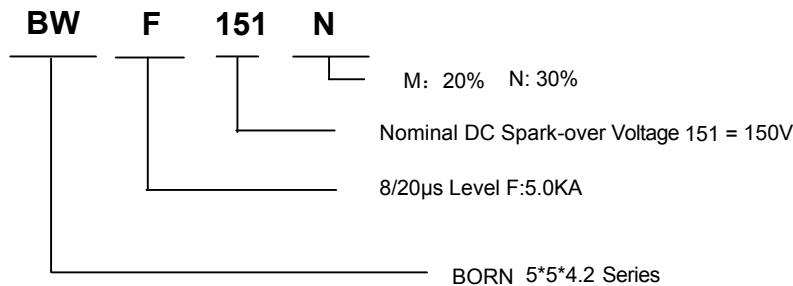
| Item | Test Condition / Description | Requirement |
|--|--|-----------------------------|
| DC Spark-over Voltage | The voltage is measured with a slowly rate of rise $dv / dt=100V/s$ | |
| Impulse Spark-over Voltage | The maximum impulse spark-over voltage is measured with a rise time of $dv / dt=100V/\mu s$ 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>  | To meet the specified value |

»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 of burning).
- 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>Technical drawing of a carrier tape showing dimensions: P0, P1, P2, D0, E, F, W, A0, B0, K0, t0. The drawing includes a top view of the tape with five components, a side view of a component, and a detail view of the carrier pocket.</p> | W | 16.00 | ±0.20 | |
| | P0 | 4.00 | ±0.10 | |
| | P1 | 12.00 | ±0.20 | |
| | P2 | 2.00 | ±0.10 | |
| | D0 | 1.50 | ±0.10 | |
| | E | 1.75 | ±0.10 | |
| | F | 7.50 | ±0.10 | |
| | A0 | 5.30 | ±0.10 | |
| | K0 | 5.40 | ±0.10 | |
| | B0 | 4.50 | ±0.10 | |
| | t0 | 0.40 | ±0.10 | |
| | Reel | D | 330.00 | ±1.00 |
| | <p>Technical drawing of a reel showing dimensions: D, d, L, t. The drawing includes a top view of the reel with four segments and a side view of the reel.</p> | d | 13.00 | ±0.50 |
| | | L | 20.00 | ±0.50 |
| t | | 2.00 | ±0.20 | |
| Quantity: 1000pcs | | | | |