

RoHS SL1122A Series Hybrid



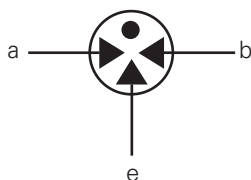
Description

The SL1122A series Hybrid features a high performance Alpha Gas Plasma Tube in conjunction with a MOV. These devices are matched so that high speed pulses are initially clamped by the MOV, then as the current rises, the transient energy is switched through the gas tube. The Hybrid offers high levels of performance on fast rising transients in the domain of 100V/μs to 10 kV/μs, so eliminates the dv/dt switching delay normally exhibited by standard GDTs. These devices are extremely robust and are able to divert a 10,000 Amp pulse without destruction.

Agency Approvals

| AGENCY | AGENCY FILE NUMBER |
|---|--------------------|
|  | E128662 |

2 Electrode GDT Graphical Symbol



a = TIP
 b = RING
 e = GROUND
 (centre electrode)

Features

- RoHs Compliant
- Excellent response to fast rising transients
- Flat response up to 10kV/μs
- 10kA surge capability tested with 8/20μs pulse as defined by IEC 61000-4-5
- Thermal failsafe

Applications

- MDF protection
- ADSL equipment
- XDSL equipment
- Alarm panels
- General telecom equipment

Electrical Characteristics

| Part Number | Device Specifications (at 25°C) | | | | | | Life Ratings | | | | |
|-------------|--|-----|-----|--|-------------------------------|--|--|--|--|--|----------------------------------|
| | DC Breakdown in Volts ^{1,2} (@100V/s) | | | DC Voltage ² (1kV/μs Ignition Time) | Insulation Resistance | Capacitance (@1MHz, 0V bias, 1V oscillation) | Arc Voltage (on state voltage) @1Amp Min | Surge Life ¹ (10/1000μs 300x +/-) | Surge Current ¹ (8/20μs x 10) | Nominal AC Discharge Current ¹ (10x1s@50Hz) | DC Holdover Voltage (<150msecs.) |
| | MIN | TYP | MAX | | MIN | MAX | TYP | | | | TYP |
| SL1122A090 | 72 | 90 | 108 | 200 (< 10μs) | > 10 ⁸ Ω (at 50V) | 270 pF | ~10 to 35 Volts | 200 A | 10 kA | 10 A | 50 V |
| SL1122A230 | 184 | 230 | 276 | 350 (< 10μs) | > 10 ⁸ Ω (at 100V) | 100 pF | | | | | 135 V |
| SL1122A260 | 210 | 260 | 310 | 400 (< 10μs) | | | | | | | |

Tested in accordance with ITU-T Rec K.12

Notes:

1. Total current through centre electrode
2. Maximum Peak Break Over Voltage

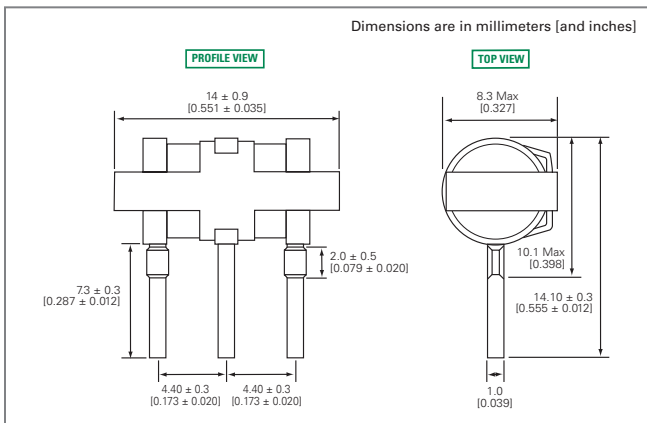
Product Characteristics

| | |
|------------------------|--|
| Materials | Electrode Base: Nickel Iron Alloy Electrode Plating: Bright Tin Body: Ceramic |
| Product Marking | Littelfuse 'LF' Mark, voltage and date code. Red. |

| | |
|--|---|
| Glow to Arc Transition Current | ~1 Amp |
| Glow Voltage | ~60 to 200 Volts |
| Storage and Operational Temperature | -40 to +90°C |
| Transverse Voltage (Delay Time) | < 0.2 μSec. (Tested to ITU-T Rec.K.12) |

Device Dimensions

Radial Lead Devices



Packaging Dimensions

For Radial Lead Items: Packed in tray (100 pcs)

Part Numbering System and Ordering Information

