

# Gas Discharge Tubes

## High Performance Alpha Range

### RoHS Greentube™ SL1122A Series Hybrid Gas Plasma Arresters

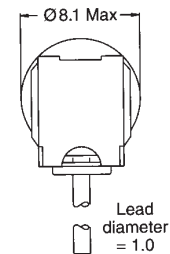
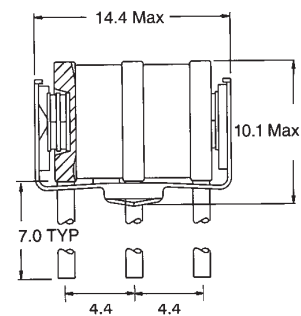
The SL1122 series Hybrid features a high performance Alpha Gas Plasma Tube in conjunction with a high speed Silicon Avalanche Diode ( SAD ). These devices are matched so that High speed pulses are initially clamped by the SAD, then as the current rises, the transient energy is switched through the Gas 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 GDT's. These devices are extremely robust and are able to divert a 10,000Amp pulse without destruction, so are ideal for central office ( telephone exchange ) protection.

#### FEATURES

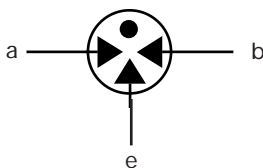
- RoHs Compliant
- Excellent response to fast rising transients.
- Flat response up to 10KV/μS.
- 10KA surge capability tested with 8/20μS pulse as defined by IEC 61000-4-5
- SAD ensures short circuit failure mode in the event of severe transient overload.
- Thermal failsafe.

#### Applications:

- MDF protection
- Alarm panels.
- ADSL equipment.
- XDSL equipment.
- General Telecom Equipment

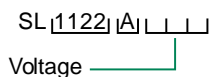


All dimensions in mm



3 ELECTRODE GDT  
 a=TIP  
 b=RING  
 e=GROUND  
 (centre electrode)  
 GRAPHICAL SYMBOL

#### ORDERING INFORMATION



#### Mechanical Specifications:

- Weight:** 2.7g (0.095 oz.)
- Materials:** Electrode Base: Nickel Iron Alloy  
 Electrode Plating: Bright Sn  
 Body: Ceramic
- Device Marking:** Littelfuse 'LF' logo, voltage and date code

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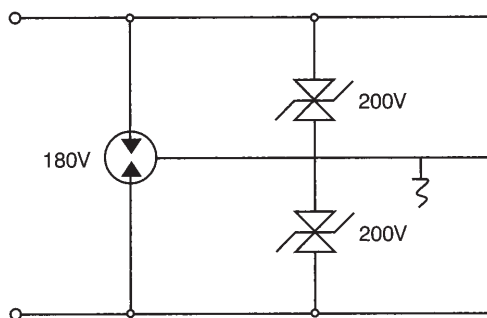
LITTELFUSE 3 TERMINAL ARRESTER SERIES  
TOTALLY NON-RADIOACTIVE, UL BREAKER VOLTAGE

Part Number	DC Voltage (V)	Breakover Voltage <sup>1,2,4</sup> (V)	Max Dynamic Breakover Voltage @ 1 kV/us (Vbr)	Max Repetitive Impulse Discharge Current <sup>4,7</sup> (kA)	Max Repetitive Impulse Discharge Current <sup>5,7</sup> (kA)	Alternating Discharge Current <sup>4,6</sup> (A)	Insulation Resistance <sup>8</sup> (Ω)	Max Capacitance <sup>9</sup> (pF)	Holdover Voltage <sup>3</sup> (V)	Nominal On-State Voltage @ 1A (V)
SL1122A090	90	70-120	150	5	10	5	1x10 <sup>8</sup> @ 50V	200	50	20
SL1122A200	200	140-250	250	5	10	5	1x10 <sup>8</sup> @ 120V	100	120	20
SL1122A230	230	184-276	350	5	10	5	1x10 <sup>8</sup> @ 150V	100	135	20
SL1122A250	250	200-300	400	5	10	5	1x10 <sup>8</sup> @ 150V	100	135	20
SL1122A260	260	210-350	400	5	10	5	1x10 <sup>8</sup> @ 175V	100	135	20
SL1122A350	350	280-420	600	5	10	5	1x10 <sup>8</sup> @ 265V	100	135	20
SL1122A450	450	420-600	700	5	10	5	1x10 <sup>8</sup> @ 350V	100	135	20

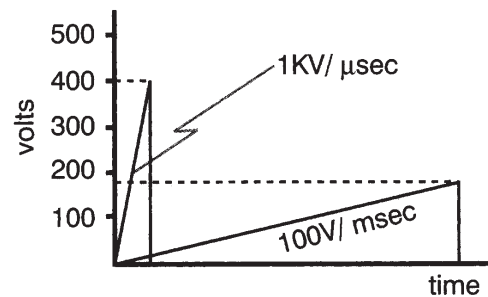
Notes:

- (1) Measured using a voltage rate of rise of 100V/s.
- (2) In ionized mode
- (3) Tested according to ITU-T Rec.K.12
- (4) Either end electrode to center electrode
- (5) Total current through center electrode, both line electrodes subject to simultaneous pulses
- (6) 10 shots, AC 60Hz, 1 sec duration
- (7) 10 shots, 8/20μs waveform
- (8) Measured @ 100V
- (9) Measured at MHz, line to ground

#### CCT DIAGRAM



#### G.D.T. ONLY



#### HYBRID

