

# High Performance Beta Range





# Greentube™ SL0902A Series Gas Plasma Arrester

**!R** 

The Broadband Optimized™ SL0902A series has been especially developed to offer high surge ratings in a miniature package. Unique design features offer high levels of performance on fast rising transients in the domain of 100V/µs to 1kV/µs, which are those most likely from induced lightning disturbances.

The device offers low insertion loss, so is well suited to brandband equipment. The capacitance does not vary with voltage, so will not cause operational problems with ADSL2+ where capacitance variation across Tip and Ring is undesirable. These devices are extremely robust and are able to divert a 2500A pulse without destruction. For AC Power Cross of long duration, overcurrent protection is recommended.

# **FEATURES**

- RoHS compliant
- · GHz working frequency
- Excellent stability on multiple pulse duty cycle
- Excellent response to fast rising transients.
- Ultra Low Insertion Loss
- Surface mountable
- 2.5KA surge capability tested with 8/20mS pulse as defined by IEC 61000-4-5

# Applications:

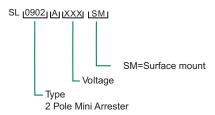
- · Broadband equipment.
- ADSL equipment, including ADSL2+.
- XDSL equipment.
- Satellite and CATV equipment.
- General telecom equipment.



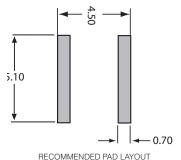
2 ELECTRODE GDT

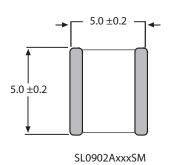
**GRAPHICAL SYMBOL** 

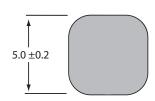
# **ORDERING INFORMATION**











GDT SHOWING SEATING PLANE FOR SL0902AxxxSM

All dimensions in mm

# Mechanical Specifications:

Weight: 0.33g (0.011 oz.)

Materials: Electrode Base: Copper Alloy

Electrode Plating: Bright Tin

Body: Ceramic

**Device Marking:** 'LF' logo, Voltage and date code

Packaging: Tape and Reel to EIA RS-296-D, 1500 pieces

Bulk in vacuum sealed bags, 1000 pieces



# **пон** Greentube™ SL0902A Series Gas Plasma Arrester

# LITTELFUSE 2 TERMINAL MINI ARRESTER SERIES TOTALLY NON-RADIOACTIVE, UL RECOGNIZED

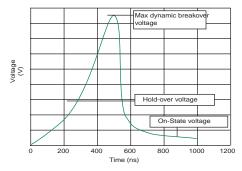
	DC Breakover Voltage @100 V/s <sup>12</sup> Volts		MAX Dynamic Breakover Voltage <sup>3</sup>		AC Discharge	Max Repetitive Impulse	Max Leakage	Holdover	Nominal On-state Voltage
Part Number	MIN	MAX	100 V/µs Volts	1kV/µs Volts	Current <sup>4</sup> Amps	Current⁵ kAmps	Current <sup>6</sup> nAmps	Voltage <sup>7</sup> Volts	@1A Volts
SL0902A090	72	108	400	650	2.5	2.5	50	50	20
SL0902A230	184	276	400	500	2.5	2.5	100	135	20
SL0902A350	280	420	550	650	2.5	2.5	100	135	20
SL0902A420	350	504	675	800	2.5	2.5	100	135	20

<sup>\*</sup>Max capacitance is 1.0 pF.

### Notes

- 1. At delivery AQL 0.65 level II, DIN ISO 2869
- 2. In ionized mode
- 3. Comparable to the silicon measuremet, Switching Voltage (Vs)
- 4. 10 shots, AC 60Hz, 1µs duration
- 5. 10 shots, 8/20µs wave form per IEC 61000-4-5
- 6. Measured @ 100V, except 90V dc devices which are measured at 50V
- 7. Tested according to ITU-T Rec. K.12

### Voltage vs Time Characteristic



# Typical Insertion Loss @ 1.0 GHz = 0.01 dB @1.4 GHz = 0.1 dB @1.8 GHz = 0.53 dB @2.1 GHz = 0.81 dB @2.45 GHz = 1 dB @2.8 GHz = 1.2 dB @3.1 GHz = 1.5 dB @3.5 GHz = 2.1 dB

## Capacitance vs. Temperature @ Various Bias Voltages

