

# LITTELFUSE Greentube™ Gas Plasma Arresters



(High Performance Beta Range)

## LITTELFUSE SL1002 SURFACE MOUNT SERIES

### Features:

- RoHS compliant
- Ultra Low Insertion Loss
- Surface mountable
- 5KA surge capability tested with 8/20μs pulse as defined by IEC 61000-4-5
- Excellent response to fast rising transients.
- Can be used to meet Telcordia GR1089 without series resistance
- 10/700 6KV capability, as per ITUT k.21, enhanced test level
- 2000 Amp 2/10μs surge rating
- Meets FCC part 68 10/160μs waveform, 200A test and 10/560μs waveform 100A test.

### Mechanical Specifications:

- Weight: 0.63g (0.022 oz.)
- Materials: Electrode Base: Nickel Iron Alloy
- Electrode Plating: Bright Sn
- Body: Ceramic
- Device Marking: 'LF' logo, Voltage and date code

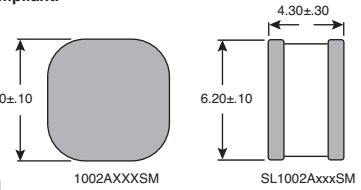
### Applications:

- Broadband equipment
- ADSL equipment
- XDSL equipment
- Satellite and CATV equipment
- General telecom equipment

RoHS Compliant



2 Electrode GDT Graphical Symbol



For quantities greater than 500, call for quote.

MOUSER STOCK NO.	DC Voltage @ 100V/sec (V)	Max Dynamic Breakover Voltage @ 100V/μs (Vbr)	Max Dynamic Breakover Voltage @ 1kV/μs (Vbr)	Max Repetitive Impulse Discharge Current (kA)	Max Single Impulse Discharge Current (A)	Max Leakage Current (nA)	Max Capacitance (pF)	Holdover Voltage (V)	Nominal On-State Voltage @ 1A	Price Each			
										1	10	100	250
576-SL1002A090SM	90	360	700	5	2	100	1.2	50	20	.74	.71	.67	.63
576-SL1002A230SM	230	400	500	5	2	100	1.2	135	20	.74	.71	.67	.63
576-SL1002A350SM	350	500	600	5	2	100	1.2	135	20	.74	.71	.67	.63
576-SL1002A600SM	600	800	900	5	2	100	1.2	135	20	.74	.71	.67	.63

## LITTELFUSE SL1003 SERIES

### Features:

- RoHS compliant
- Low insertion loss
- Surface mountable
- 5KA surge capability tested with 8/20μs pulse as defined by IEC 61000-4-5
- GHz working frequency
- Excellent response to fast rising transients
- Can be used to meet Telcordia GR1089 without series resistance
- 10/700 6KV capability, as per ITUT k.21, enhanced test level
- 2000 Amp 2/10μs surge rating

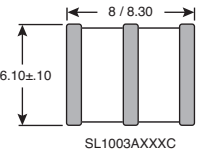
### Applications:

- Broadband equipment
- ADSL equipment
- XDSL equipment
- Satellite and CATV equipment
- General telecom equipment

RoHS Compliant



3 Electrode GDT Graphical Symbol



For quantities greater than 500, call for quote.

MOUSER STOCK NO.	Type	DC Voltage @ 100V/sec (V)	Max Dynamic Breakover Voltage @ 100V/μs (Vbr)	Max Dynamic Breakover Voltage @ 1kV/μs (Vbr)	Max Repetitive Impulse Discharge Current (kA)	Insulation Resistance (Ω)	Alternating Discharge Current (A)	Max Capacitance (pF)	Holdover Voltage (V)	Nominal On-State Voltage @ 1A (V)	Price Each			
											1	10	100	250
576-SL1003A090C	Core	90	600	700	5	1x109 @50V	5	1.2	50	20	1.74	1.66	1.58	1.50
576-SL1003A090R	Radial	90	600	700	5	1x109 @50V	5	1.2	50	20	1.79	1.70	1.61	1.52
576-SL1003A090SM	SMD	90	600	700	5	1x109 @50V	5	1.2	50	20	1.79	1.70	1.61	1.52
576-SL1003A230C	Core	230	350	500	5	1x109 @100V	5	1.2	135	20	1.66	1.58	1.49	1.41
576-SL1003A230R	Radial	230	350	500	5	1x109 @100V	5	1.2	135	20	1.79	1.70	1.61	1.52
576-SL1003A230RF	Radial w/Failsafe	230	350	500	5	1x109 @100V	5	1.2	135	20	2.05	1.95	1.85	1.74
576-SL1003A230SM	SMD	230	350	500	5	1x109 @100V	5	1.2	135	20	1.79	1.70	1.61	1.52
576-SL1003A350C	Core	350	500	700	5	1x109 @100V	5	1.2	135	20	1.66	1.58	1.49	1.41
576-SL1003A350R	Radial	350	500	700	5	1x109 @100V	5	1.2	135	20	1.79	1.70	1.61	1.52
576-SL1003A350SM	SMD	350	500	700	5	1x109 @100V	5	1.2	135	20	1.79	1.70	1.61	1.52
576-SL1003A400C	Core	400	550	800	5	1x109 @100V	5	1.2	135	20	1.66	1.58	1.49	1.41
576-SL1003A400R	Radial	400	550	800	5	1x109 @100V	5	1.2	135	20	1.79	1.70	1.61	1.52
576-SL1003A400SM	SMD	400	550	800	5	1x109 @100V	5	1.2	135	20	1.79	1.70	1.61	1.52

## LITTELFUSE SL1024A SERIES

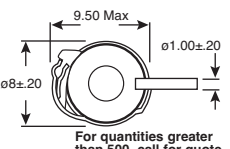
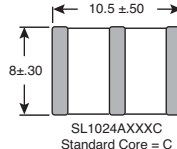
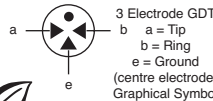
### Features:

- RoHS compliant
- Low insertion loss
- Excellent response to fast rising transients.
- Ultra low capacitance.
- 10KA surge capability tested with 8/20μs pulse as defined by IEC 61000-4-5
- Available with thermal failsafe option (add 'F' or 'S' suffix to part number)

### Applications:

- Broadband equipment.
- ADSL equipment.
- XDSL equipment.
- Satellite and CATV equipment.
- Splitters
- General telecom equipment.

RoHS Compliant



For quantities greater than 500, call for quote.

MOUSER STOCK NO.	Type	DC Voltage (V)	DC Breakover Voltage Min - Max7 @100V/sec (V)	Max Dynamic Breakover Voltage @100/μs (V)	Alternating Discharge Current (A)	Max Repetitive Impulse Discharge Current (kA)	Max Single Impulse Discharge Current (kA)	Max Single Impulse Discharge Current 10/350μs (kA)	Price Each			
									1	10	100	250
576-SL1024A230C	Core	230	184-276	350	10	10	20	2.5	1.28	1.22	1.16	1.09
576-SL1024A230R	Radial	230	184-276	350	10	10	20	2.5	1.43	1.36	1.29	1.22
576-SL1024A230RF	Radial w/Failsafe	230	184-276	350	10	10	20	2.5	1.56	1.48	1.40	1.33
576-SL1024A250C	Core	250	200-300	400	10	10	20	2.5	1.28	1.22	1.16	1.09
576-SL1024A250R	Radial	250	200-300	400	10	10	20	2.5	1.43	1.36	1.29	1.22
576-SL1024A250RF	Radial w/Failsafe	250	200-300	400	10	10	20	2.5	1.56	1.48	1.40	1.33
576-SL1024A350C	Core	350	280-420	500	10	10	20	2.5	1.28	1.22	1.16	1.09
576-SL1024A260R	Radial	350	280-420	500	10	10	20	2.5	1.43	1.36	1.29	1.22
576-SL1024A260RF	Radial w/Failsafe	350	280-420	500	10	10	20	2.5	1.56	1.48	1.40	1.33
576-SL1024A400C	Core	400	320-480	600	10	10	20	2.5	1.28	1.22	1.16	1.09
576-SL1024A400R	Radial	400	320-480	600	10	10	20	2.5	1.43	1.36	1.29	1.22
576-SL1024A400RF	Radial w/Failsafe	400	320-480	600	10	10	20	2.5	1.56	1.48	1.40	1.33
576-SL1024A500C	Core	500	400-500	700	10	10	20	2.5	1.28	1.22	1.16	1.09
576-SL1024A500R	Radial	500	400-500	700	10	10	20	2.5	1.43	1.36	1.29	1.22
576-SL1024A500RF	Radial w/Failsafe	500	400-500	700	10	10	20	2.5	1.56	1.48	1.40	1.33

## LITTELFUSE SL0902A SURFACE MOUNT SERIES - BROADBAND OPTIMISED™

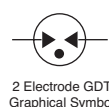
### Features:

- 2.5KA surge capability tested with 8/20μs pulse as defined by IEC 100-4-5
- Excellent stability on multiple pulse duty cycle.
- Excellent response to fast rising transients.
- Surface mountable
- GHz working frequency.

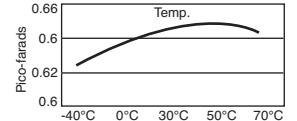
### Applications:

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

RoHS Compliant



Typical capacitance (pF) measured at bias voltages of 0 to 35 vts



For quantities greater than 500, call for quote.

MOUSER STOCK NO.	Holdover Voltage (V)	DC Breakover Voltage @2kV/sec (V)	Max Dynamic Breakover Voltage @100/μs (V)	Max Dynamic Breakover Voltage @1kV/μs (V)	Alternating Discharge Current (A)	Impulse Discharge Current (kA)	Insulation Resistance (Ω)	Max Capacitance (pF)	Price Each			
									1	10	100	250
576-SL0902A090SM	50	72-108	400	600	2.5	2.5	1000M	1.5	.74	.71	.67	.63
576-SL0902A230SM	135	184-276	400	500	2.5	2.5	1000M	1.5	.74	.71	.67	.63
576-SL0902A350SM	135	270-420	550	650	2.5	2.5	1000M	1.5	.74	.71	.67	.63
576-SL0902A420SM	135	350-504	675	800	2.5	2.5	1000M	1.5	.78	.74	.71	.67