

# Gas Discharge Tubes

Omega Range

## RoHS Greentube™ SL1024A Series Gas Plasma Arresters

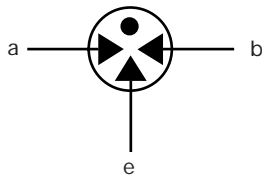
The SL1024A series offers high levels of current handling on fast rising transients created by induced Lightning disturbances. These devices are extremely robust and are able to divert pulses of 10,000A. The SL1024A also features ultra low capacitance (typically 1pf or less) making them ideal for the protection of high-speed transmission equipment.

### FEATURES

- RoHS compliant except 'RS' suffix
- 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.



3 ELECTRODE GDT

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

GRAPHICAL SYMBOL

### ORDERING INFORMATION

SL 1024A

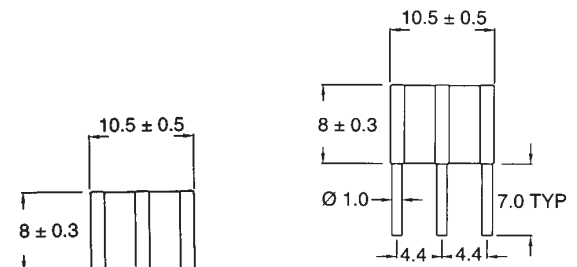
Voltage

Pin Configuration

C=Core  
R=Leaded

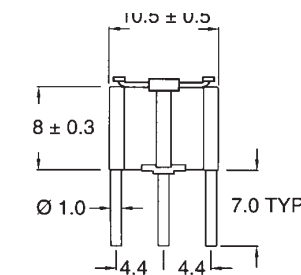
Failsafe Option

F=Plastic  
S=Solder

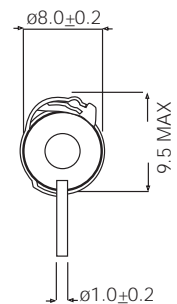


1) Standard Core = C  
SL1024A xxxC

2) 4.4 Leg Pitch = R  
SL1024A xxxR



3) as above with wrap failsafe = RF/RS  
SL1024A xxxRF  
SL1024A xxxRS



### Mechanical Specifications:

**Weight:** 2.7g (0.095 oz.)  
**Materials:** Electrode Base: Nickel Iron Alloy  
Electrode Plating: Bright Sn  
Body: Ceramic

**Device Marking:** Littelfuse 'LF' marking, Voltage and date code. Red.

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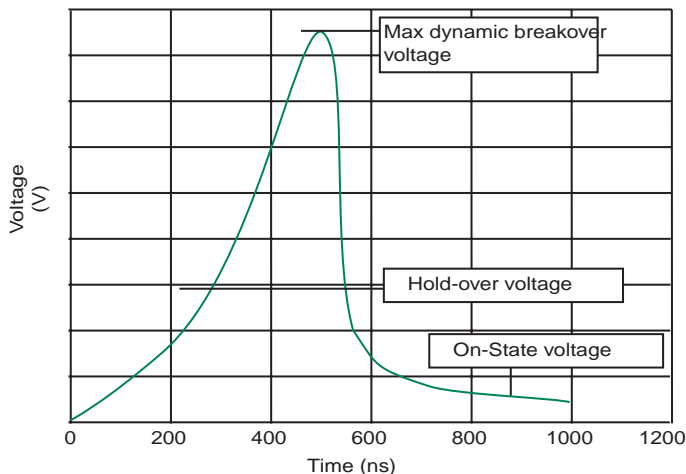


LITTELFUSE 3 TERMINAL ARRESTER SERIES  
TOTALLY NON-RADIOACTIVE, UL RECOGNIZED

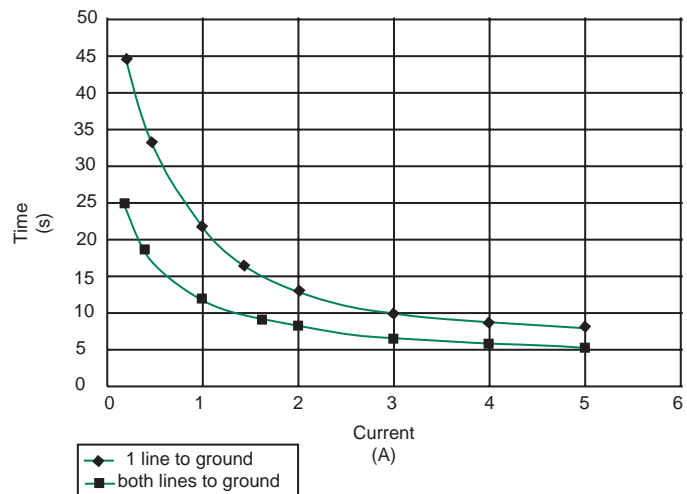
Part Number	DC Voltage(V)	DC Breakover Voltage Min-Max <sup>7</sup> @ 100V/sec (V)	Max Dynamic Breakover Voltage @ 100/μs (V)	Alternating Discharge Current <sup>1,3</sup> (A)	Max Repetitive Impulse Discharge Current (kA)	Max Single Impulse Discharge Current (kA)	Max Single Impulse Discharge Current 10/350μs <sup>5,2</sup> (kA)
SL1024A090	90	70-120	600	10	10	20	2.5
SL1024A145	145	116-174	500	10	10	20	2.5
SL1024A150	150	120-180	500	10	10	20	2.5
SL1024A230	230	184-276	350	10	10	20	2.5
SL1024A250	250	200-300	400	10	10	20	2.5
SL1024A260	260	210-310	420	10	10	20	2.5
SL1024A300	300	240-360	450	10	10	20	2.5
SL1024A350	350	280-420	500	10	10	20	2.5
SL1024A400	400	320-480	600	10	10	20	2.5
SL1024A420	420	345-500	650	10	10	20	2.5
SL1024A450	450	360-540	650	10	10	20	2.5
SL1024A500	500	400-500	700	10	10	20	2.5
SL1024A600	600	480-720	850	10	10	20	2.5

- (1) Total current through center (ground) electrode, both line electrodes pulsed simultaneously; half value through each respective line terminal.
- (2) Applies to 'C' option devices mounted in a suitable connector with high pressure contacts.
- (3) 10 shots, A.C. 60Hz, 1 sec duration.
- (4) 10 shots, 8/20μs waveform
- (5) either end (line) electrode to center (ground) electrode
- (6) Meets the requirements of BT Type 14A. Addition of 'F' (failsafe) option meets the requirements of BT type number 14A/1.

**Voltage vs Time Characteristic**



**Time vs. Current for Failsafe**



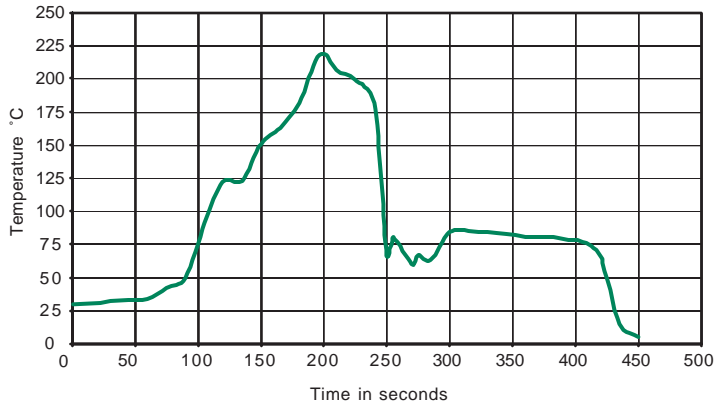
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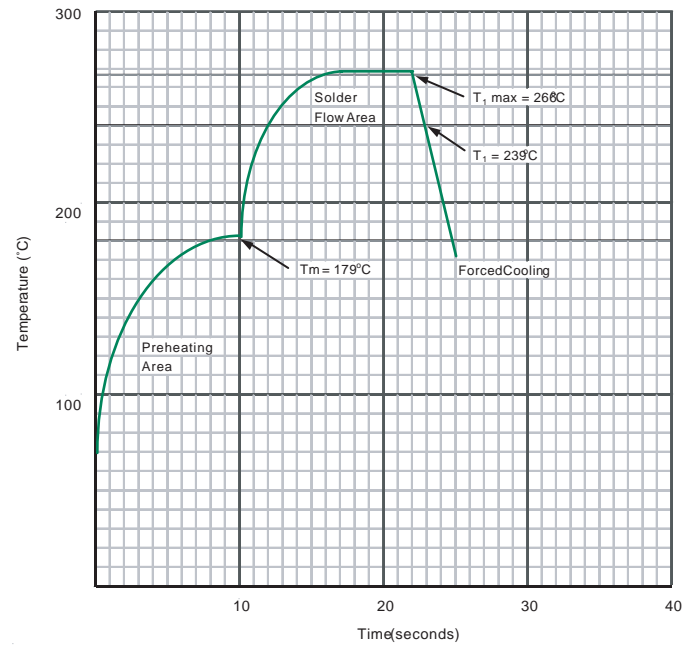
**RoHS** **Pb** **Greentube™ SL1024A Series Gas Plasma Arresters**



**Profile for reflow soldering**



**Profile for wave soldering**



GAS DISCHARGE TUBES

**Notes:**

- $T_1 \text{ max}$  = Maximum Tab Temperature =  $266^\circ\text{C}$
- $T_1$  = Flow Temperature of Solder =  $239^\circ\text{C}$
- $T_m$  = Melting Point of Solder =  $179^\circ\text{C}$
- $T_{\text{amb}}$  =  $25^\circ\text{C}$

1. Maximum permissible rate of temperature change =  $^\circ\text{C} / \text{sec}$
2. Not for RF style devices