

Gas Discharge Tubes

Omega Rage

RoHS Greentube™ SL1024A Series Gas Plasma Arresters

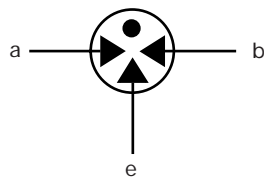
The SL1024A series offers high levels of current handling on fast rising transients created by induced Lightning disturbances. These devices are extremely robust and are able to divert pulses of 10,000A. The SL1024A also features ultra low capacitance (typically 1pf or less) making them ideal for the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

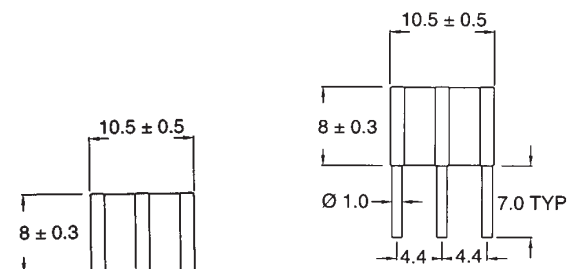
a=TIP
b=RING
e=GROUND
(centre electrode)

GRAPHICAL SYMBOL

ORDERING INFORMATION

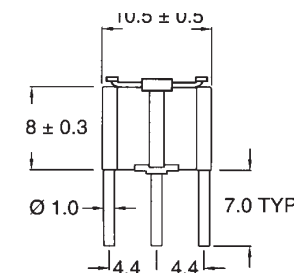
SL 1024A

Voltage
 Pin Configuration
 C=Core
 R=Leaded
 Failsafe Option
 F=Plastic
 S=Solder

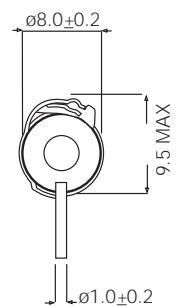


1) Standard Core = C
SL1024A xxxC

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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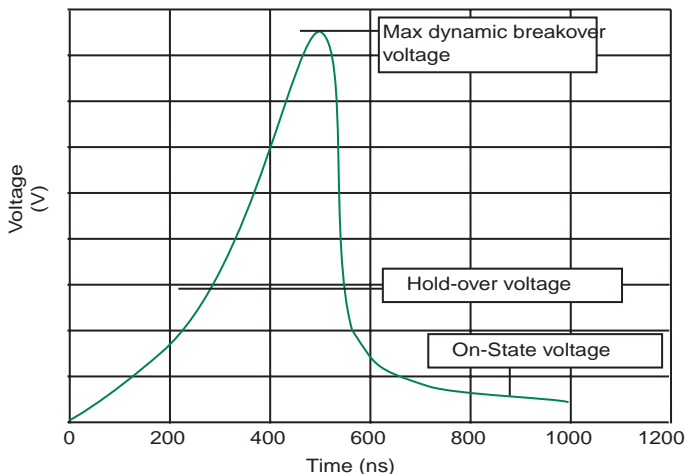


LITTELFUSE 3 TERMINAL ARRESTER SERIES
TOTALLY NON-RADIOACTIVE, UL RECOGNIZED

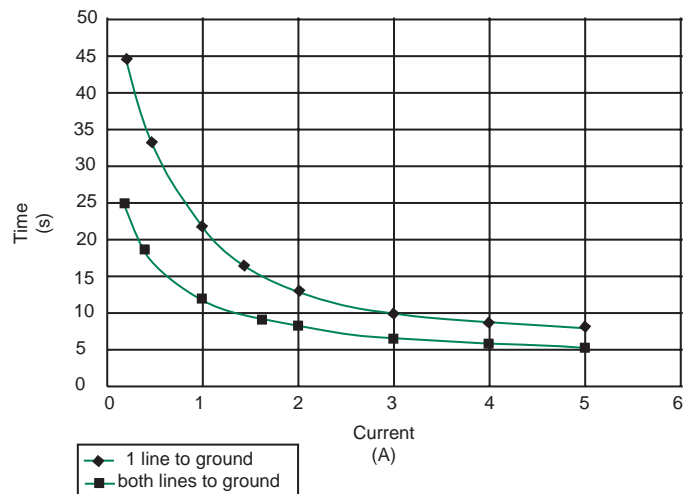
| Part Number | DC Voltage(V) | DC Breakover Voltage Min-Max ⁷ @ 100V/sec (V) | Max Dynamic Breakover Voltage @ 100/μs (V) | Alternating Discharge Current ^{1,3} (A) | Max Repetitive Impulse Discharge Current (kA) | Max Single Impulse Discharge Current (kA) | Max Single Impulse Discharge Current 10/350μs ^{5,2} (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



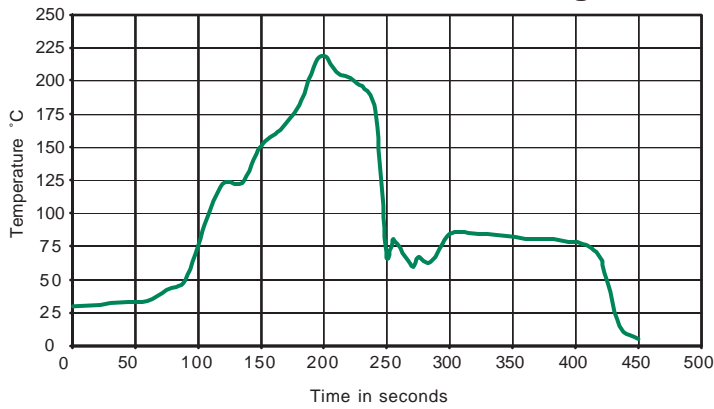
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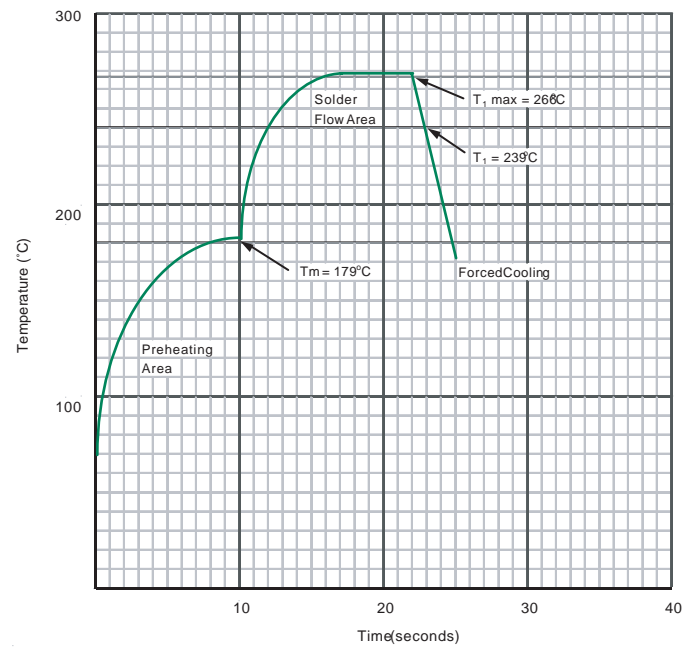
RoHS **Pb** **Greentube™ SL1024A Series Gas Plasma Arresters**



Profile for reflow soldering



Profile for wave soldering



GAS DISCHARGE TUBES

Notes:

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

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