

# SLD Series

## HIGH POWER AUTOMOTIVE TRANSIENT VOLTAGE SUPPRESSORS FOR PROTECTION AGAINST LOAD DUMP CONDITIONS.

### FEATURES

- 2200 Watts Peak Power rated with 100µs/150ms pulse (applies to a single device)
- 50,000 Watts Peak Pulse Power based on 8/20µs (applies to a single device)
- UL 94V-0 Flammability Classification

### APPLICATION

- Designed to protect sensitive electronics which operate within an automotive system, such as: Sound systems, satellite navigation, climate control, engine management, stability control, ABS etc.

### DESCRIPTION

The SLD series is specifically designed for automotive applications, available in both unidirectional and bidirectional.

The SLD 10U is designed to be used in series, for example three 10U's in series for a 30 volt working; this configuration will provide a very high power (a multiple of 3) capability and is a far superior solution than using devices in parallel, which will require closely matched devices in order to prevent 'current hogging' and consequently, damage to the device.

### ABSOLUTE MAXIMUM RATINGS @ 25°C case temp (unless otherwise noted)

SYMBOL	PARAMETER	VALUE	UNIT
PPP	Peak pulse power. 100µ/150m sec. Pulse 8/20µ sec. Pulse	2,200 50,000	Watts Watts
PM (AV)	Steady state power dissipation, lead length 9.5mm, TL - 85°C (note1)	6.5	Watts
Vf	Maximum instantaneous forward voltage @ 100 amps (note 2)	3.5	Volts
Tj	Junction temperature	-55 to +150	°C
Tstg	Storage temperature	-55 to +150	°C

Note 1. Mounted on copper pad area 40mm square

Note 2. Using 300 microsecond square pulse; applies to unidirectional only, and a single device only. For devices used in series, this value should be multiplied by the number of devices.

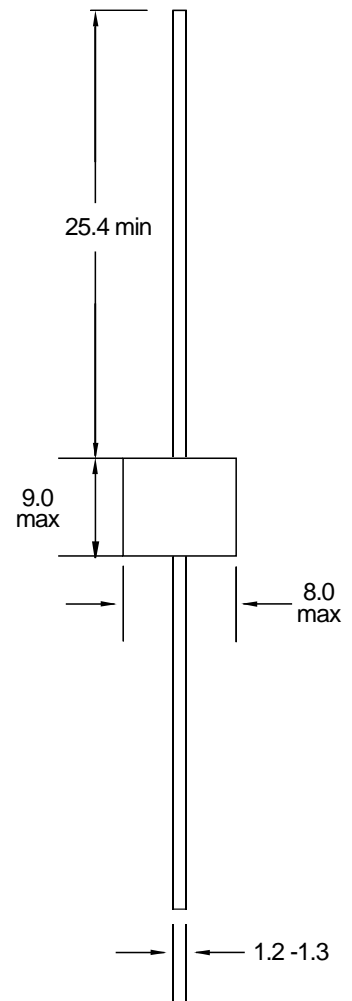
### Characteristics @ 25°C case temp (unless otherwise noted)

PART NUMBER	WORKING VOLTAGE (Vr)	BREAKDOWN VOLTAGE (bv)@It		MAXIMUM LEAKAGE CURRENT (Ir) @ Vr	MAXIMUM CLAMPING VOLTAGE (Vcl) @ Ipp	MAXIMUM PEAK PULSE CURRENT (Ipp) @ Vcl (note 3)
		min	max			
	volts	volts	mA	µA	volts	Amps
SLD 16U	16	18.0- 22.0	1.0	10.0	28.6	76.0
SLD 24	24	25.0 - 30.0	1.0	1.0	36.0	61.0
SLD 10U	10	11.8 - 13.0	5.0	10.0	19.0	115.0
3 x SLD 10U in series	30	35.4 - 39.0	5.0	10.0	45.0	100.0

Note 3. 100µs / 150mS pulse as defined by ISO7637/2 pulse # 5

Please note, U suffix denotes unidirectional

All products are sold to the commercial specifications shown, for any additional reliability testing or extended parameters, please consult the factory.  
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All dimensions in mm.