

Dual Line CAN Bus Protector**DESCRIPTION**

The SLESD2105L has been designed to protect the CAN transceiver in high-speed and fault tolerant networks from ESD and other harmful transient voltage events. This device provides bidirectional protection for each data line with a single compact SOT-23 package, giving the system designer a low cost option for improving system reliability and meeting stringent EMI requirements.

APPLICATIONS

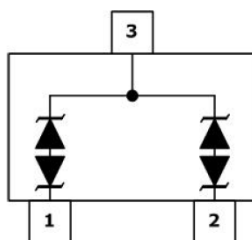
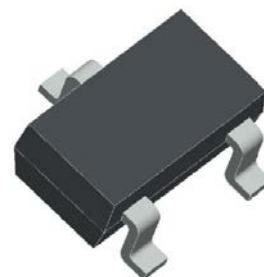
- ✧ Industrial Control Networks
 - Smart Distribution Systems
- ✧ Automotive Networks
 - Low and High-Speed CAN
 - Fault Tolerant CAN

FEATURES

- ✧ IEC61000-4-2 (ESD) $\pm 15\text{kV}$ (air), $\pm 8\text{kV}$ (contact)
- ✧ IEC61000-4-4 (EFT) 40A (5/50ns)
- ✧ IEC61000-4-5 (Lighting) 8.0A (8/20 μs)
- ✧ 350 Watts Peak Pulse Power per (tp=8/20 μs)
- ✧ Working voltages : 24V
- ✧ Low clamping voltage
- ✧ Low leakage current

MACHANICAL DATA

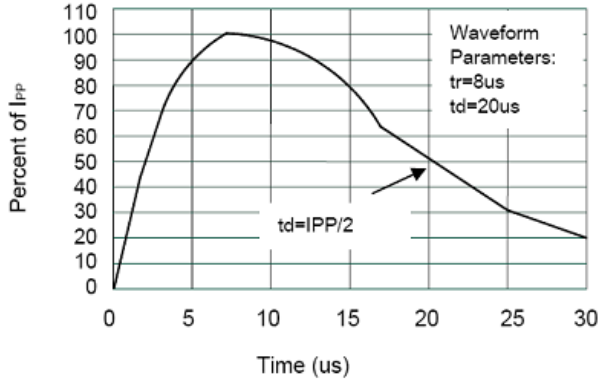
- ✧ SOT-23 package
- ✧ Flammability Rating: UL 94V-0
- ✧ Packaging: Tape and Reel
- ✧ High temperature soldering guaranteed: 260°C/10s
- ✧ Reel size: 7 inch
- ✧ Quantity per reel: 3,000pcs

PIN CONFIGURATION**PACKAGE OUTLINE**

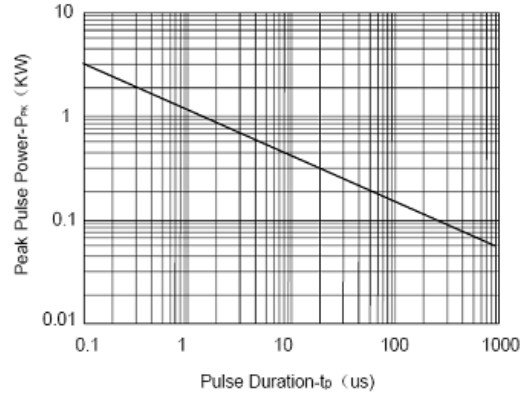
ABSOLUTE MAXIMUM RATING			
Symbol	Parameter	Value	Units
V_{ESD}	ESD per IEC 61000-4-2 (Air)	± 30	kV
	ESD per IEC 61000-4-2 (Contact)	± 30	
P_{PP}	Peak Pulse Power (8/20 μ s)	350	W
T_{OPT}	Operating Temperature	-55/+150	$^{\circ}$ C
T_{STG}	Storage Temperature	-55/+150	$^{\circ}$ C
T_L	Lead Soldering Temperature	260 (10 sec.)	$^{\circ}$ C

ELECTRICAL CHARACTERISTICS ($T_{amb}=25^{\circ}$ C)						
Symbol	Parameter	Test Condition	Min	Typ	Max	Units
V_{RWM}	Reverse Working Voltage	Pin 1,2 to Pin3			24	V
V_{BR}	Reverse Breakdown Voltage	$I_T = 1mA$ Pin 1,2 to Pin3	26.2		32	V
I_R	Reverse Leakage Current	$V_{RWM} = 24V$ Pin 1,2 to Pin3		15	100	nA
V_{C1}	Clamping Voltage 1	$I_{PP} = 1A, t_p = 8/20\mu s$ Pin 1,2 to Pin3			36	V
V_{C2}	Clamping Voltage 2	$I_{PP} = 5A, t_p = 8/20\mu s$ Pin 1,2 to Pin3			46	V
C_J	Junction Capacitance	$V_R = 0V, f = 1MHz$ Pin 1,2 to Pin3		25	30	pF

ELECTRICAL CHARACTERISTICS CURVE



Pulse Waveform



Non-Repetitive Peak Pulse Power vs. Pulse Time

SOT-23 PACKAGE OUTLINE DIMENSIONS

