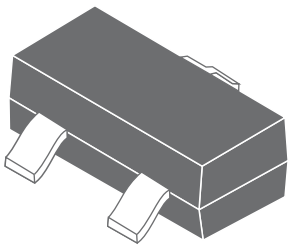
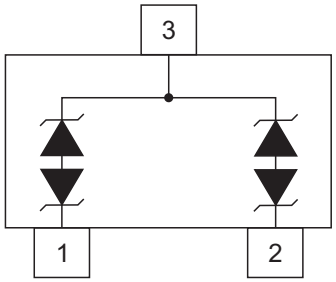
Electro-Static Discharge
TLSD24G2B
Bidirectional TVS Diode

SOT-23



Pin Configuration



Features

- 200 Watts Peak Pulse Power per Line (tp=8/20μs)
- Protects one I/O or power line
- Low clamping voltage
- Working voltages: 24V
- Low leakage current

IEC Compatibility

- IEC61000-4-2 (ESD) ±15kV (air), ±15kV (contact)
- IEC61000-4-4 (EFT) 40A (5/50ns)
- IEC61000-4-5 (Lightning) 3A (8/20μs)

Applications

- CAN-BUS protection
- Automotive applications

Mechanical Characteristics

- JEDEC SOT-23 Package
- Molding Compound Flammability Rating:UL 94V-O
- Weight 8.0 Millgrams(Approximate)
- Quantity Per Reel:3000pcs
- Reel Size:7 inch
- Lead Finish:Lead Free

Maximum Ratings(T_A=25℃ unless otherwise specified)

Parameter	Symbol	Value	Units
Peak Pulse Power(tp=8/20μs)	P_{PP}	200	Watts
Lead Soldering Temperature	T_L	260(10 sec.)	℃
Operating Temperature Range	T_J	-55~150	℃
Storage Temperature Range	T_{STG}	-55~150	℃

Electrical Characteristics(T_A=25℃ unless otherwise specified)

TLSD24G2B(Marking:B24)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Stand-off Voltage	V_{RWM}				24	V
Breakdown Voltage	V_{BR}	I_T=1mA	26.7			V
Clamping Voltage	V_C	I_{PP}=1A,tp=8/20μs			50	V
		I_{PP}=3A,tp=8/20μs			65	V
Reverse Leakage Current	I_R	@V_{RWM}			1	μA
Junction Capacitance	$C_{I/O}$	0Vdc,f=1MHz Between I/O Pins and GND		6		pF

Ratings and Characteristic Curves

Fig.1 Non-repetitive Peak Pulse Power V.S Pulse Time

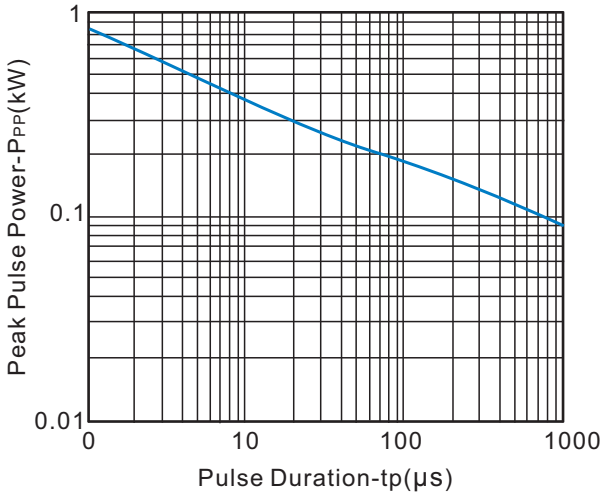
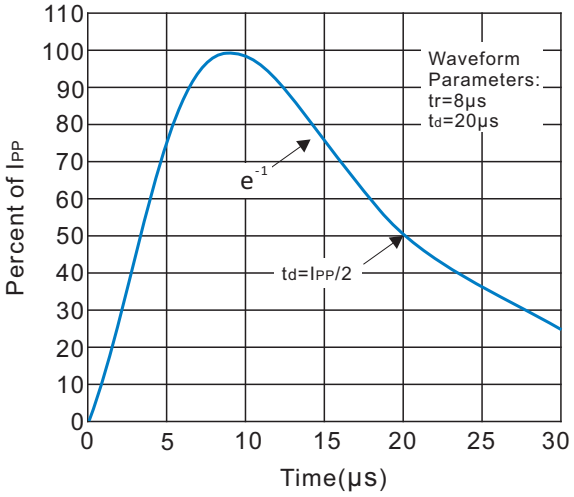
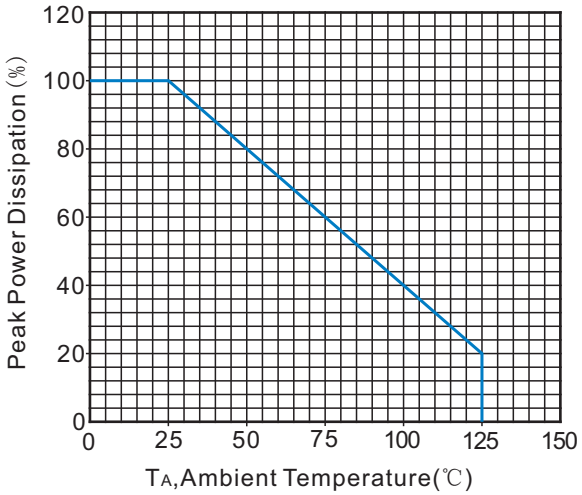


Fig.2 Pulse Waveform



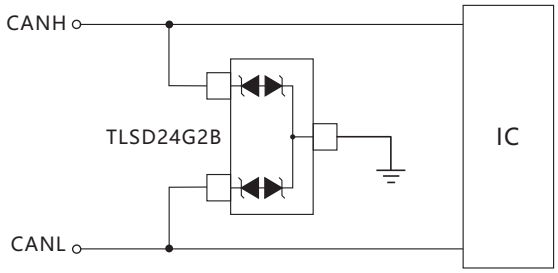
Ratings and Characteristic Curves

Fig.3 Power Derating Curve

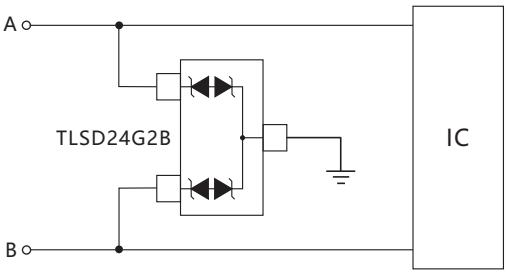


Application

CAN Protection

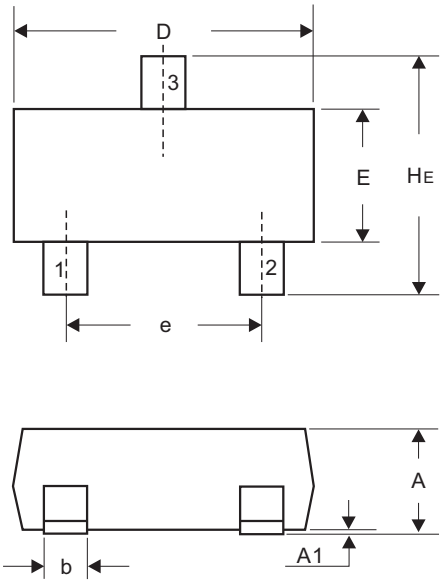


RS232 Protection



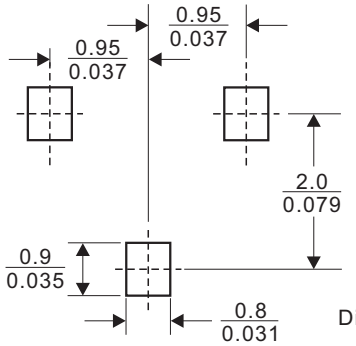
Dimensions(SOT-23)

SOT-23



DIM	Millimeters		Inches	
	Min	Max	Min	Max
A	0.89	1.11	0.035	0.044
A1	0.01	0.10	0.001	0.004
b	0.37	0.50	0.015	0.020
c	0.09	0.18	0.003	0.007
D	2.80	3.04	0.110	0.120
E	1.20	1.40	0.047	0.055
e	1.78	2.04	0.070	0.081
L	0.35	0.69	0.014	0.029
HE	2.10	2.64	0.083	0.104

Recommended Mounting Pad Layout



Dimensions in (millimeters / inches)