

Features

- AEC-Q101 Qualified
- Low Channel Input Capacitance
- Ultra Low Leakage
- Low Clamping Voltage
- Protects One Data Line of the LIN
- Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Halogen Free. "Green" Device (Note 1)
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

Maximum Ratings

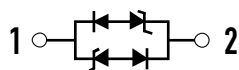
- Operating Junction Temperature Range: -40°C to +85°C
- Storage Temperature Range: -55°C to +150°C

MCC Part Number	Device Marking
ESD1524D3B	1524

IEC61000-4-2(ESD)		Air Contact	±30KV ±30KV
Peak Pulse Current (8/20µs)	Pin 1 to 2	I _{PP}	5A
	Pin 2 to 1		3A
Peak Pulse Power (8/20µs)		P _{PK}	160W

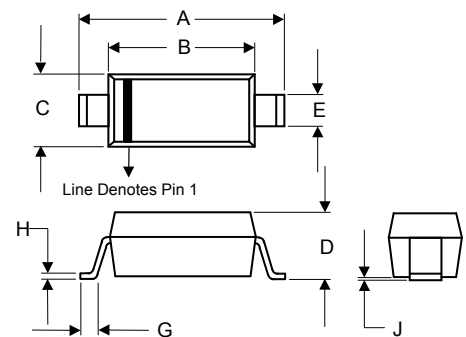
Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

Circuit and Pin Schematic



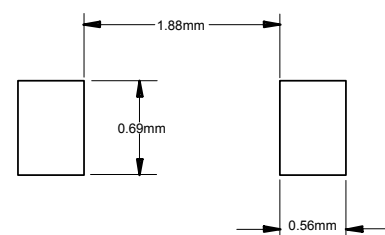
ESD Protection Device

SOD-323



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.090	0.107	2.30	2.70	
B	0.063	0.071	1.60	1.80	
C	0.045	0.053	1.15	1.35	
D	0.031	0.045	0.80	1.15	
E	0.010	0.016	0.25	0.40	
G	0.004	0.018	0.10	0.45	
H	0.004	0.010	0.10	0.25	
J	-----	0.006	-----	0.15	

Suggested Solder Pad Layout



Electrical Characteristics @ 25°C (Unless Otherwise Specified)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Pin 1 to Pin 2 (15V TVS)						
Reverse Working Voltage	V_{RWM}				15	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	17.1			V
Reverse Leakage Current	I_R	$V_{RWM}=15V$			50	nA
Clamping Voltage	V_C	$I_{PP}=1A, t_p=8/20\mu s$			25	V
Clamping Voltage	V_C	$I_{PP}=5A, t_p=8/20\mu s$			35	V
Junction Capacitance	C_J	$V_R=0V, f=1MHz$			13	pF
		$V_R=15V, f=1MHz$			10	pF
Pin 2 to Pin 1 (24V TVS)						
Reverse Working Voltage	V_{RWM}				24	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	25.4			V
Reverse Leakage Current	I_R	$V_{RWM}=24V$			50	nA
Clamping Voltage	V_C	$I_{PP}=1A, t_p=8/20\mu s$			35	V
Clamping Voltage	V_C	$I_{PP}=3A, t_p=8/20\mu s$			50	V
Junction Capacitance	C_J	$V_R=0V, f=1MHz$			13	pF
		$V_R=24V, f=1MHz$			8	pF

Curve Characteristics

Fig. 1 - 8 X 20µs Pulse Waveform

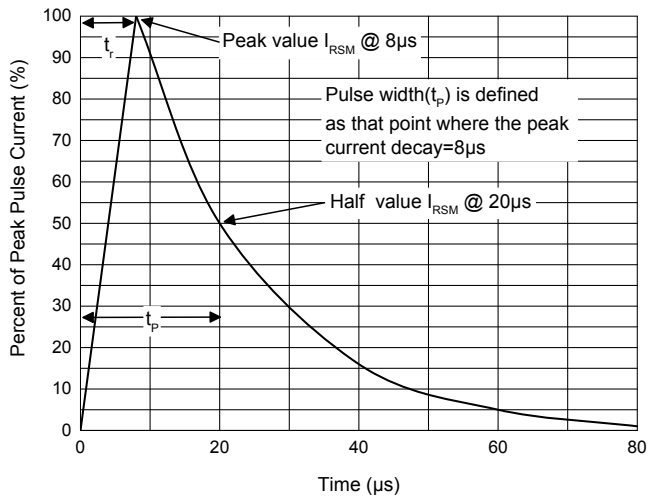


Fig. 2 - Non-Repetitive Peak Pulse Power

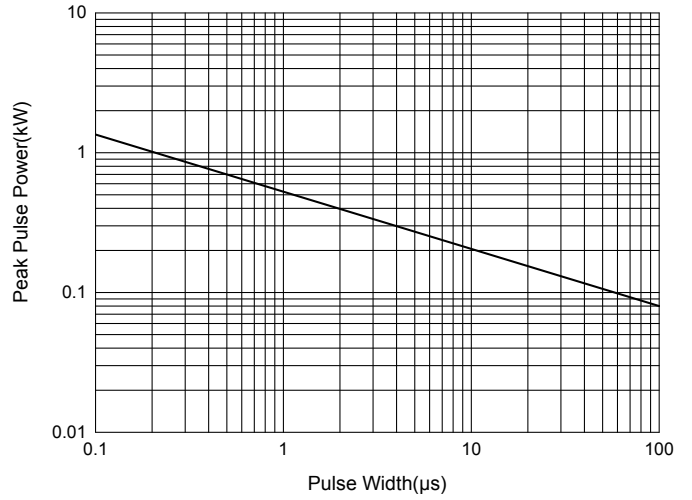


Fig. 3 - Pulse Derating Curve

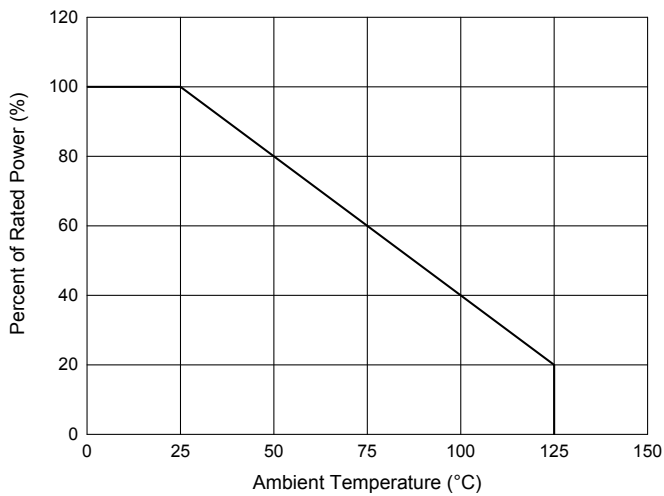


Fig. 4 - Capacitance Characteristics

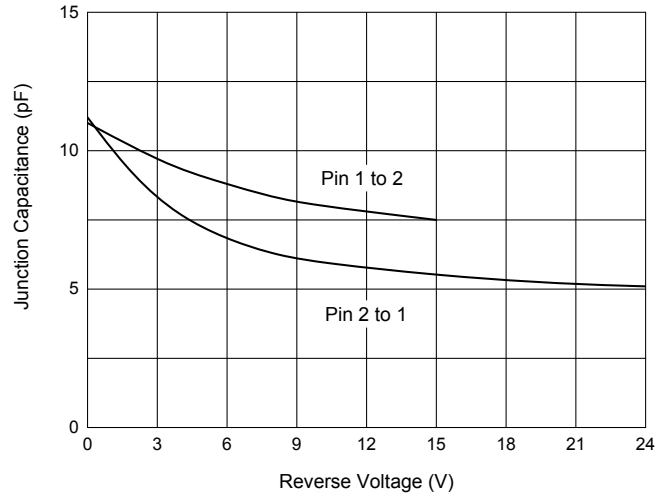
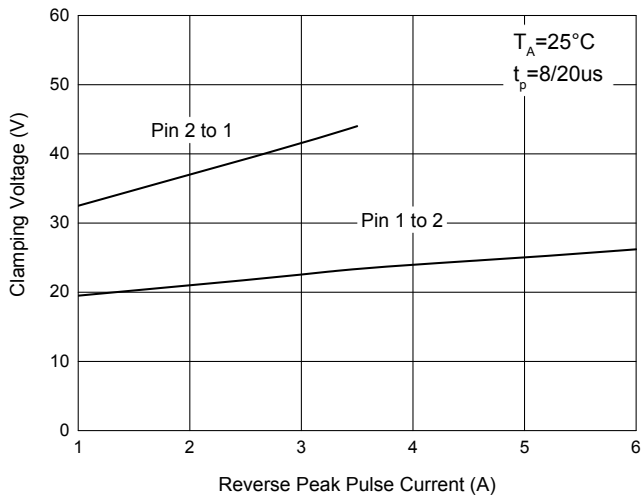


Fig. 5 - Clamping Voltage Characteristics



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

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