Features

- AEC-Q101 Qualified
- Protects One Data or Power Line
- Low Leakage
- Ultra Low Clamping Voltage
- 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)

ESD Protection Device

Maximum Ratings

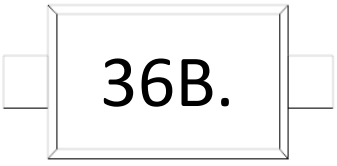
- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C

MCC Part Number	Device Marking
ESD36VD3BHE3	36B.

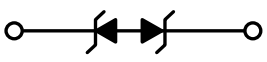
IEC61000-4-2(ESD)	Air Contact	±30KV ±30KV
Peak Pulse Power (8/20μs)	P_{PK}	350W

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

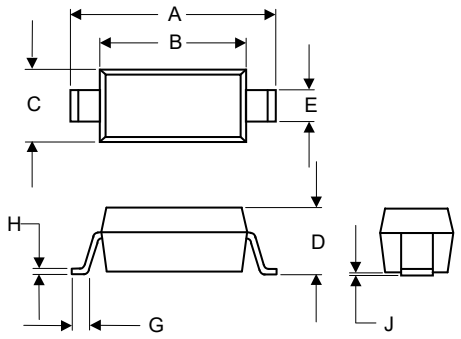
Marking Information



Internal Structure

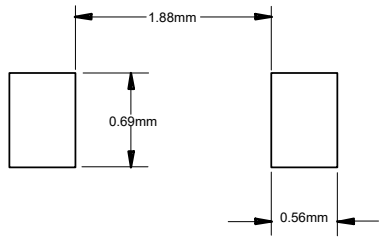


SOD-323



DIMENSIONS					
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
Reverse Working Voltage	V_{RWM}				36	V
Reverse Breakdown Voltage	V_{BR}	I_T =1mA	40			V
Reverse Leakage Current	I_R	V_{RWM}=36V			1.0	μA
Peak Pulse Current	I_{PP}	t_P=8/20μs			5	A
Clamping Voltage	V_C	I_{PP}=1A, t_P=8/20μs			55	V
Clamping Voltage	V_C	I_{PP}=5A, t_P=8/20μs			75	V
Dynamic Resistance Note2	R_{DYN}	TLP, t_P=100ns		0.9		Ω
Junction Capacitance	C_J	V_R=0V, f=1MHz		13	35	pF

Note:
1. Non-repetitive current pulse, according to IEC61000-4-5.
2. I/O to Ground, TLP parameter: Z_0=50Ω, t_p=100ns, t_r=2ns, averaging window from 60ns to 80ns. R_{DYN} is calculated from 4A to 16A.

Curve Characteristics

Fig. 1 - 8 X 20μs Pulse Waveform

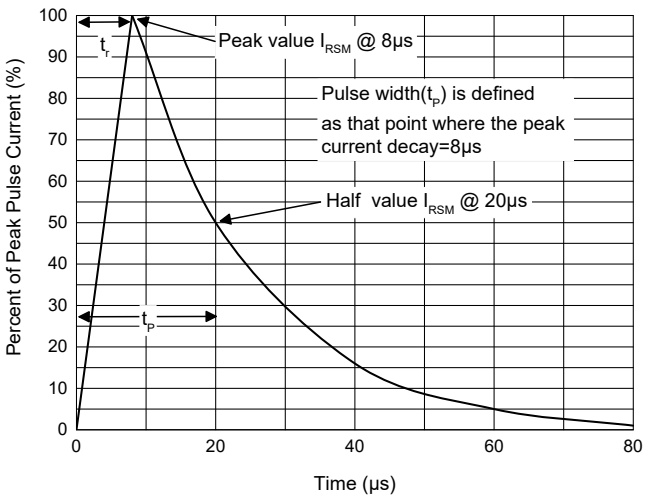


Fig. 2 - Non-Repetitive Peak Pulse Power

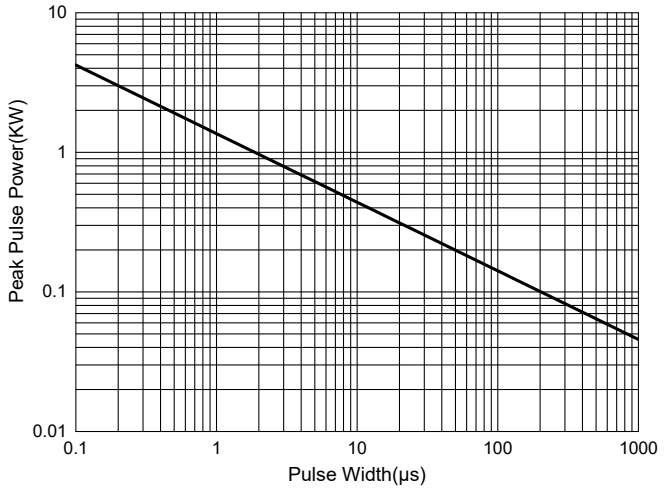


Fig. 3 - Capacitance Characteristics

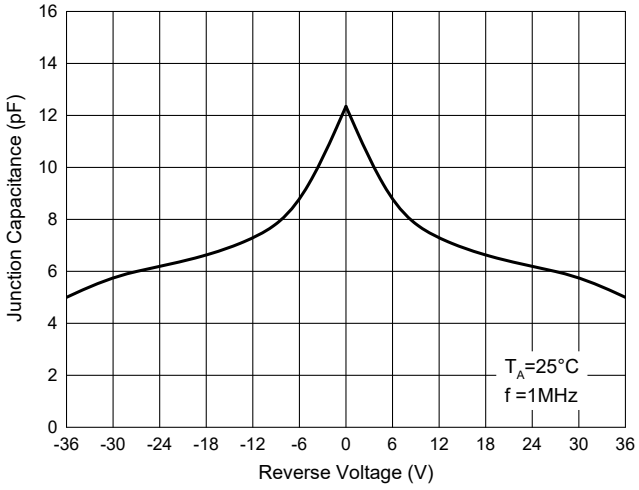


Fig. 4 - TLP Measurement

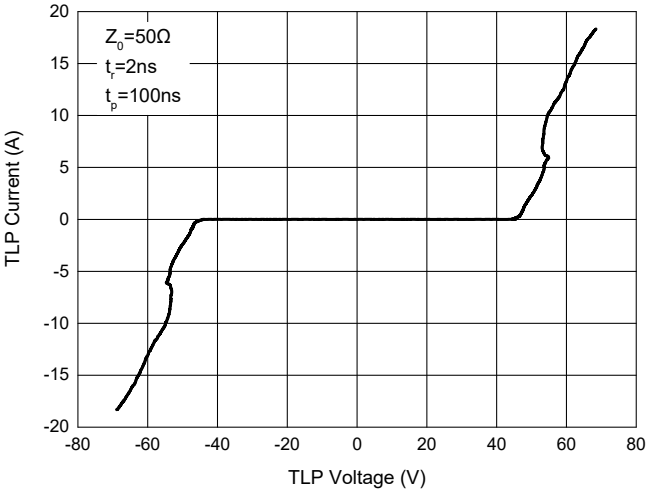
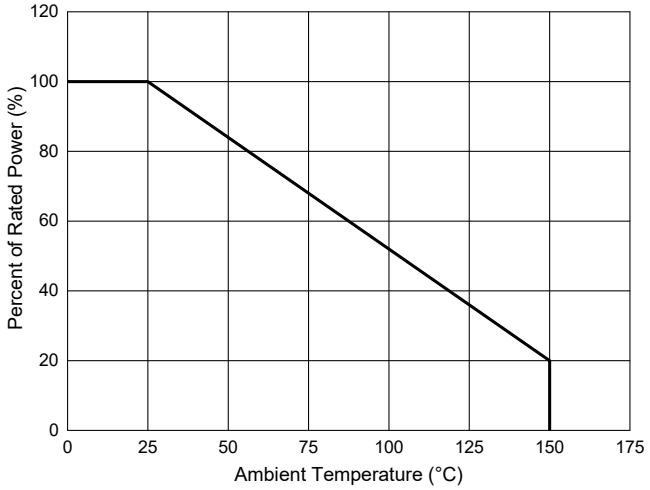


Fig. 5 - Pulse Derating Curve



Ordering Information

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

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