

Features

- For Sensitive ESD Protection
- Excellent Clamping Capability
- Low Leakage
- Fast Response, Response Time Less than 1ns
- For Space Saving Application
- 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: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C

IEC61000-4-2(ESD)	Air Contact	±25KV ±25KV
JESD22-A114-B(ESD)	Human Body	16KV
Peak Pulse Power (8/20us)	P _{PK}	330W

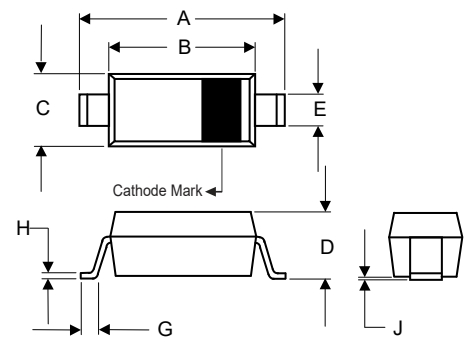
Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

Internal Structure



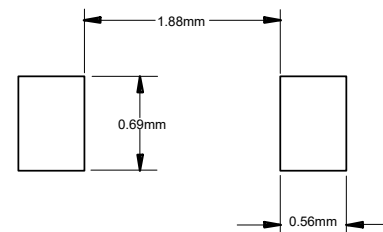
ESD Protection Device

SOD-323



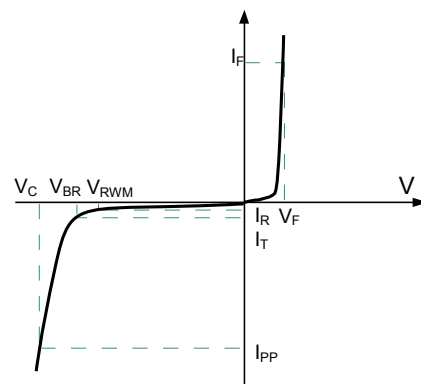
DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.090	0.107	2.30	2.70	
B	0.063	0.071	1.60	1.80	
C	0.045	0.053	1.15	1.35	
D	0.031	0.045	0.80	1.15	
E	0.010	0.016	0.25	0.40	
G	0.004	0.018	0.10	0.45	
H	0.004	0.010	0.10	0.25	
J	-----	0.006	-----	0.15	

Suggested Solder Pad Layout



ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Symbol	Parameter
V_{RWM}	Peak Reverse Working Voltage
I_R	Reverse Leakage Current @ V_{RWM}
V_{BR}	Breakdown Voltage @ I_T
I_T	Test Current
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}
P_{PP}	Peak Pulse Power
C_J	Junction Capacitance
I_F	Forward Current
V_F	Forward Voltage @ I_F



Electrical Characteristics @ 25°C (Unless Otherwise Specified)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Working Voltage ⁽¹⁾	V_{RWM}				24	V
Reverse Breakdown Voltage	V_{BR}	$I_T = 1\text{mA}$	26.7		33	V
Reverse Leakage Current	I_R	$V_{RWM} = 24\text{V}$			1	μA
Forward Voltage	V_F	$I_F = 10\text{mA}$			0.9	V
Clamping Voltage ⁽²⁾	V_C	$I_{PP} = 7.5\text{A}$, $t_p = 8/20\mu\text{s}$			44	V
Junction Capacitance	C_J	$V_R = 0\text{V}$, $f = 1\text{MHz}$		36		pF

(1). Other Voltages Available Upon Request.

(2). Non-Repetitive Current Pulse 8/20 μs Exponential Decay Waveform According to IEC61000-4-5.

Curve Characteristics

Fig. 1 - 8 X 20 μ s Pulse Waveform



Fig. 2 - Pulse Derating Curve

