SOCAY

Transient Voltage Suppressors for ESD Protection

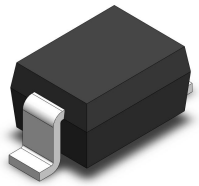
Low Capacitance

SE15D3U01GY

Features

- IEC 61000-4-2 (ESD) ±30kV (air), ±30kV (contact)
- IEC61000-4-4 (EFT) 40A (5/50ηs)
- Response Time is ＜1ns
- Protect one I/O line (bidirectional)
- Low clamping voltage
- Working voltage: 15V
- Low leakage current

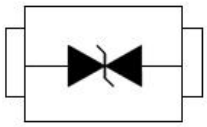
SOD-323



Applications

- Cell Phone Handsets and Accessories
- Microprocessor based Equipment
- Personal Digital Assistants (PDA's)
- Notebooks, Desktops, and Servers
- Portable Instrumentation
- Peripherals
- Networking and Telecom
- Serial and Parallel Ports

Pin Configuration



Mechanical Characteristics

- SOD-323 Package
- Flammability Rating: UL 94V-0
- Packaging: 3000 PCS / Tape & Reel
- High Temperature Soldering Guaranted: 260℃/10s
- Reel Size: 7 inch

Absolute Maximum Ratings (TA=25℃ unless otherwise specified)

Parameter	Symbol	Value	Units
ESD Voltage (HBM Waveform per IEC 61000−4−2)	V_{pF}	30	KV
Operating Temperature Range	T_{OPT}	−55 ~ +125	℃
Storage Temperature Range	T_{STG}	−55 ~ +150	℃
Lead Solering Temperature	T_L	260 (10 sec.)	℃

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Electrical Characteristics (T_A= 25℃ unless otherwise specified)

Symbol	Conditions	Min	Typ	Max	Unit
V_{RWM}	--	--	--	15.0	V
V_{BR}	I_T = 1 mA	16.7	--	--	V
I_R	V_R =15V	--	--	1	μA
V_C	I_{PP} =1A, tp = 8/20μs	--	20	--	V
V_C	I_{PP} =10A, tp = 8/20μs	--	25	--	V
C_J	V_R = 0V, f = 1MHz	--	31	--	pF

Ratings and V-I Characteristics Curves (TA=25℃, unless otherwise noted)

Fig1. V-I Curve Characteristics (Bi-directional)

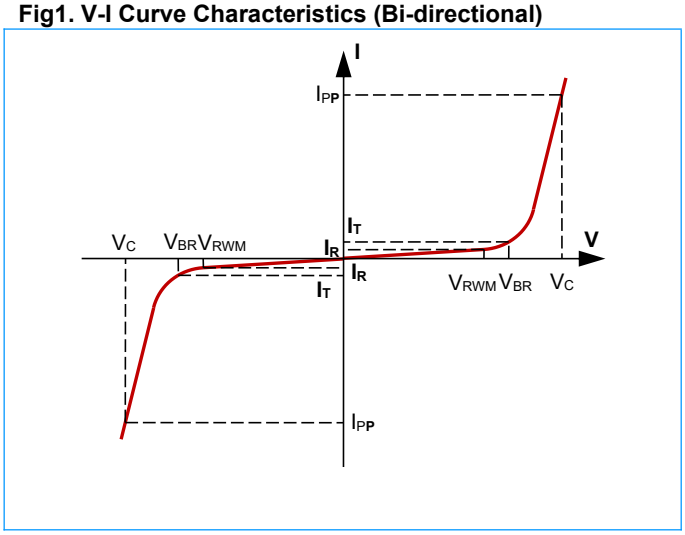


Fig2. Pulse Waveform (8/20μs)

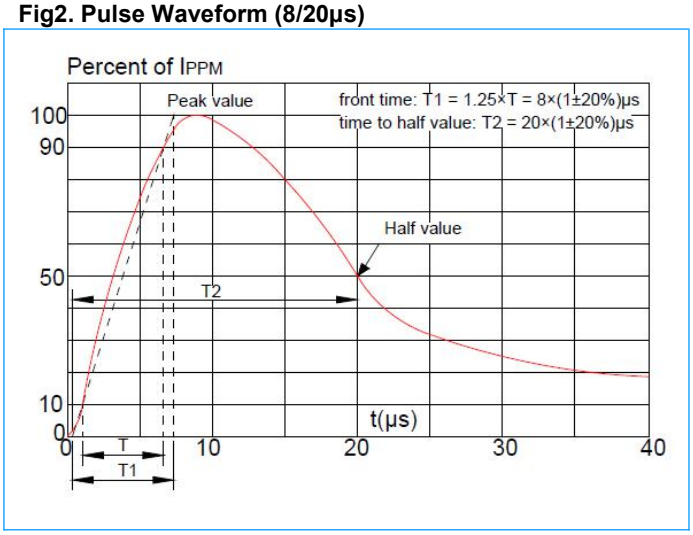


Fig3. Pulse Derating Curve

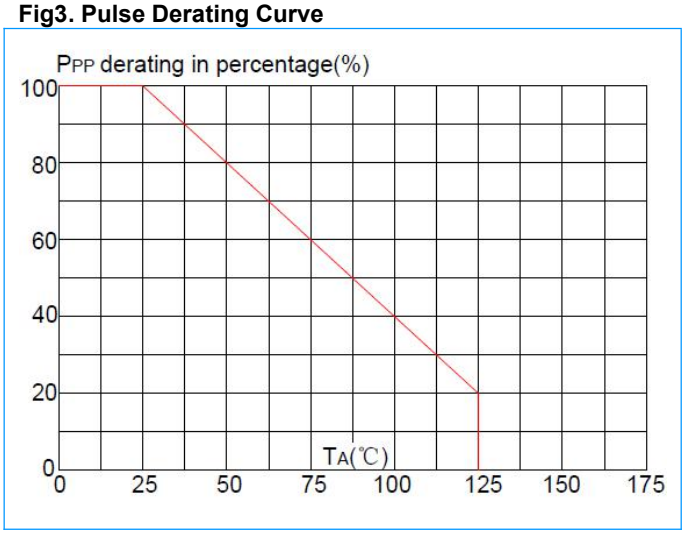
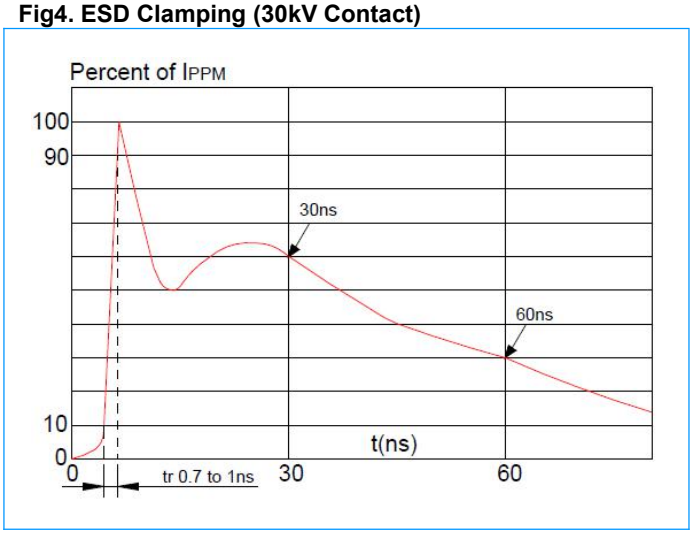


Fig4. ESD Clamping (30kV Contact)



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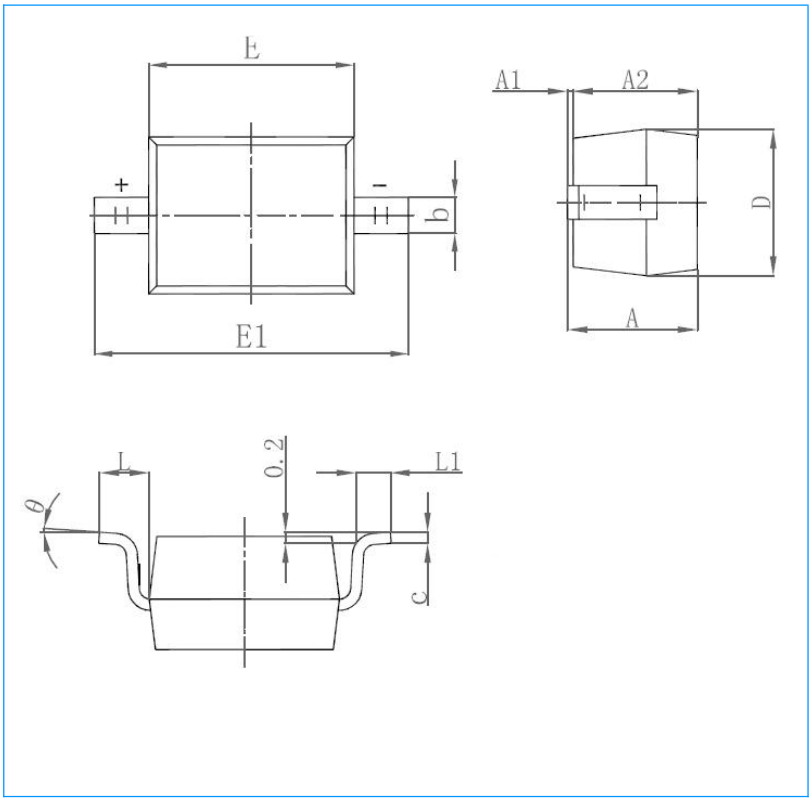
SOD-323 Package Outline Dimensions



Symbol	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	--	1.00	--	0.039
A1	0.00	0.10	0.000	0.004
A2	0.80	0.90	0.031	0.035
b	0.25	0.35	0.010	0.014
c	0.08	0.15	0.003	0.006
D	1.20	1.40	0.047	0.055
E	1.60	1.80	0.063	0.071
E1	2.55	2.75	0.100	0.108
L	0.475 REF.		0.019 REF.	
L1	0.25	0.40	0.010	0.016
θ	0°	8°	0°	8°

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