

Transient Voltage Suppressors for ESD Protection

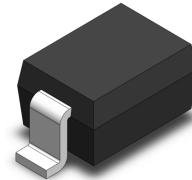
Low Capacitance

SE03D3D01GW

Feature

- u IEC 61000-4-2 (ESD) $\pm 15\text{kV}$ (air), $\pm 8\text{kV}$ (contact)
- u IEC61000-4-4 (EFT) 40A (5/50ns)
- u Protect one I/O line (bidirectional)
- u Low clamping voltage
- u Working voltage: 3V
- u Low leakage current
- u Response time is $< 1\text{ns}$

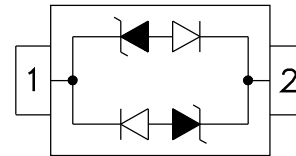
SOD-323



Applications

- u Cell Phone Handsets and Accessories
- u Microprocessor based Equipment
- u Personal Digital Assistants (PDA's)
- u Notebooks, Desktops, and Servers
- u Portable Instrumentation
- u Peripherals
- u USB Interface

Pin Configuration



Mechanical Characteristics

- u SOD-323 Package
- u Flammability Rating: UL 94V-0
- u Packaging: 3000 PCS / Tape & Reel
- u High Temperature Soldering Guaranteed: $260^{\circ}\text{C}/10\text{s}$
- u Reel Size: 7 inch
- u Material: Halogen Free

Absolute Maximum Ratings ($T_A=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Value	Units
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	V_{ESD}	± 15 ± 8	KV
Operating Temperature Range	T_J	$-55 \sim +150$	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	$-55 \sim +150$	$^{\circ}\text{C}$
Lead Solering Temperature	T_L	260	$^{\circ}\text{C}$

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Electrical Characteristics ($T_A = 25^\circ\text{C}$ unless otherwise specified)

Part Number	V_{RWM} (V) (Max)	V_B (V) (Min)	I_T (mA)	$V_C @ 1A$ (V) (Max)	V_C (V)		I_R (μA) (Max)	C_T (pF) (Typ)
					(Max)	(@A)		
SE03D3D01GW	3.3	4.0	1	7.8	19.5	17	0.1	0.8

Electrical Characteristics Curves

Fig1. Pulse Waveform

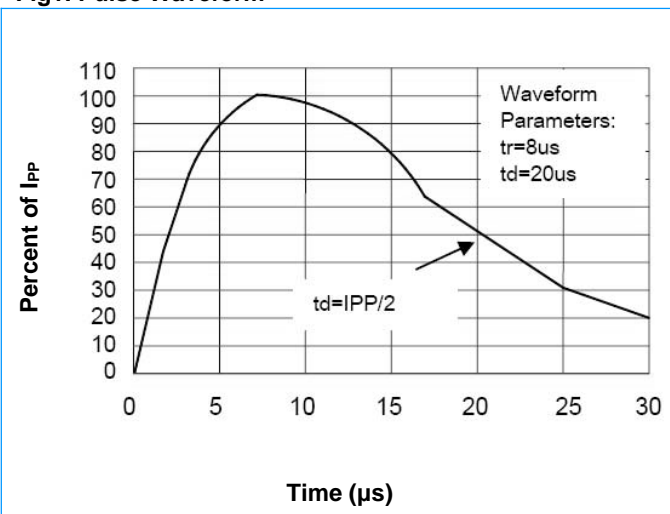


Fig2. Non-Repetitive Peak Pulse Power vs. Pulse Time

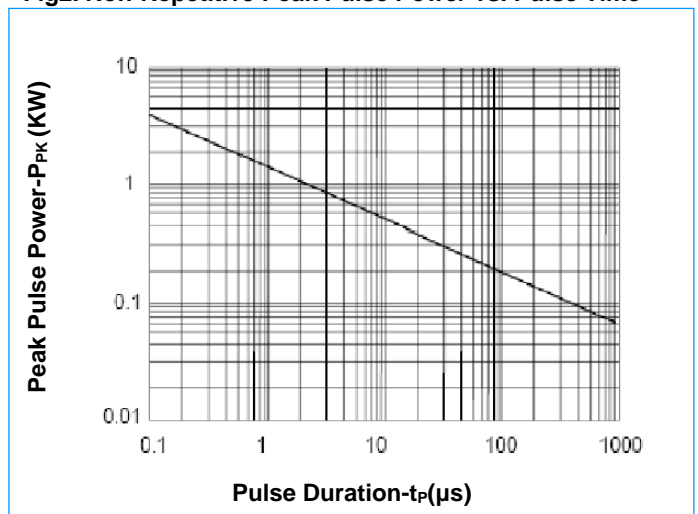


Fig3. Power Derating Curve

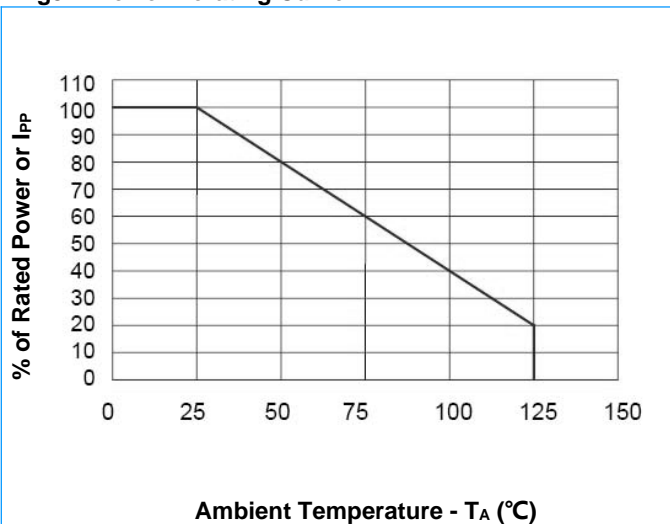
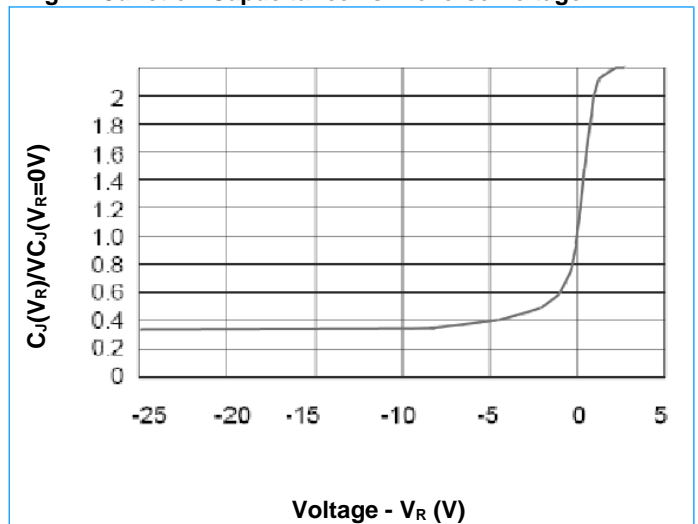
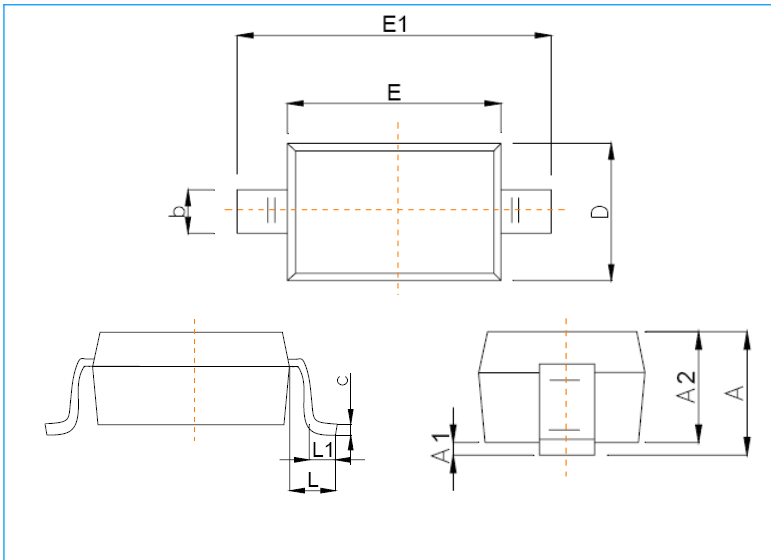


Fig4. Junction Capacitance vs. Reverse Voltage



SOD-323 Package Outline & Dimensions


Symbol	Dimensions in Millimeters	
	Min.	Max.
A	--	1.00
A1	0.00	0.10
A2	0.80	0.90
b	0.25	0.35
c	0.08	0.15
D	1.20	1.40
E	1.60	1.80
E1	2.50	2.70
e	1.80	2.04
L	0.475 REF	
L1	0.25	0.40
θ	0°	8°

Recommended Pad Outline
