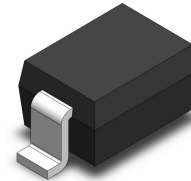




Transient Voltage Suppressors for ESD Protection

Features

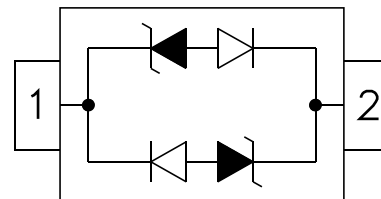
- ◆ IEC 61000-4-2 (ESD) $\pm 15\text{kV}$ (air), $\pm 8\text{kV}$ (contact)
- ◆ IEC 61000-4-4 (EFT) 40A (5/50ns)
- ◆ Response Time is $< 1\text{ns}$
- ◆ Protect one I/O line (bidirectional)
- ◆ Low clamping voltage
- ◆ Working voltage: 8V
- ◆ Low leakage current

SOD-323

Applications

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

Pin Configuration



Mechanical Characteristics

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

Absolute Maximum Ratings (TA=25 °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_{OPT}	$-55 \sim +150$	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	$-55 \sim +150$	$^{\circ}\text{C}$
Lead Solering Temperature	T_{L}	260 (10 sec.)	$^{\circ}\text{C}$

Transient Voltage Suppressors for ESD Protection

SE08D3D01GW

Electrical Characteristics (T_A= 25 °C unless otherwise specified)

Part Number	V _{RWM} (V) (Max)	V _B (V) (Min)	I _T (mA)	V _C @ 1A (V) (Typ)	V _C (V)		I _R (μA) (Max)	C _T (pF) (Typ)
					(Typ)	(@A)		
SE08D3D01GW	8.0	8.5	1	11	20	17.0	1	0.7

Electrical Characteristics Curves

Fig1. Pulse Waveform

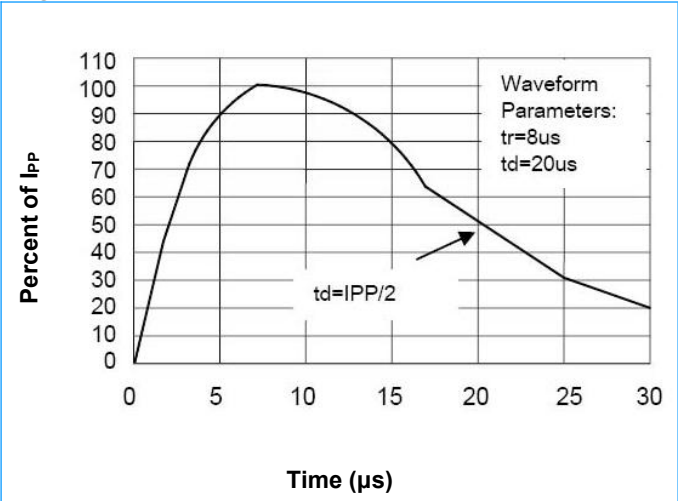


Fig2. Non-Repetitive Peak Pulse Power vs. Pulse Time

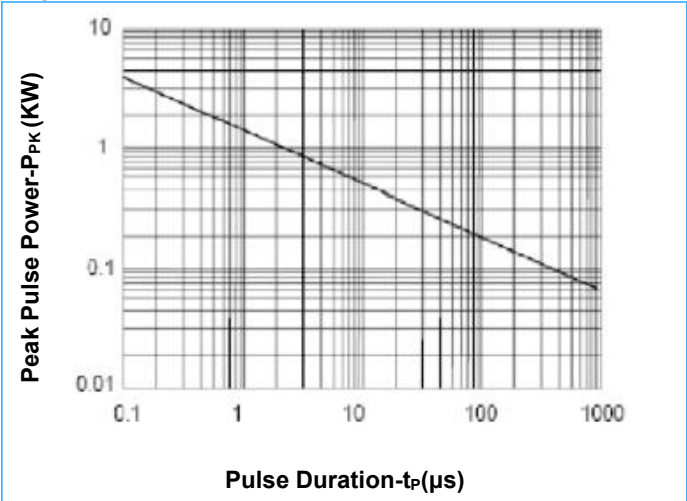


Fig3. Power Derating Curve

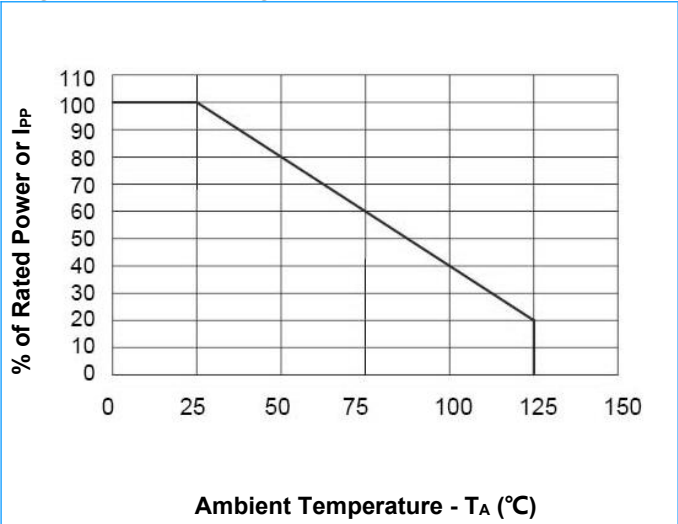
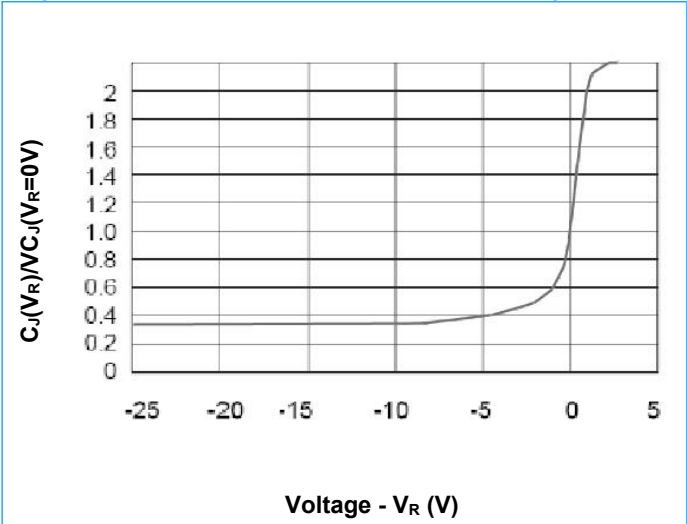


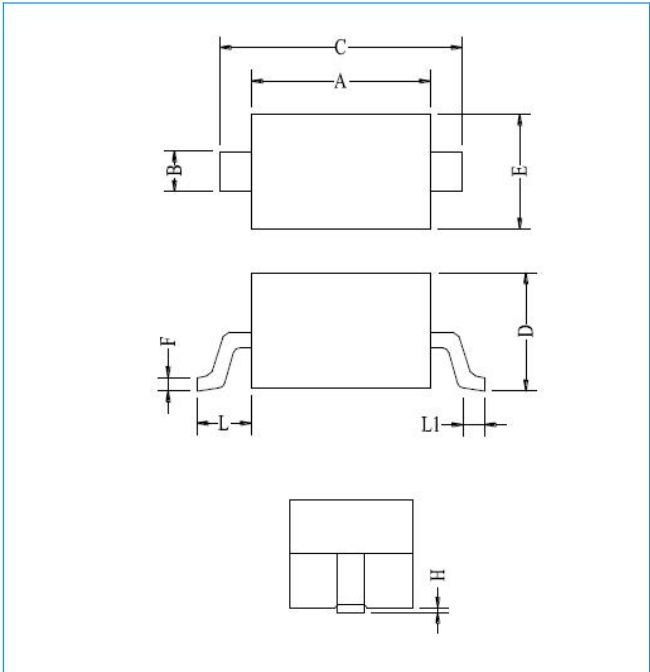
Fig4. Junction Capacitance vs. Reverse Voltage



Transient Voltage Suppressors for ESD Protection

SE08D3D01GW

SOD-323 Package Outline & Dimensions



Symbol	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	1.60	1.80	0.063	0.071
B	0.25	0.35	0.010	0.014
C	2.50	2.70	0.098	0.106
D	0.00	1.00	0.000	0.039
E	1.20	1.40	0.047	0.055
F	0.08	0.15	0.003	0.006
L	0.475REF		0.019REF	
L1	0.25	0.40	0.010	0.016
H	--	0.10	--	0.004