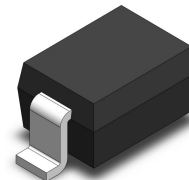


SE12D3D01GW

Features

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

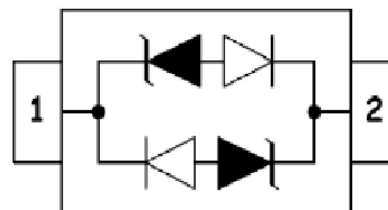
SOD-323



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

Low Capacitance

SE12D3D01GW

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) (Typ)	V_C (V)		I_R (μA) (Max)	C_T (pF) (Typ)
					(Typ)	(@A)		
SE12D3D01GW	12.0	13.3	1	17.0	24.0	11.0	1	0.6

Electrical Characteristics Curves

Fig1. Pulse Waveform

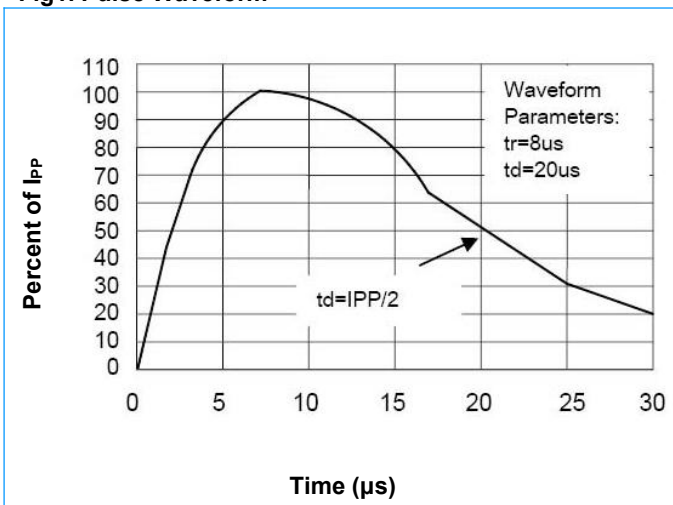


Fig2. Non-Repetitive Peak Pulse Power vs. Pulse Time

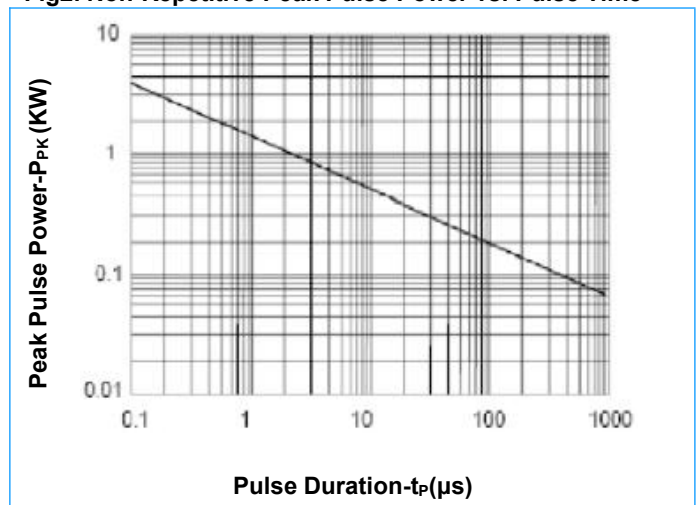


Fig3. Power Derating Curve

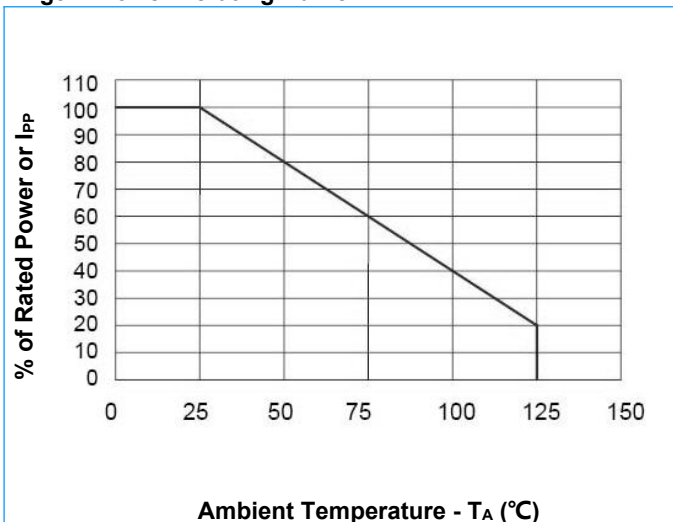
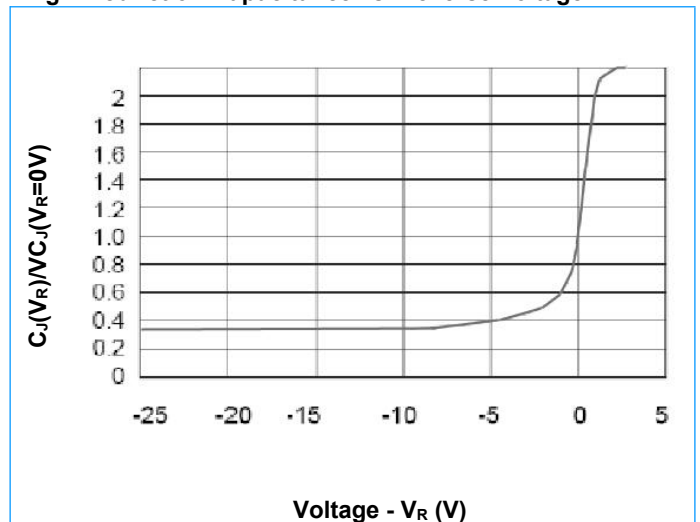
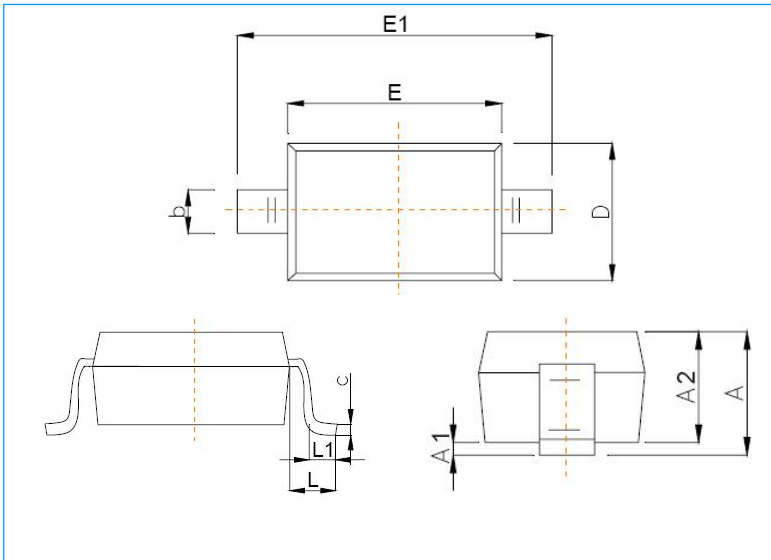


Fig4. Junction Capacitance vs. Reverse Voltage



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°