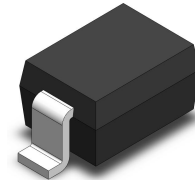


### SE03D3D01GW

#### Feature

- ◆ IEC 61000-4-2 (ESD)  $\pm 25\text{kV}$  (air),  $\pm 25\text{kV}$  (contact)
- ◆ IEC61000-4-4 (EFT) 40A (5/50ns)
- ◆ Protect one I/O line (bidirectional)
- ◆ Low clamping voltage
- ◆ Working voltage: 3.3V
- ◆ Low leakage current
- ◆ Response time is  $< 1\text{ns}$

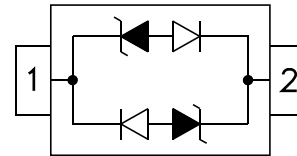
#### SOD-323



#### 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
- ◆ Material: Halogen Free
- ◆ Marking Code: CC

#### 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)	$V_{\text{ESD}}$	$\pm 25$ $\pm 25$	KV
Operating Temperature Range	$T_J$	$-55 \sim +150$	$^{\circ}\text{C}$
Storage Temperature Range	$T_{\text{STG}}$	$-55 \sim +150$	$^{\circ}\text{C}$
Lead Solering Temperature	$T_L$	260	$^{\circ}\text{C}$

# Transient Voltage Suppressors for ESD Protection

Low Capacitance

## SE03D3D01GW

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)		$I_R$ ( $\mu\text{A}$ ) (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

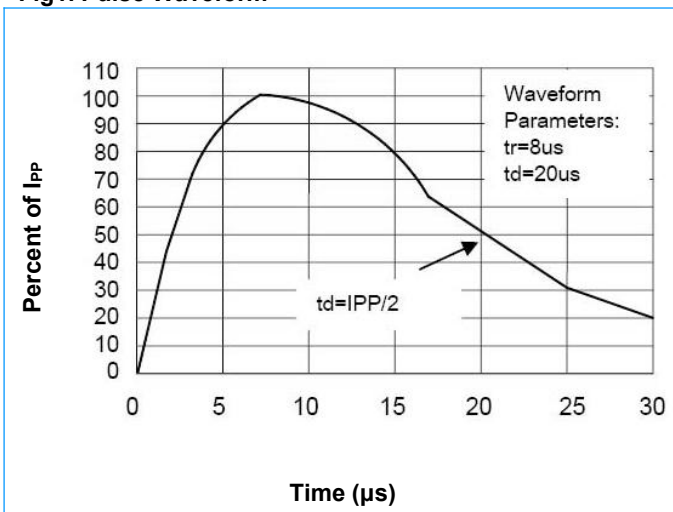


Fig2. Non-Repetitive Peak Pulse Power vs. Pulse Time

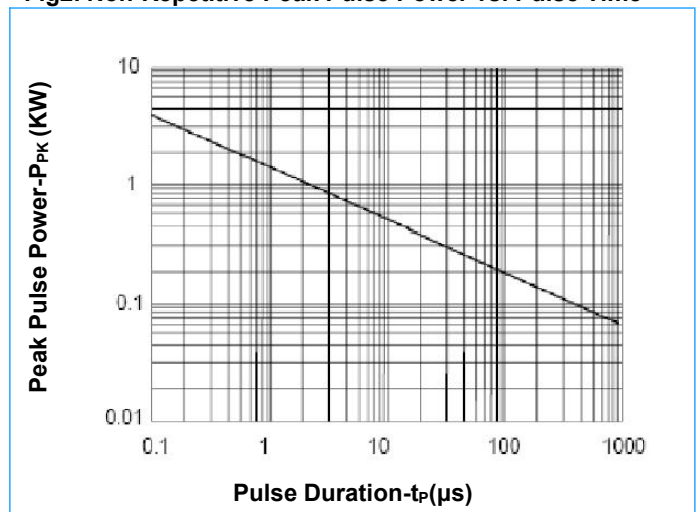


Fig3. Power Derating Curve

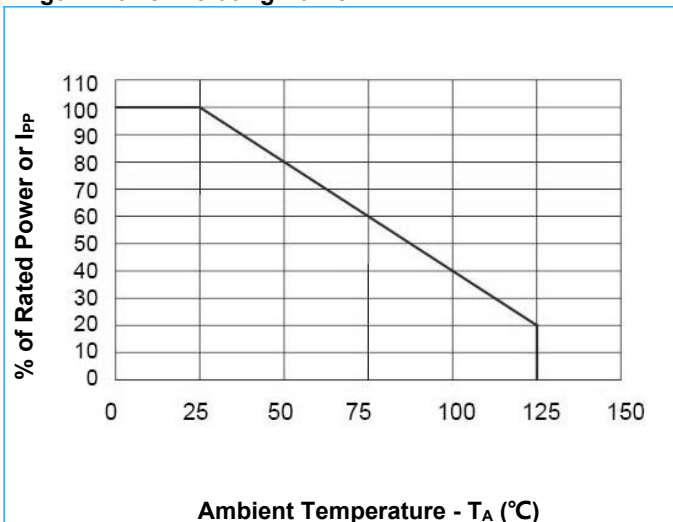
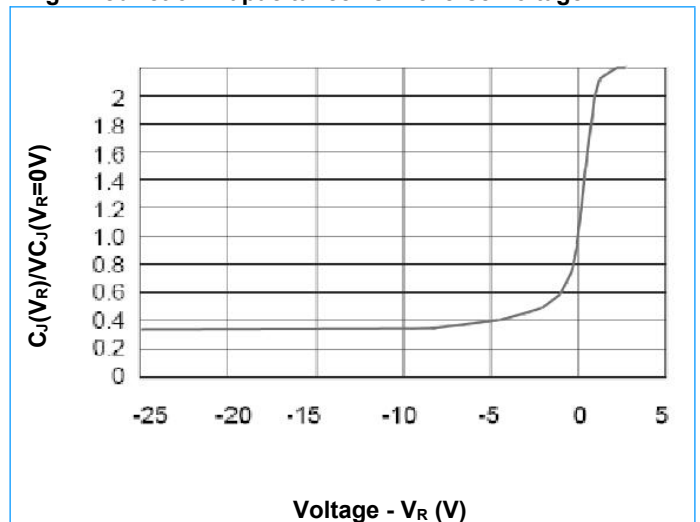
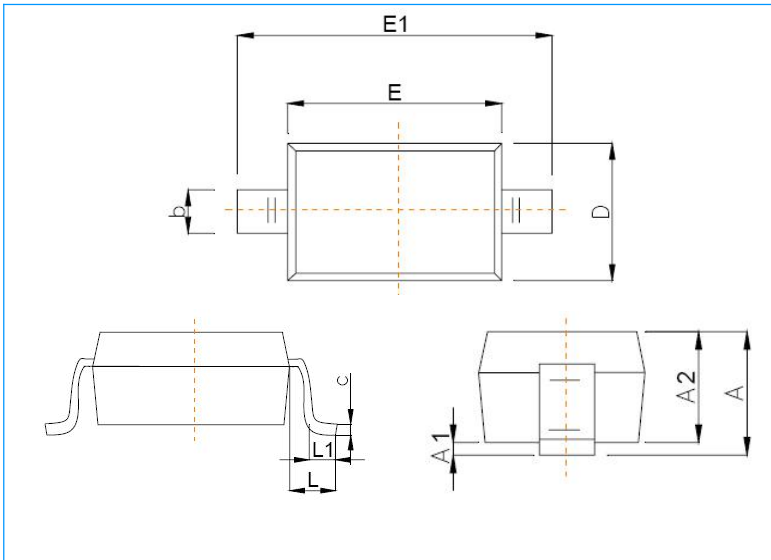


Fig4. Junction Capacitance vs. Reverse Voltage



**SOD-323 Package Outline & Dimensions**


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

**Recommended Pad Outline**
