

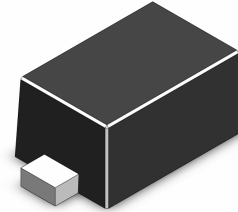
Transient Voltage Suppressors for ESD Protection

SE05D5S01HW

Features

- ◆ Working voltage : 5.0V
- ◆ Low leakage current: 1.0 μ A @ V_{RWM}
- ◆ Low clamping voltage
- ◆ Response Time is < 1 ns

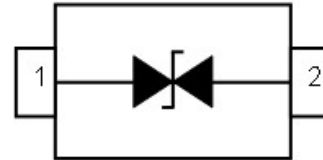
SOD-523



Applications

- ◆ Serial and Parallel Ports
- ◆ Note books, Desktops, Servers
- ◆ Projection TV

Pin Configuration



Mechanical Characteristics

- ◆ SOD-523 Package
- ◆ Molding Compound Flammability Rating : UL 94V-0
- ◆ Quantity Per Reel : 5,000pcs
- ◆ Reel Size : 7 inch

Absolute Maximum Rating

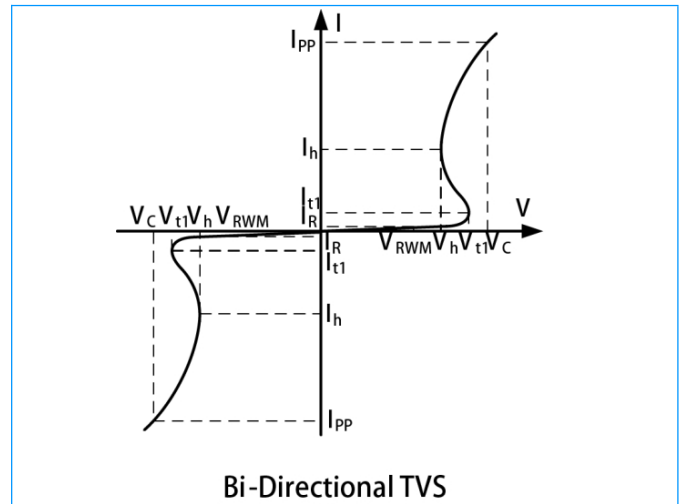
Symbol	Parameter	Value	Units
T_{LST}	Lead Soldering Temperature	150	$^{\circ}$ C
T_{STG}	Storage Temperature Range	-40 to +150	$^{\circ}$ C
V_{ESD}	ESD per IEC61000-4-2 (Air)	± 30	kV
	ESD per IEC61000-4-2 (Contact)	± 30	

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I-V Curve Characteristics

Symbol	Parameter
I_{PP}	Maximum Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}
V_{RWM}	Working Peak Reverse Voltage
I_R	Maximum Reverse Leakage Current @ V_{RWM}
V_{t1}	Trigger Voltage
I_{t1}	Trigger Current @ V_{t1}
V_h	Holding Voltage
I_h	Holding Current @ V_h



Electrical Characteristics (@ $T_A=25^\circ\text{C}$ Unless Otherwise Specified)

Symbol	Test Condition	Minimum	Typical	Maximum	Units
V_{RWM}	--	--	--	5.0	V
V_{BR}	$I_T = \pm 1\text{mA}$	5.7	7.2	9	V
I_R	$V_{RWM} = \pm 5\text{V}$, $T=25^\circ\text{C}$	--	--	1.0	μA
V_C	$I_{PP} = \pm 4.5\text{A}$, $t_p = 8/20\mu\text{s}$	--	--	15	V
C_J	$V_R = 0\text{V}$, $f = 1\text{MHz}$	--	7	12	pF

Characteristic Curves

Fig1. Pulse Waveform

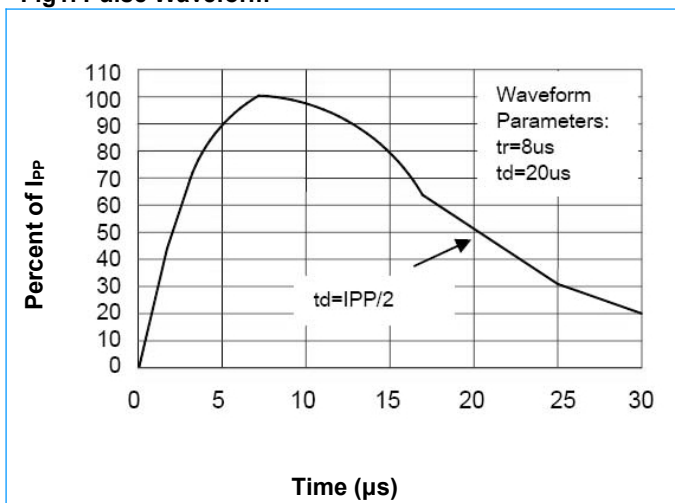
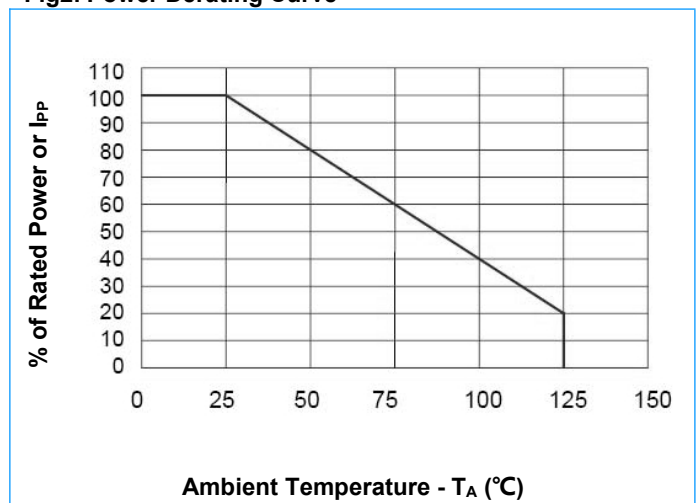


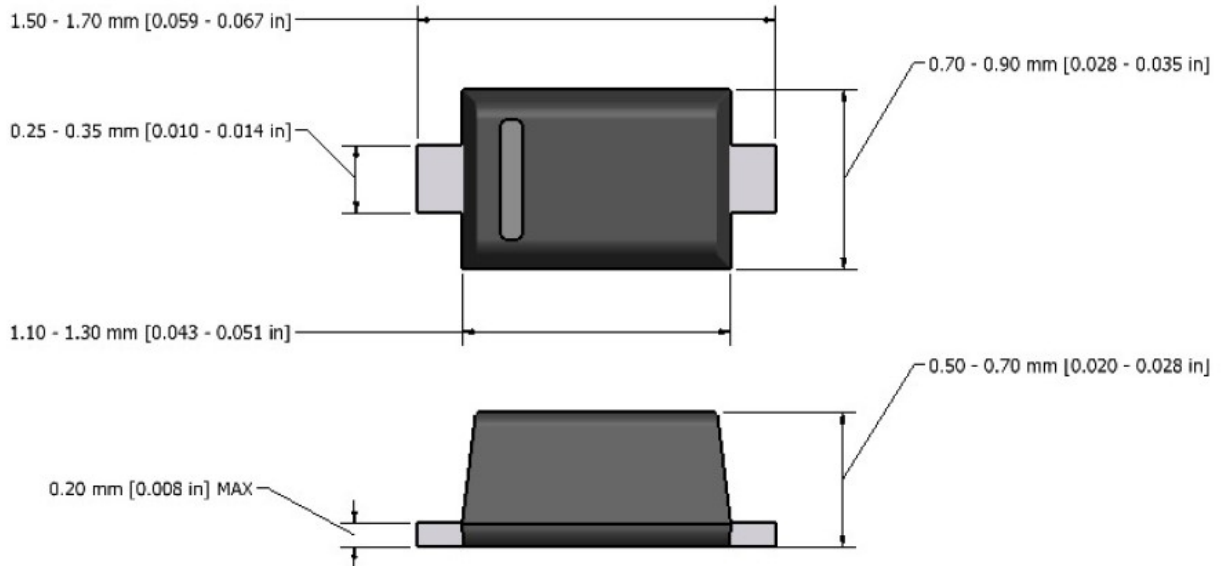
Fig2. Power Derating Curve



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SOD-523 Package Outline & Dimensions



Note: Dimensions are exclusive of Burrs, Mold Flash & Tie Bar extrusions.

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