

Transient Voltage Suppressors for ESD Protection

SE15D5T11GW

Features

- ◆ Working voltage : 15V
- ◆ Low leakage current: 1.0 μ A @ V_{RWM}
- ◆ Low clamping voltage
- ◆ Response Time is < 1 ns

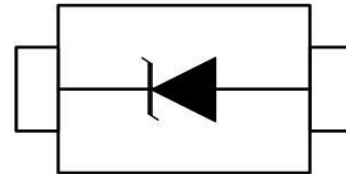
SOD-523



Applications

- ◆ Cell Phone Handsets and Accessories
- ◆ Microprocessor based equipment
- ◆ Personal Digital Assistants (PDA's)
- ◆ Notebooks, Desktops, and Servers

Pin Configuration



Mechanical Characteristics

- ◆ SOD-523 Package
- ◆ Molding Compound Flammability Rating : UL 94V-0
- ◆ Quantity Per Reel : 3,000pcs
- ◆ Reel Size : 7 inch

Absolute Maximum Rating

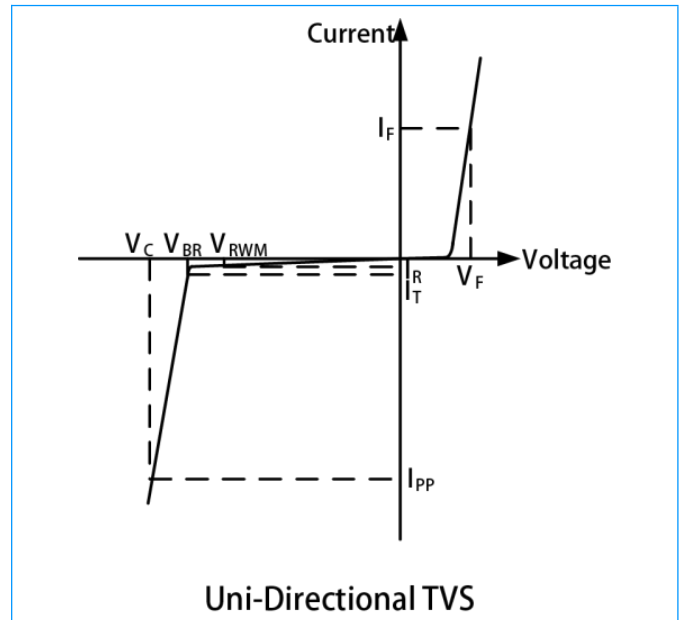
Symbol	Parameter	Value	Units
T_{LST}	Lead Soldering Temperature	260 (10sec)	$^{\circ}$ C
T_{STG}	Storage Temperature Range	-55 to +150	$^{\circ}$ C
T_{OPT}	Operating Temperature Range	-55 to +150	$^{\circ}$ C
V_{ESD}	ESD per IEC 61000-4-2(Air)	\pm 15	KV
	ESD per IEC 61000-4-2 (Contact)	\pm 8	

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I-V Curve Characteristics

Symbol	Parameter
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}
V_{RWM}	Working Peak Reverse Voltage
I_R	Maximum Reverse Leakage Current @ V_{RWM}
V_{BR}	Breakdown Voltage @ I_T
I_T	Test Current
I_F	Forward Current
V_F	Forward Voltage @ I_F



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

Symbol	Test Condition	Minimum	Typical	Maximum	Units
V_{RWM}	--	--	--	15	V
I_R	$V_{RWM}=15V, T=25^{\circ}C$	--	--	1.0	μA
V_{BR}	$I_T = 1mA$	16.5	--	--	V
V_C	$I_{PP}=1A, t_p=8/20\mu s$	--	20	--	V
V_C	$I_{PP}=4A, t_p=8/20\mu s$	--	23	--	V
C_J	$V_R=0V, f=1MHz$	--	23	--	pF

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Characteristic Curves

Fig1. ESD Clamping Voltage Screenshot
Positive 8 kV Contact per IEC6100-4-2

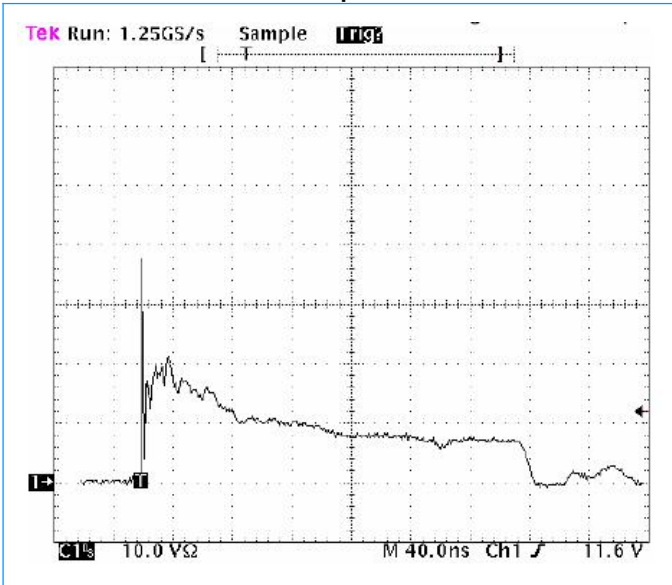
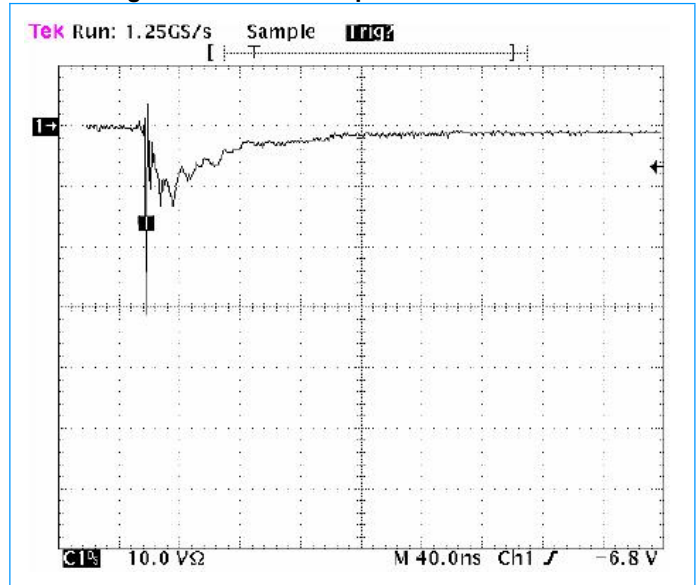
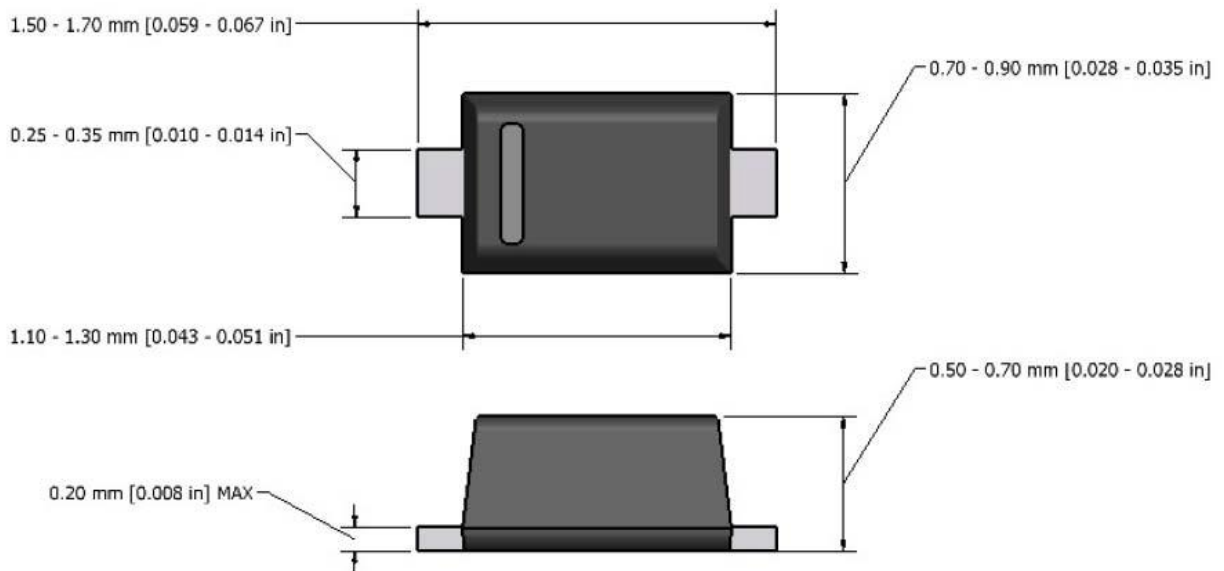


Fig2. ESD Clamping Voltage Screenshot
Negative 8 kV Contact per IEC6100-4-2



SOD-523 Package Outline & Dimensions



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

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