

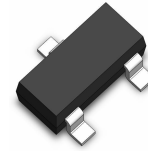
Transient Voltage Suppressors Array for ESD Protection

SE24T2S02GY

Features

- ◆ Working voltages: 24V
- ◆ Low capacitance
- ◆ Low leakage current: 1uA @ V_{RWM}
- ◆ Low clamping voltage
- ◆ Response Time is < 1 ns

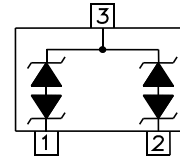
SOT23-3L



Applications

- ◆ CAN、RS-232&RS-485
- ◆ Audio/Video Inputs
- ◆ Wireless Network Systems
- ◆ Digit Video Interface (DVI)

PIN Configuration



Mechanical Characteristics

- ◆ SOT23-3L package
- ◆ Molding Compound Flammability Rating: UL 94V-0
- ◆ Quantity Per Reel: 3,000 pcs
- ◆ Reel size: 7 inch
- ◆ Marking Code: CB2

Absolute Maximum Rating

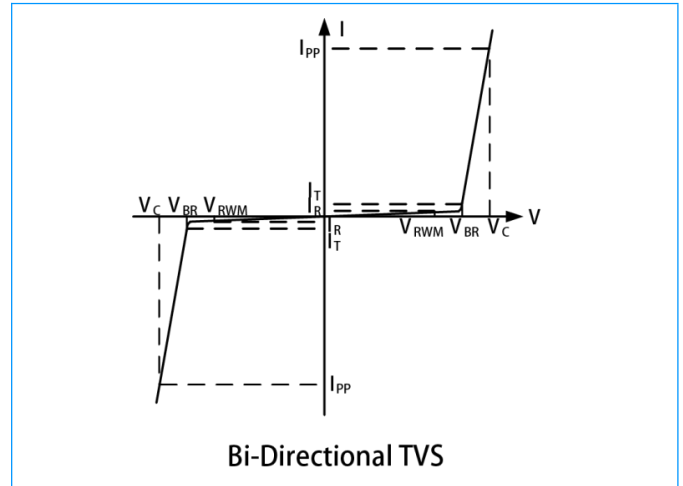
Symbol	Parameter	Value	Units
T_{LST}	Lead Soldering Temperature	260 (10 sec.)	°C
T_{STG}	Storage Temperature Range	-55 to +150	°C
T_{OPT}	Operating Temperature Range	-55 to +125	°C
V_{ESD}	ESD per IEC 61000-4-2(Air) ESD per IEC 61000-4-2 (Contact)	±30 ±30	KV

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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_{BR}	Breakdown Voltage @ I_T
I_T	Test Current



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

Symbol	Test Condition	Minimum	Typical	Maximum	Units
V_{RWM}	--	--	--	24	V
I_R	$V_{RWM} = 24\text{V}$, $T = 25^\circ\text{C}$	--	--	1	μA
V_{BR}	$I_T = 1\text{mA}$	26.7	--	--	V
V_C	$I_{PP} = 6\text{A}$, $t_p = 8/20\mu\text{s}$	--	46	--	V
C_J	$V_R = 0\text{V}$, $f = 1\text{MHz}$	--	15	--	pF

Characteristic Curves

Fig1. 8/20 μs Pulse Waveform

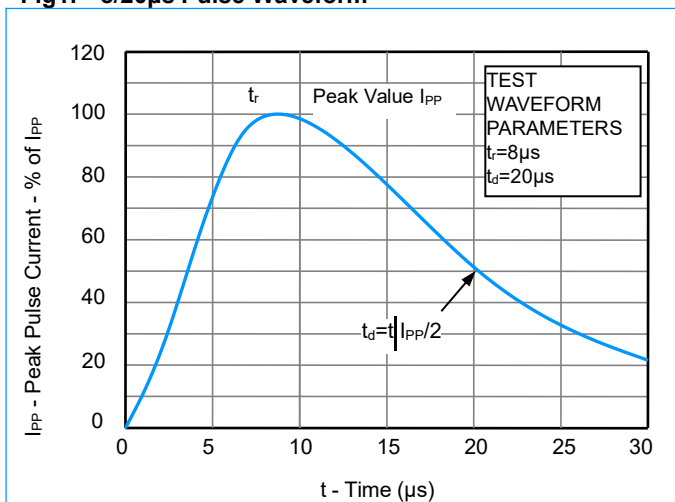
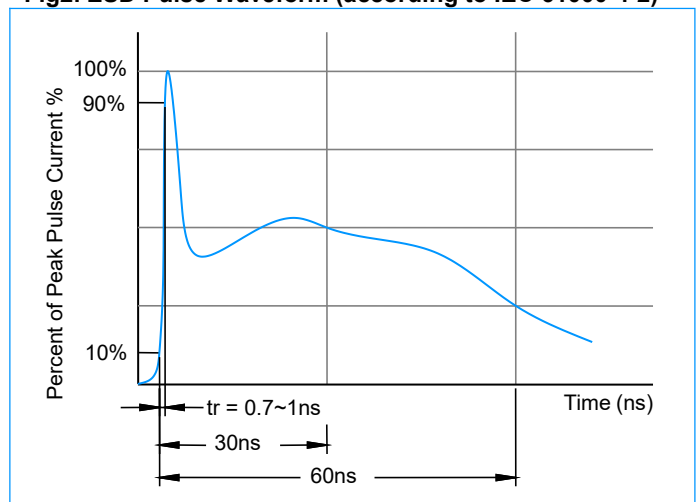


Fig2. ESD Pulse Waveform (according to IEC 61000-4-2)



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Characteristic Curves (Continue)

Fig3. ESD Pulse Waveform (according to IEC 61000-4-2)

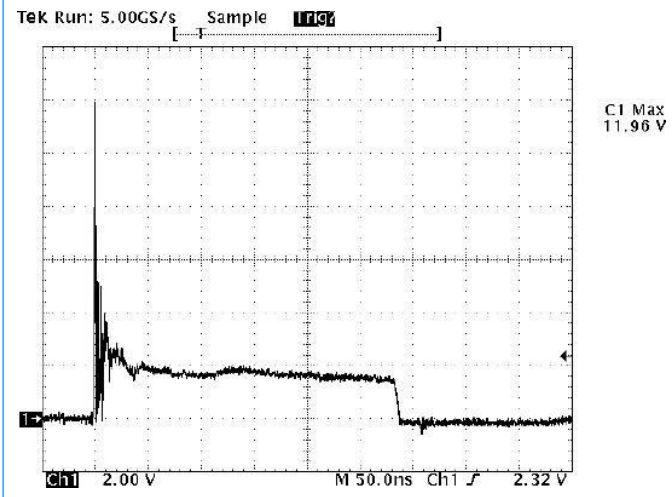
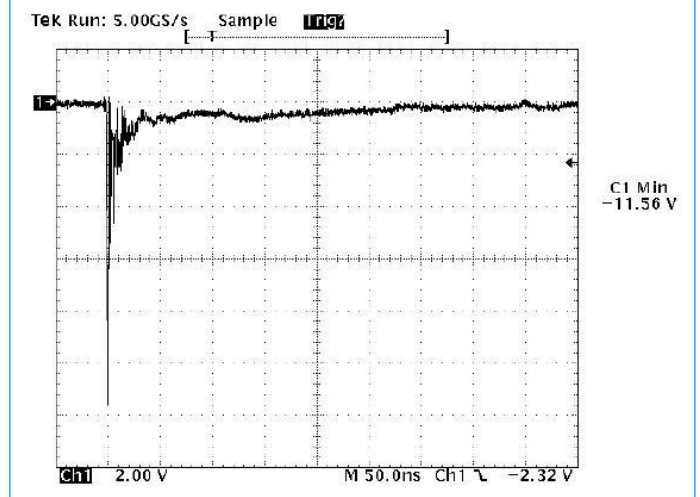
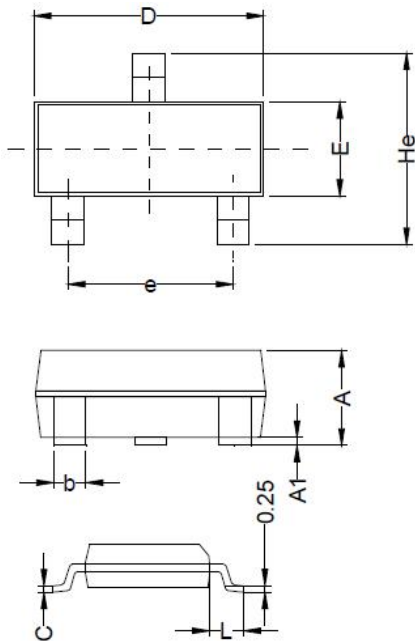


Fig4. ESD Clamping (-8KV Contacper IEC61000-4-2)



SOT23-3L Package Outline & Dimensions (Unit: mm)



Symbol	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	0.90	1.063	1.15	0.035	0.042	0.045
A1	0.00	0.075	0.14	0.000	0.003	0.006
b	0.30	0.40	0.50	0.012	0.016	0.020
C	0.07	0.10	0.15	0.003	0.004	0.006
D	2.80	2.90	3.00	0.110	0.114	0.118
e	1.80	1.90	2.00	0.071	0.075	0.079
E	1.20	1.30	1.40	0.047	0.051	0.055
L	0.55 REF			0.022 REF		
He	2.25	2.40	2.55	0.089	0.094	0.100

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