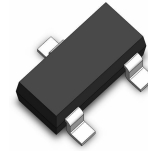


Features

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

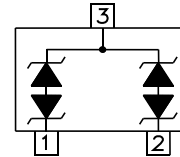
SOT23



Applications

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

PIN Configuration



Mechanical Characteristics

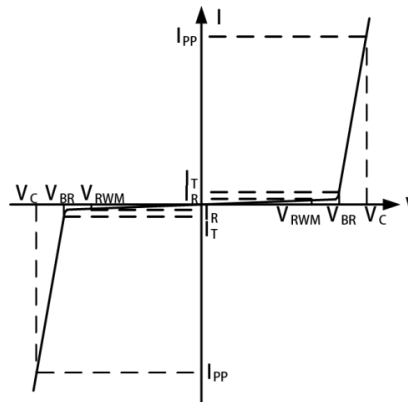
- ◆ SOT23 package
- ◆ Molding Compound Flammability Rating: UL 94V-0
- ◆ Quantity Per Reel:3,000pcs
- ◆ Reel size: 7inch

Absolute Maximum Rating

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

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 |



Bi-Directional TVS

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

| Symbol | Test Condition | Minimum | Typical | Maximum | Units |
|-----------|-----------------------------|---------|---------|---------|---------|
| V_{RWM} | -- | -- | -- | 24 | V |
| I_R | $V_{RWM}=24V, T=25^\circ C$ | -- | -- | 1 | μA |
| V_{BR} | $I_T = 1mA$ | 26.7 | -- | 31.5 | V |
| V_C | $I_{PP}=6A, t_p=8/20\mu s$ | -- | -- | 70 | V |
| C_J | $V_R=0V, f=1MHz$ | -- | 20 | -- | pF |

Characteristic Curves

Fig1. 8/20 μs Pulse Waveform

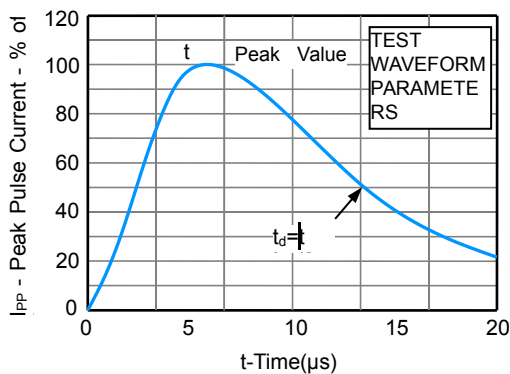
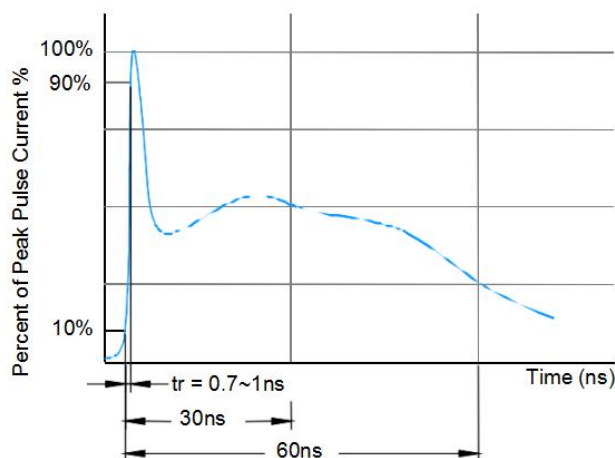


Fig2. ESD Pulse Waveform (according to IEC 61000-4-2)



Characteristic Curves (Continue)

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

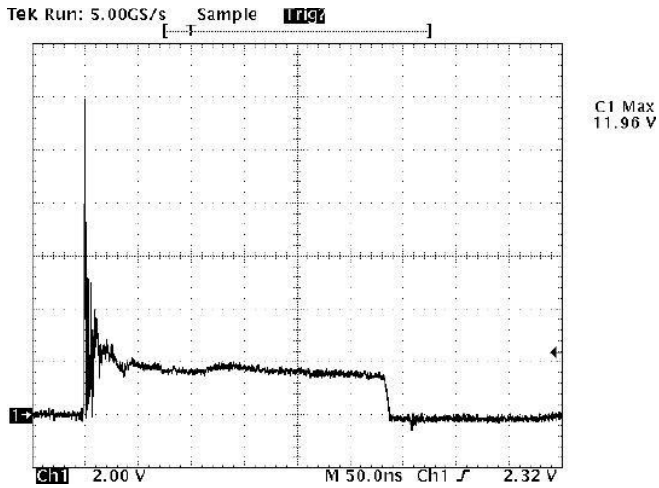
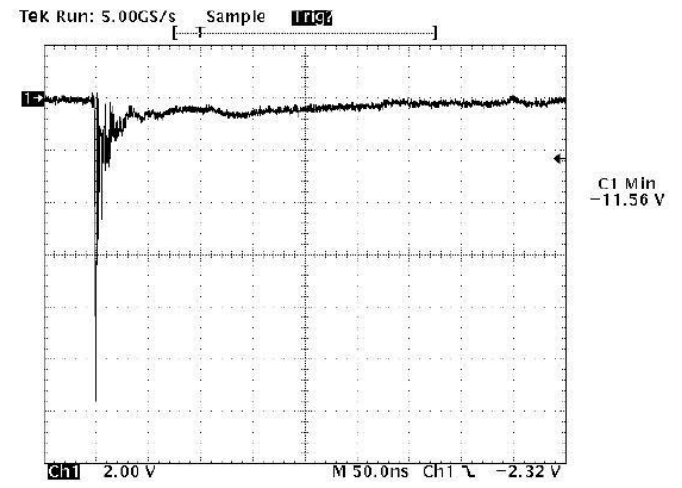
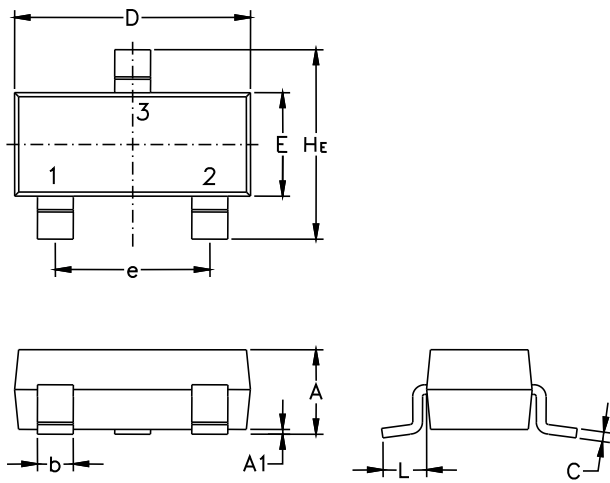


Fig4. ESD Clamping (-8KV Contacter IEC61000-4-2)

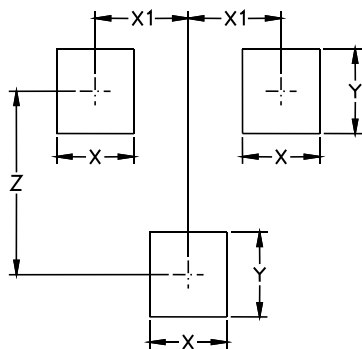


SOT23 Package Outline & Dimensions (Unit: mm)



| Symbol | Millimeters | | | Inches | | |
|--------|-------------|------|------|--------|-------|-------|
| | Min. | Nom. | Max. | Min. | Nom. | Max. |
| A | 0.89 | 1.00 | 1.11 | 0.035 | 0.040 | 0.044 |
| A1 | 0.01 | 0.06 | 0.10 | 0.001 | 0.002 | 0.004 |
| b | 0.37 | 0.44 | 0.50 | 0.15 | 0.18 | 0.020 |
| c | 0.09 | 0.13 | 0.18 | 0.003 | 0.005 | 0.007 |
| D | 2.80 | 2.90 | 3.04 | 0.110 | 0.114 | 0.120 |
| E | 1.20 | 1.30 | 1.40 | 0.047 | 0.051 | 0.055 |
| e | 1.78 | 1.90 | 2.04 | 0.070 | 0.075 | 0.081 |
| L | 0.35 | 0.54 | 0.69 | 0.014 | 0.021 | 0.029 |
| He | 2.10 | 2.40 | 2.64 | 0.083 | 0.094 | 0.104 |

Soldering Footprint



| Symbol | Millimeters | Inches |
|--------|-------------|--------|
| X | 0.80 | 0.031 |
| X1 | 0.95 | 0.037 |
| Y | 0.90 | 0.035 |
| Z | 2.00 | 0.079 |