

Features

- Ultra low capacitance: 0.5pF typical
- Ultra low leakage: nA level
- Low operating voltage: 3.3V
- Low clamping voltage
- 2-pin leadless package
- Complies with following standards:
 - – IEC 61000-4-2 (ESD) immunity test
Air discharge: ±30kV
Contact discharge: ±30kV
 - – IEC61000-4-5 (Lightning)4A (8/20μs)
- RoHS Compliant
- Lead Finish: NiPdAu

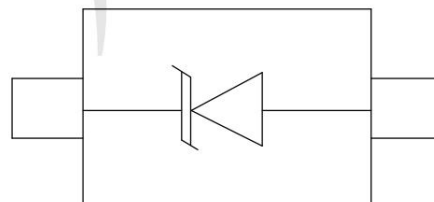
Mechanical Characteristics

- Package: SOD-923 (0402)
- Lead Finish: Matte Tin
- Case Material: “Green” Molding Compound.
- Moisture Sensitivity: Level 3 per J-STD-020
- Terminal Connections: See Diagram Below
- Shipping Qty : Or 10000pcs/7Inch Tape & Reel

Applications

- Smart Phone and Tablet PC
- TV and Set Top Box
- Wearable Devices
- PDA

Dimensions and Pin Configuration



SOD923

Marking: X

Absolute Maximum Ratings (Tamb=25°C unless otherwise specified)

| Parameter | Symbol | Value | Unit |
|---------------------------------|--------|-------------|------|
| Peak Pulse Power (8/20μs) | Ppk | 60 | W |
| Peak Pulse Current (8/20μs) | Ipp | 4 | A |
| ESD per IEC 61000-4-2 (Air) | VESD | ±30 | kV |
| ESD per IEC 61000-4-2 (Contact) | | ±30 | |
| Operating Temperature Range | TJ | -55 to +125 | °C |
| Storage Temperature Range | Tstg | -55 to +150 | °C |

Electrical Characteristics (TA=25°C unless otherwise specified)

| Parameter | Symbol | Min | Typ | Max | Unit | Test Condition |
|-------------------------|--------|-----|-----|------|------|-----------------------|
| Reverse Working Voltage | VRWM | | | 3.3 | V | |
| Breakdown Voltage | VBR | 5 | | | V | IT = 1mA |
| Reverse Leakage Current | IR | | | 0.08 | uA | VRWM = 3.3V |
| Clamping Voltage | VC | | | 8 | V | Ipp=1A(8x 20us pulse) |
| Clamping Voltage | VC | | | 14 | V | Ipp=4A(8x 20us pulse) |
| Junction Capacitance | CJ | | 0.5 | | pF | VR = 0V, f = 1MHz |

Characteristic Curves

Fig1. 8/20 μ s Pulse Waveform

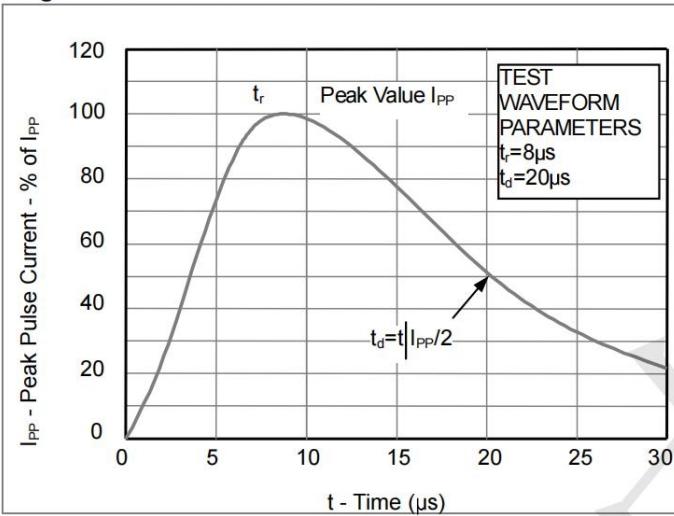


Fig2. ESD Pulse Waveform (according to IEC 61000-4-2)

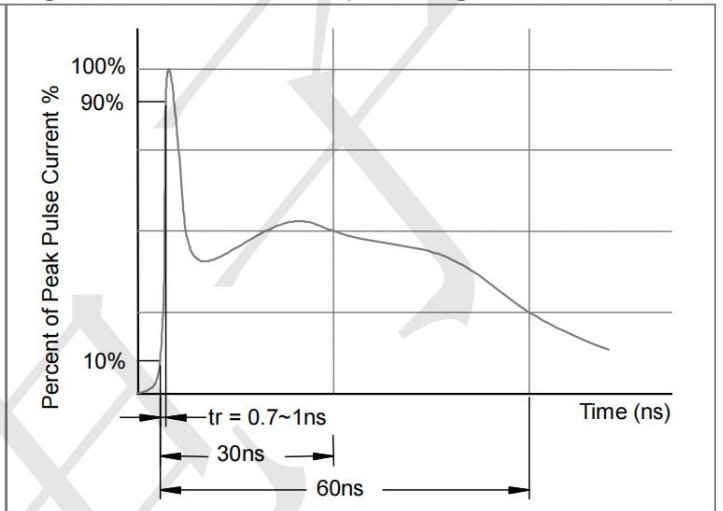
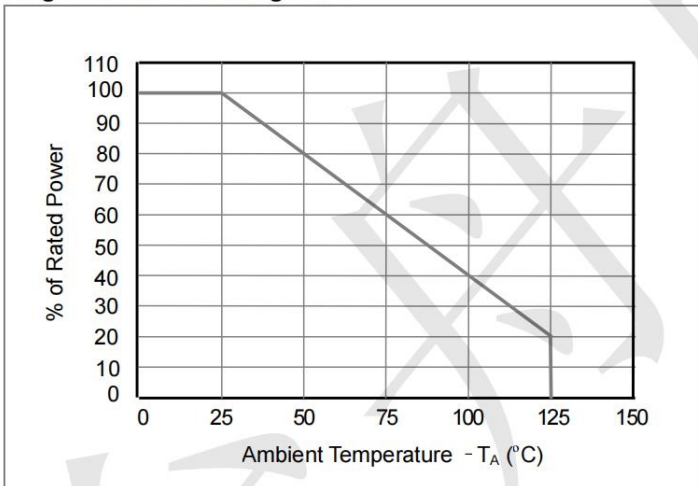
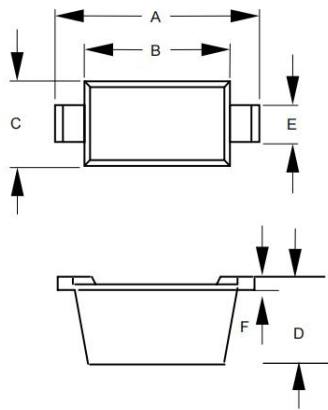


Fig3. Power Derating Curve

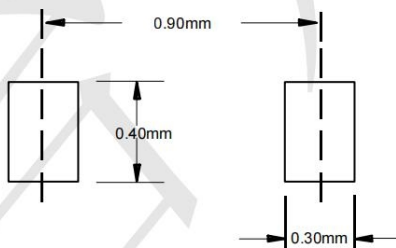


Outline Drawing - SOD-923(0402)



| DIM | DIMENSIONS | | | | NOTE |
|-----|------------|------|------|------|------|
| | INCHES | | MM | | |
| | MIN | MAX | MIN | MAX | |
| A | .037 | .041 | 0.95 | 1.05 | |
| B | .030 | .033 | 0.75 | 0.85 | |
| C | .022 | .026 | 0.55 | 0.65 | |
| D | .014 | .017 | 0.36 | 0.43 | |
| E | .006 | .010 | 0.15 | 0.25 | |
| F | .003 | .007 | 0.07 | 0.17 | |

Land Pattern - SOD-923(0402)



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