

Features

- 80W peak pulse power(8/20 μ s)
- Ultra low leakage: nA level
- Operating voltage: 12V
- Low clamping voltage
- Complies with following standards:
 - IEC 61000-4-2 (ESD) immunity test
Air discharge: ± 30 kV
Contact discharge: ± 30 kV
 - IEC61000-4-4 (EFT) 40A (5/50ns)
 - IEC61000-4-5 (Lightning) 8A (8/20 μ s)
- RoHS Compliant

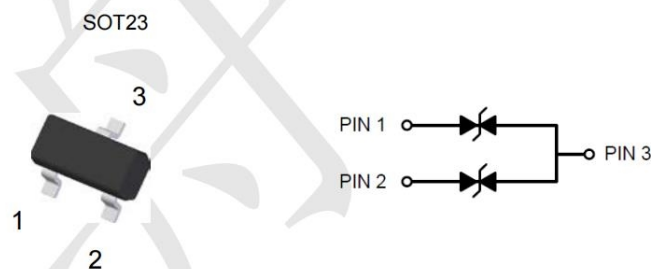
Mechanical Characteristics

- Package: SOT23
- Lead Finish: Matte Tin
- UL Flammability Classification Rating 94V-0
- Shipping Qty :3000pcs/7Inch Tape & Reel

Applications

- Cellular Handsets and Accessories
- Notebooks and Handhelds
- Portable Instrumentation
- Set Top Box

Dimensions and Pin Configuration



Marking:  1272

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

| Parameter | Symbol | Value | Unit |
|---------------------------------|--------|-------------|------|
| Peak Pulse Power (8/20μs) | Ppk | 80 | W |
| Peak Pulse Current (8/20μs) | Ipp | 8 | 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 | | | 12 | V | |
| Breakdown Voltage | VBR | 13.6 | | 17.5 | V | IT = 1mA |
| Reverse Leakage Current | IR | | | 0.05 | uA | VRWM = 12V |
| Clamping Voltage | VC | | | 9 | V | I _{PP} = 1A (8 x 20μs pulse) |
| Clamping Voltage | VC | | | 10 | V | I _{PP} = 8A (8 x 20Us pulse) |
| Junction Capacitance | CJ | | 15 | 20 | pF | VR=0, f=1MHz, Pin 3 to Pin 1 or Pin 3 to Pin 2 |
| Junction Capacitance | CJ | | 8 | | pF | VR=0, f=1MHz, Pin1 to Pin 2 or Pin 2 to Pin1 |

Characteristic Curves

Fig1. 8/20 μ s Pulse Waveform

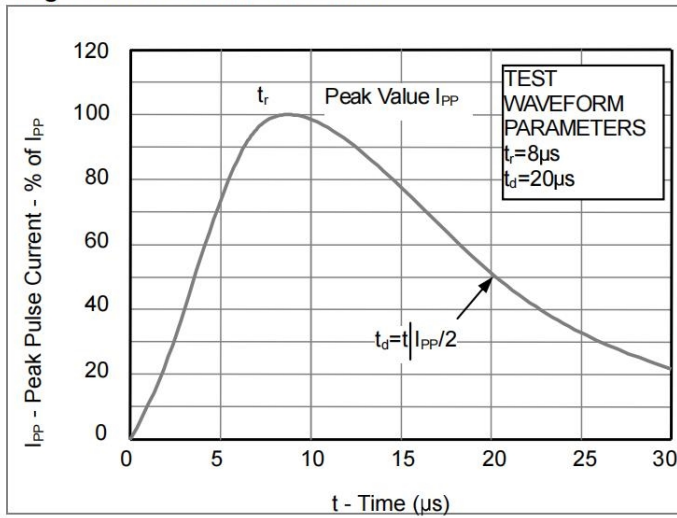


Fig2. ESD Pulse Waveform (according to IEC 61000-4-2)

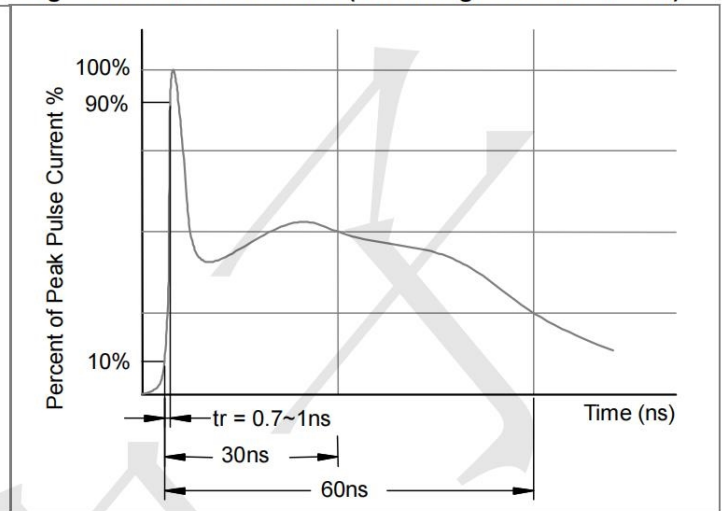
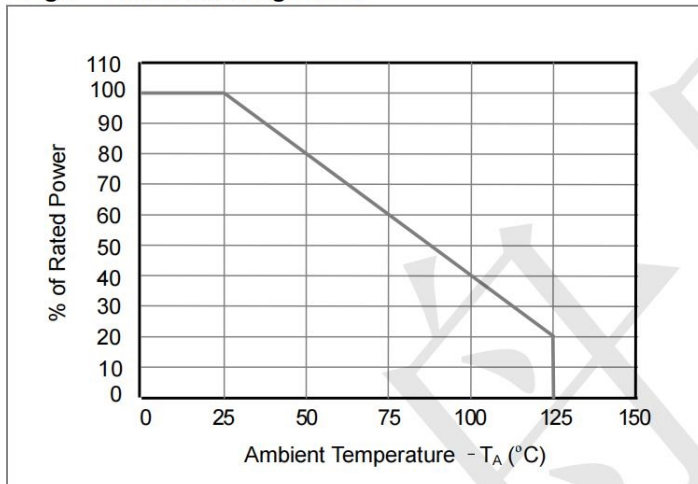
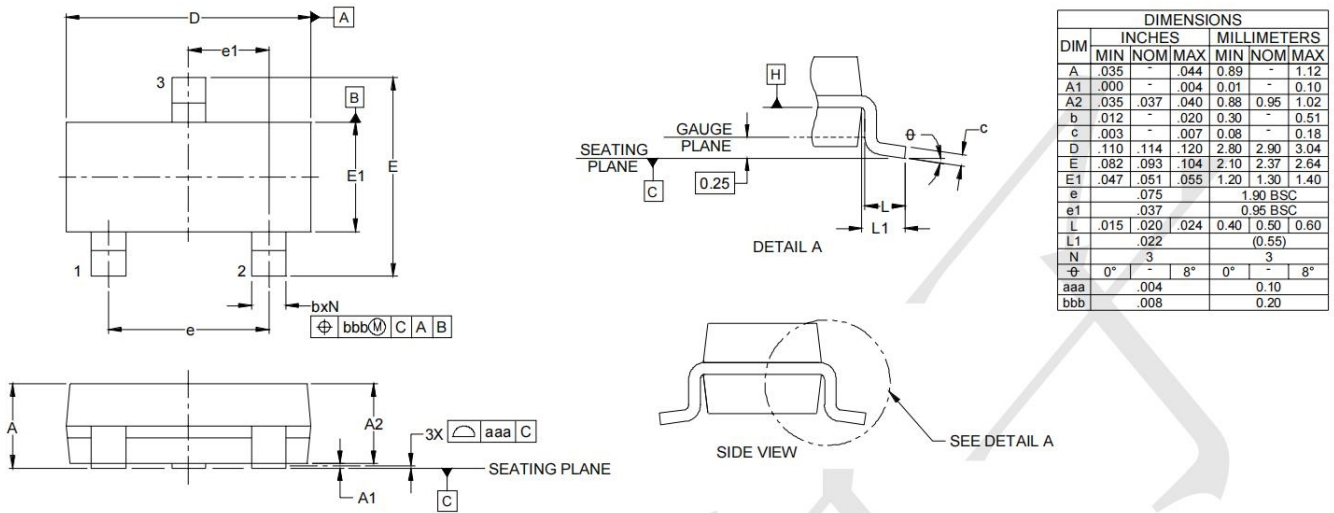


Fig3. Power Derating Curve



Outline Drawing - SOT23



Land Pattern - SOT23

