

## Features

- ◆ 180W peak pulse power(8/20 $\mu$ s)
- ◆ Ultra low leakage: nA level
- ◆ Operating voltage: 24V
- ◆ Low clamping voltage
- ◆ Complies with following standards:
  - IEC 61000-4-2 (ESD) immunity test
    - Air discharge:  $\pm 30$ kV
    - Contact discharge:  $\pm 30$ kV
  - IEC61000-4-4 (EFT) 40A (5/50ns)
  - IEC61000-4-5 (Lightning) 3.5A(8/20 $\mu$ s)
- ◆ RoHS Compliant

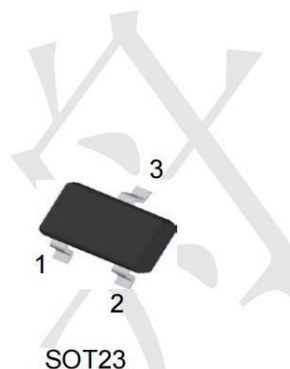
## Mechanical Characteristics

- ◆ Package: SOT-23
- ◆ Lead Finish: Matte Tin
- ◆ Case Material: "Green" Molding Compound.
- ◆ UL Flammability Classification Rating 94V-0
- ◆ Moisture Sensitivity: Level 3 per J STD 020
- ◆ Shipping Qty :3000pcs/7Inch Tape & Reel

## Applications

- ◆ CAN Bus Protection
- ◆ Automotive Appllcatrons

## Dimensions and Pin Configuration



**Absolute Maximum Ratings** (T amb=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power(8/20μs)	Ppk	180	W
ESD per IEC 61000-4-2 (Air)	VESD	±15	kV
ESD per IEC 61000-4-2 (Contact)		±8	
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			24	V	
Breakdown Voltage	VBR	26.7			V	IT = 1mA
Reverse Leakage Current	IR		0.01	0.1	μA	VRWM = 24V
Clamping Voltage	VC			24	V	I <sub>PP</sub> = 1A (8 x 20μs pulse)
Clamping Voltage	VC			65	V	I <sub>PP</sub> = 3.5 A (8 x 20μs pulse)
Peak Pulse Current	I <sub>PP</sub>			3.5	A	t <sub>p</sub> =8/20μs
Junction Capacitance	CJ		12	14	pF	VR=0, f=1MHz, Pin 1 to Pin 3 or Pin 2 to Pin 3

## Typical Performance Characteristics ( $T_A=25^\circ\text{C}$ unless otherwise Specified)

Fig1. 8/20 $\mu\text{s}$  Pulse Waveform

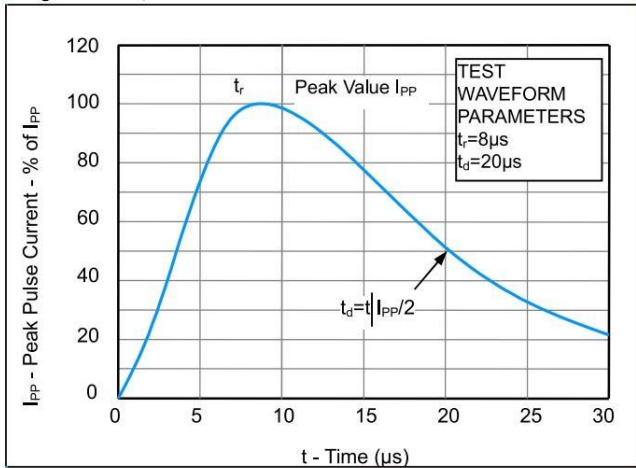


Fig2. ESD Pulse Waveform (according to IEC 61000-4-2)

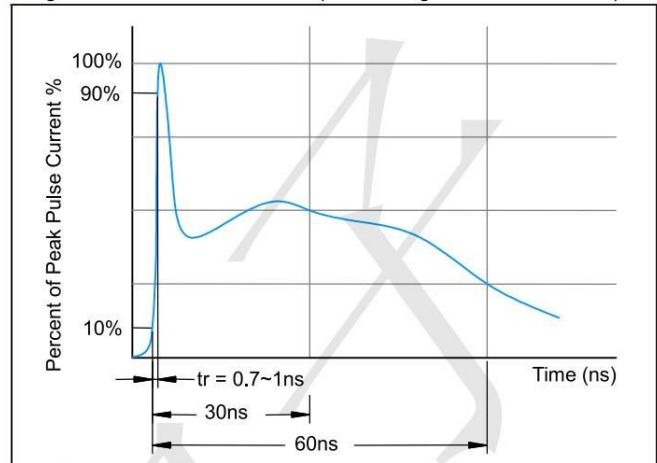
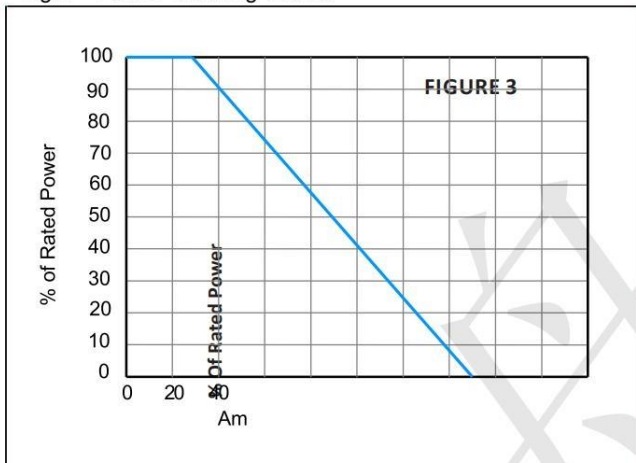
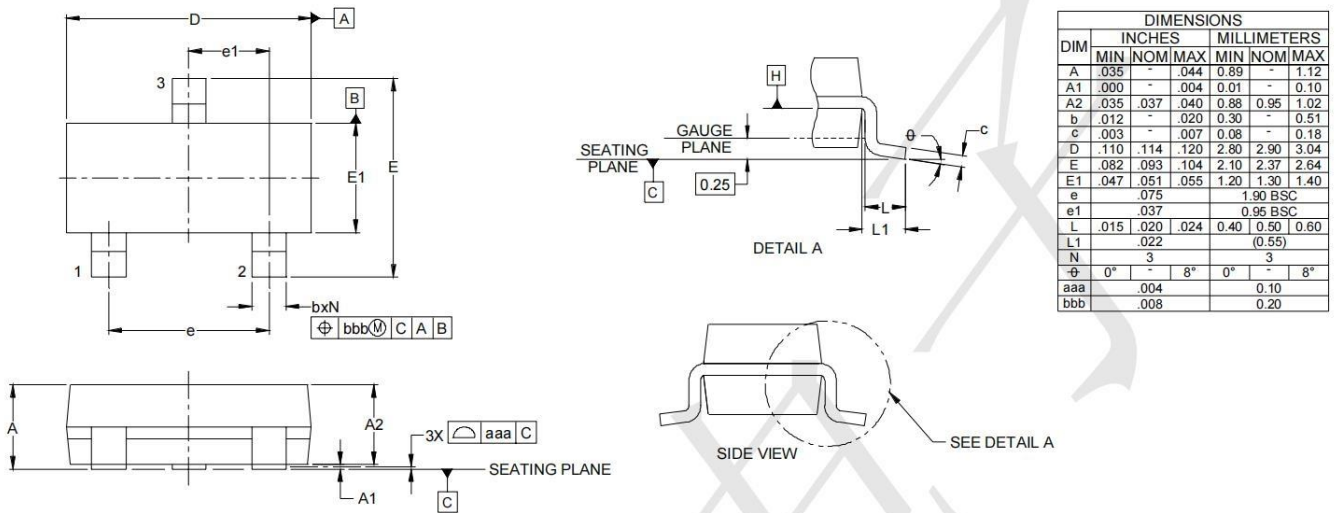


Fig3. Power Derating Curve



## Outline Drawing - SOT23



## Land Pattern - SOT23

