

Features

- ◆ 30W peak pulse power(8/20μs)
- ◆ Ultra low leakage: nA level
- ◆ Operating voltage: 5.5V
- ◆ Low clamping voltage
- ◆ Complies with following standards:
 - IEC 61000-4-2 (ESD) immunity test
Air discharge: ±15kV
Contact discharge: ±8kV
 - IEC61000-4-4 (EFT) 40A (5/50ns)
 - IEC61000-4-5 (Lightning) 1.5A (8/20μs)
- ◆ RoHS Compliant

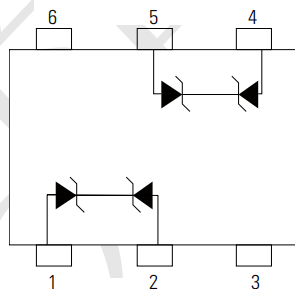
Mechanical Characteristics

- ◆ Package: SOT-563
- ◆ 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 :4000pcs/7Inch Tape & Reel

Applications

- ◆ Game Consoles
- ◆ LCD/ PDP TVs
- ◆ Desktops

Dimensions and Pin Configuration



SOT563

Marking: DEB

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

Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20μs)	Ppk	30	W
Peak Pulse Current (8/20μs)	IPP	1.5	A
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			5.5	V	
Breakdown Voltage	VBR	5.7		9	V	IT = 1mA
Reverse Leakage Current	IR			0.1	μA	VRWM = 5.5 V
Clamping Voltage	VC			20	V	IPP = 1.5 A (8 x 20μs pulse)
Junction Capacitance	CJ		1.5		pF	VR=0, f=1MHz

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

Fig1. 8/20 μs Pulse Waveform

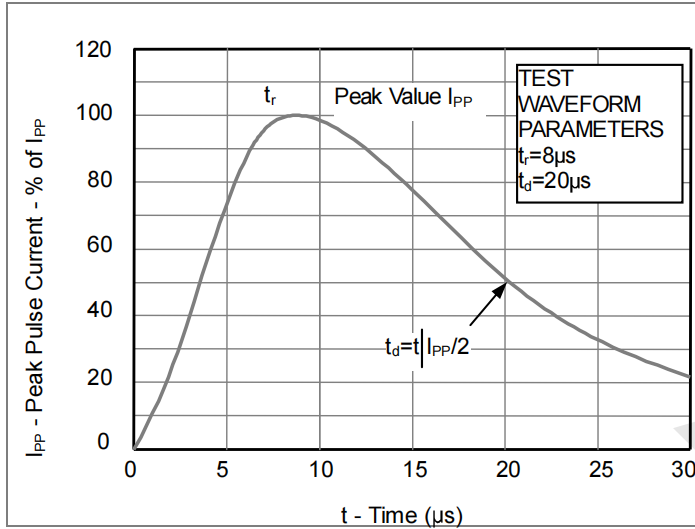


Fig2. ESD Pulse Waveform (according to IEC 61000-4-2)

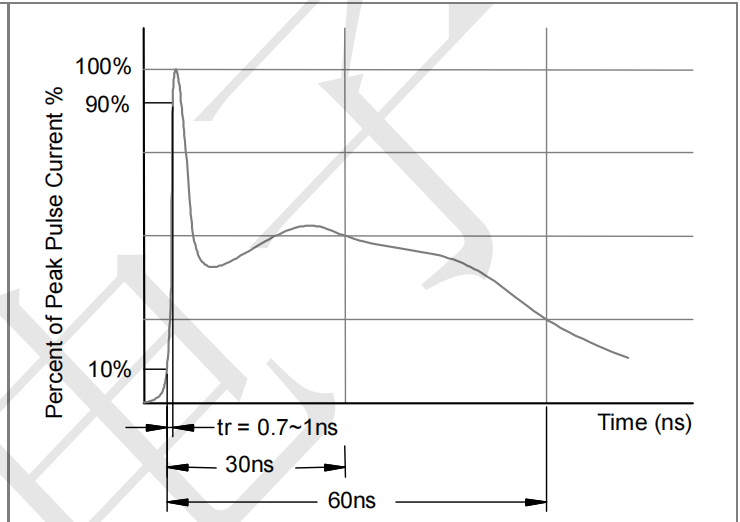
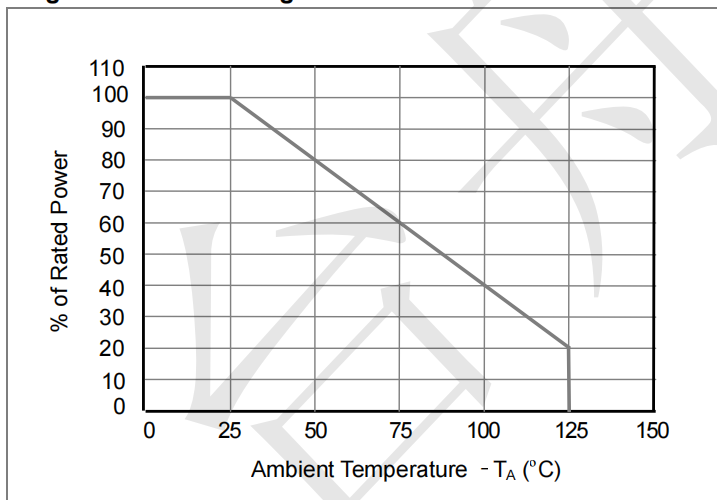
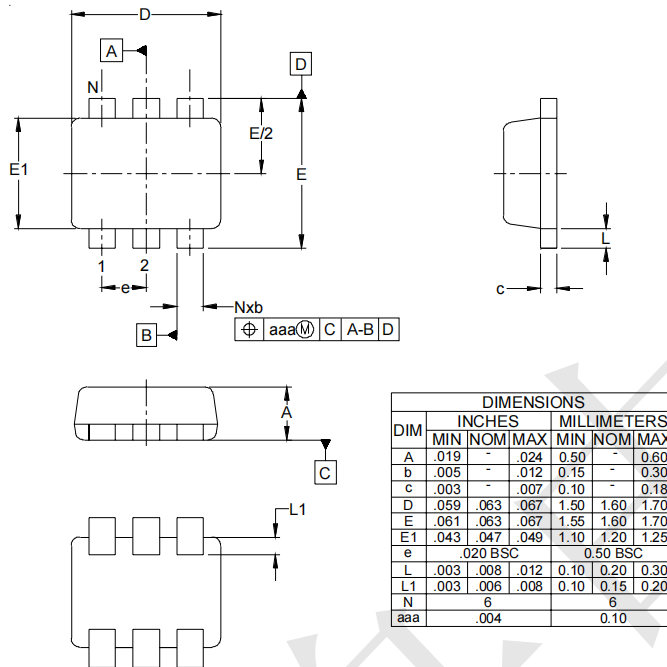


Fig3. Power Derating Curve



Outline Drawing - SOT-563



Land Pattern - SOT-563

