



TECH PUBLIC

— 台舟电子 —

ESDA6V8AV6

Low Capacitance 5-Line TVS Diode

www.sot23.com.tw

Features

- Ultra low leakage: nA level
- Low operating voltage: 5V
- Complies with following standards:
- IEC 61000-4-2 (ESD) immunity test
 - Air discharge: $\pm 20\text{kV}$
 - Contact discharge: $\pm 18\text{kV}$
 - IEC61000-4-5 (Lightning)4A (8/20 μs)
- RoHS Compliant
- Lead Finish: NiPdAu

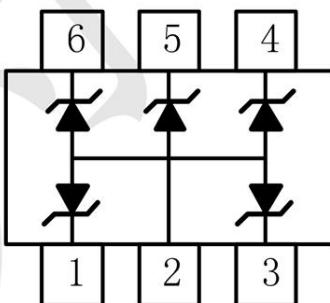
Mechanical Characteristics

- Package: SOT563 (1.6mmx1.6mmx0.6mm)
- Lead Finish: Matte Tin
- UL Flammability Classification Rating 94V-0
- Pb-Free, Halogen Free, RoHS/WEEE Compliant
- Shipping Qty :4000pcs/7Inch Tape & Reel

Applications

- USB 2.0 interface
- 10/100 Ethernet
- Personal digital assistants (PDA's)
- Notebooks, Desktops and Servers
- Portable instrumentation
- Digital cameras

Dimensions and Pin Configuration



Pin Configuration

Absolute Maximum Ratings ($T_A=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20μs)	Ppk	40	W
ESD per IEC 61000-4-2 (Air)	V _{ESD}	±20	kV
ESD per IEC 61000-4-2 (Contact)		±18	
Operating Temperature Range	T _J	-55 to +125	°C
Storage Temperature Range	T _{Stg}	-55 to +150	°C

Electrical Characteristics ($T_A=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Working Voltage	V _{RWM}			5	V	
Breakdown Voltage	V _{BR}	6			V	I _T = 1mA
Reverse Leakage Current	I _R			0.1	uA	V _{RWM} = 5V
Forward Voltage	V _F			1.2	V	I _F = 10mA
Clamping Voltage	V _c			14	V	I _{PP} =4A (8 x 20us pulse)
Junction Capacitance	C _J			10	pF	VR = 0V, f = 1MHz IO to Gnd



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

Fig1. 8/20 μs Pulse Waveform

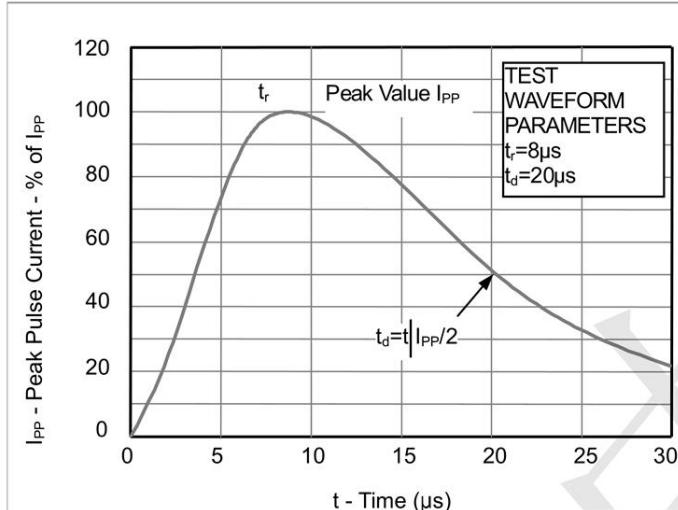


Fig2. ESD Pulse Waveform (according to IEC 61000-4-2)

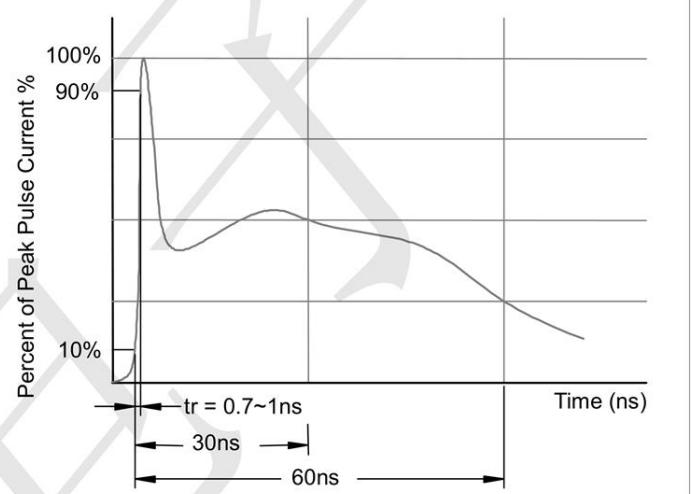
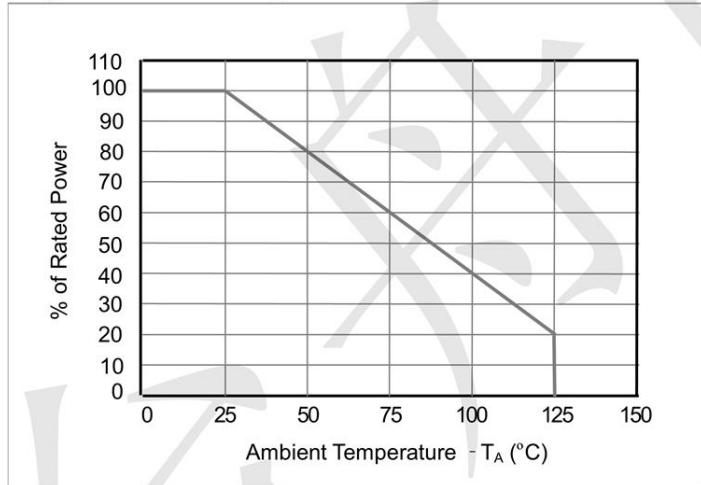


Fig3. Power Derating Curve





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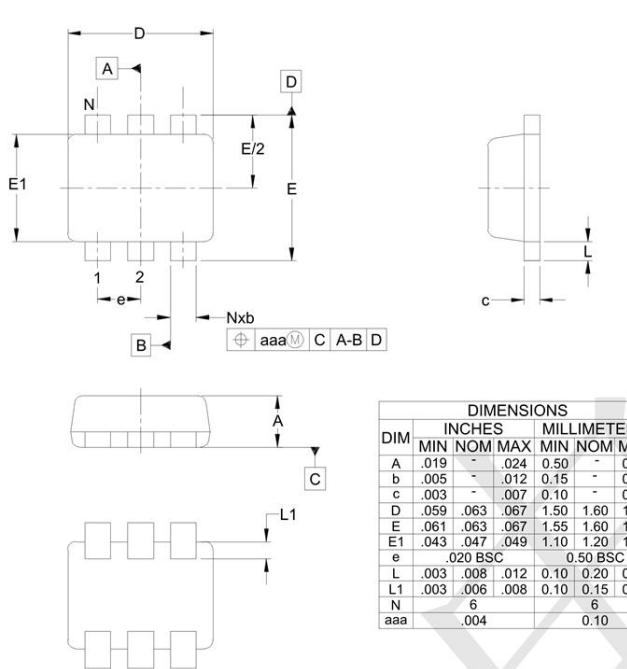
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Outline Drawing - SOT-563



Land Pattern - SOT-563

