

Features

- Low operating voltage: 24V
- Ultra low leakage: nA level
- Complies with following standards:
 - – IEC 61000-4-2 (ESD) immunity test
 - Air discharge: $\pm 15\text{kV}$
 - Contact discharge: $\pm 8\text{kV}$
- RoHS Compliant

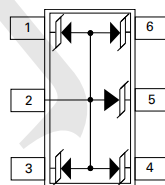
Mechanical Characteristics

- ◆ Package: SOT23-6
- ◆ 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 :3000 /7Inch Tape & Reel

Applications

- ◆ Networking and Telecom
- ◆ Automotive Electronics
- ◆ Serial and Parallel Ports
- ◆ Notebooks, Desktops, Servers

Dimensions and Pin Configuration

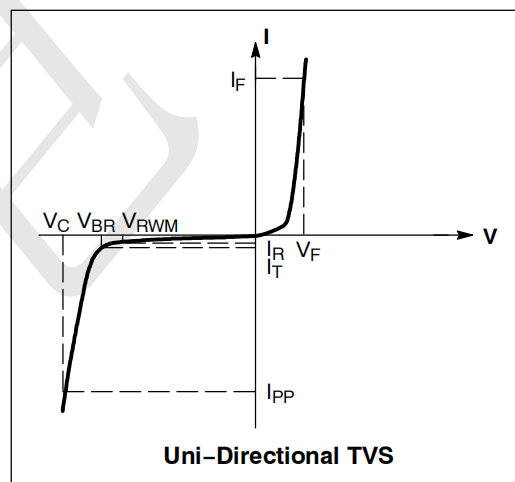


Absolute Maximum Ratings ($T_{amb}=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Value	Unit
ESD per IEC 61000-4-2 (Air)	VESD	± 15	kV
ESD per IEC 61000-4-2 (Contact)		± 8	
Operating Temperature Range	T_J	-55 to $+125$	$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	-55 to $+150$	$^{\circ}\text{C}$

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

Symbol	Parameter
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}
V_{RWM}	Working Peak Reverse Voltage
I_R	Maximum Reverse Leakage Current @ V_{RWM}
V_{BR}	Breakdown Voltage @ I_T
I_T	Test Current
I_F	Forward Current
V_F	Forward Voltage @ I_F
P_{pk}	Peak Power Dissipation
C	Capacitance @ $V_R = 0$ and $f = 1.0$ MHz



Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Working Voltage	V_{RWM}			24	V	Any I/O pin to ground
Punch-Through Voltage	V_{BR}	26.7			V	$I_T = 1\text{mA}$, any I/O pin to ground
Reverse Leakage Current	I_R			1	μA	$V_{RWM} = 24\text{V}$, any I/O pin to ground
Clamping Voltage	V_C		45	60	V	$I_{PP} = 3\text{A}$ (8 x 20us pulse), any I/O pin to ground
Junction Capacitance	C_J			50	pF	$V_R=0$, $f=1\text{MHz}$, between I/O pins

Fig1. 8/20 μ s Pulse Waveform

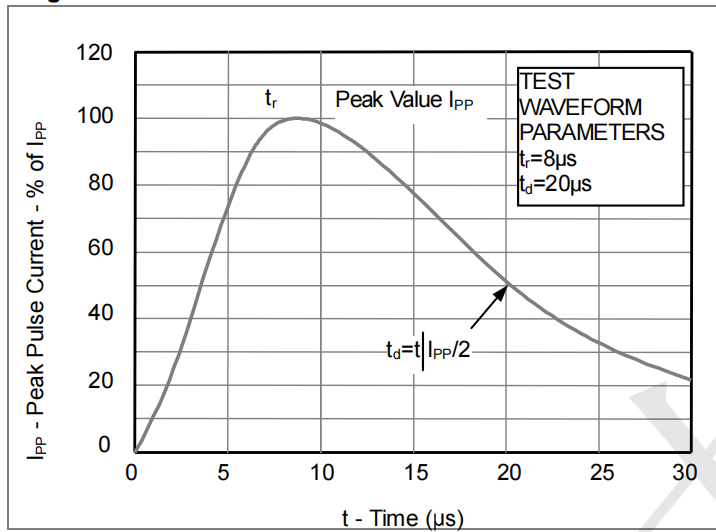


Fig2. ESD Pulse Waveform (according to IEC 61000-4-2)

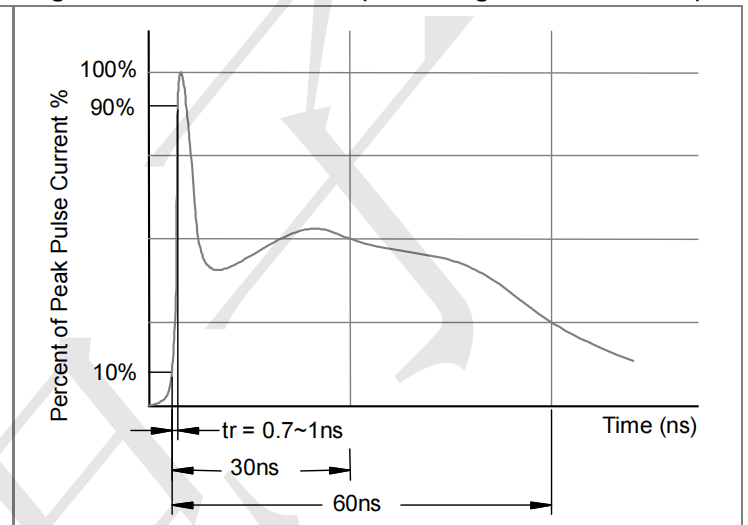
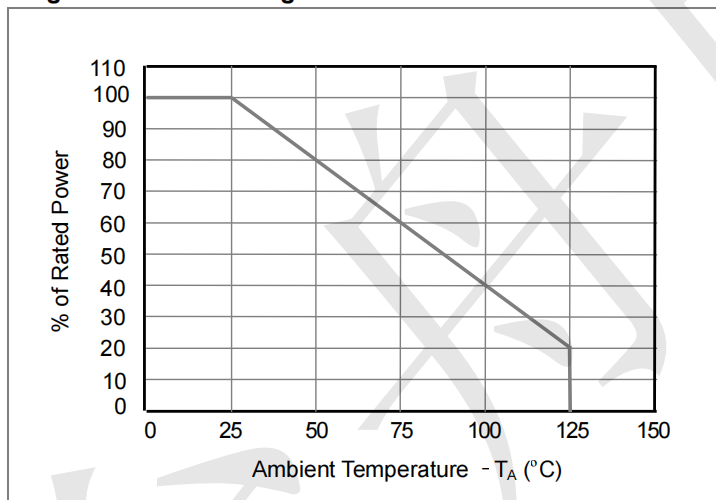
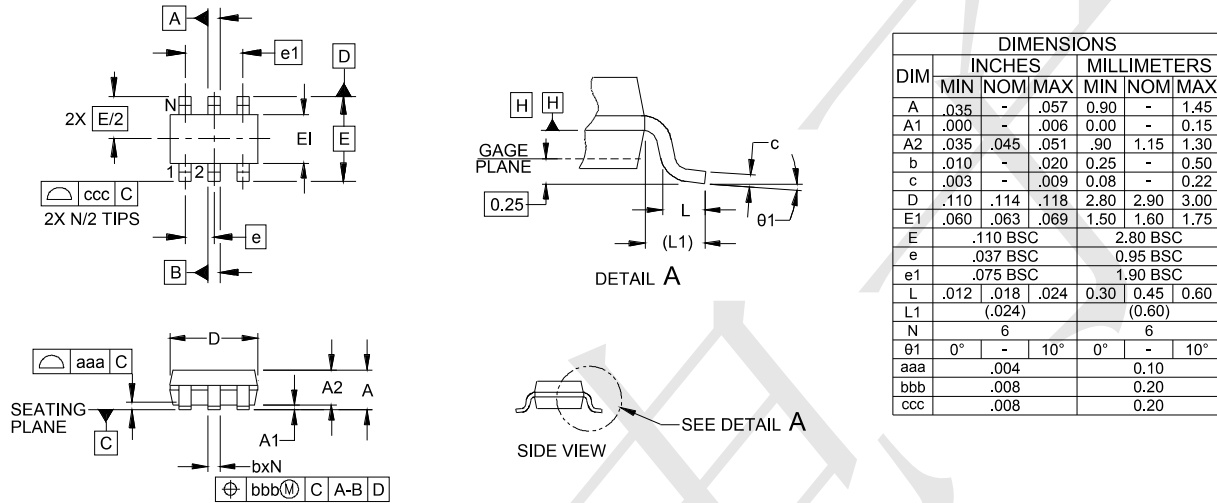


Fig3. Power Derating Curve



Outline Drawing - SOT23-6



Land Pattern - SOT23-6

