

ESD24VT6

Features

- Ultra low leakage: nA level
- Operating voltage: 24V
- Low clamping voltage
- Complies with following standards:
 - IEC 61000-4-2 (ESD) immunity test Air discharge: $\pm 15\text{kV}$
 - Contact discharge: $\pm 8\text{kV}$
 - IEC61000-4-4 (EFT) 40A (5/50ns)
 - IEC61000-4-5 (Lightning) 8A (8/20 μs)
- RoHS Compliant

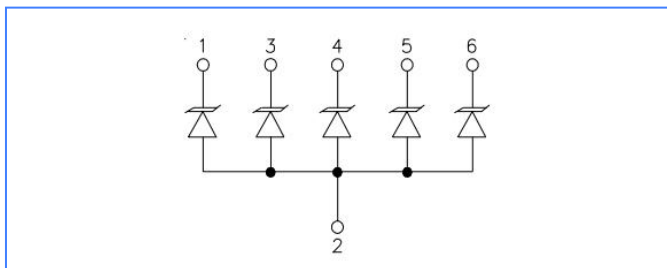
Applications

- USB 2.0 power and data line
- Set-top box and digital TV
- Digital video interface (DVI)
- Notebook Computers
- SIM Ports
- 10/100 Ethernet

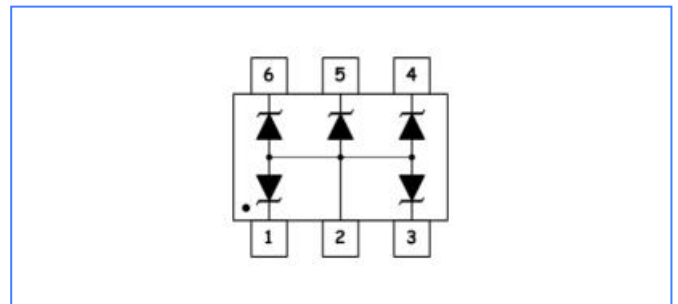
Mechanical Characteristics

- Package: SOT23-6L
- Lead Finish: Lead Free
- UL Flammability Classification Rating 94V-0
- Quantity Per Reel: 3,000pcs
- Reel Size: 7inch

Circuit Diagram



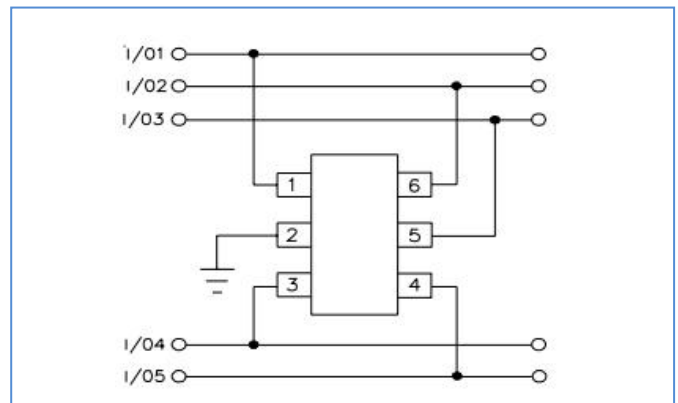
Functional Diagram



Packaging diagram



Port Protection



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

Parameter	Symbol	Value	Units
Peak Pulse Power (8/20 μs)	Ppp	300	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	TSTJ	-55 to +150	°C

Electrical Characteristics(TA=25°C unless otherwise specified)

Part Number	VRWM (V)	VBR (V)	IT (mA)	VC @1A	Vc		IR μ A (Max)	C (Pf) (Typ.)
					(Max)	(@A)		
ESD24VT6	24	26.7	1	38	46	8	1	50

Characteristics Curves

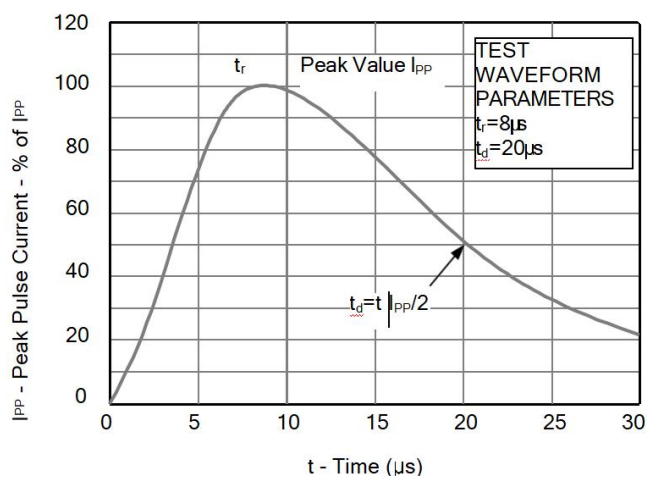
Fig1. 8/20 μ s Pulse Waveform


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

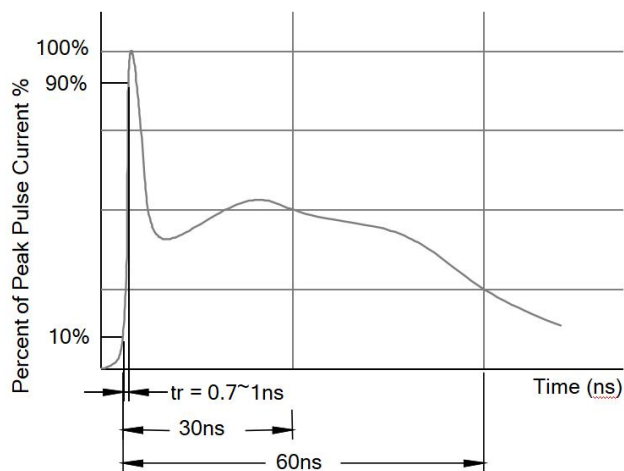
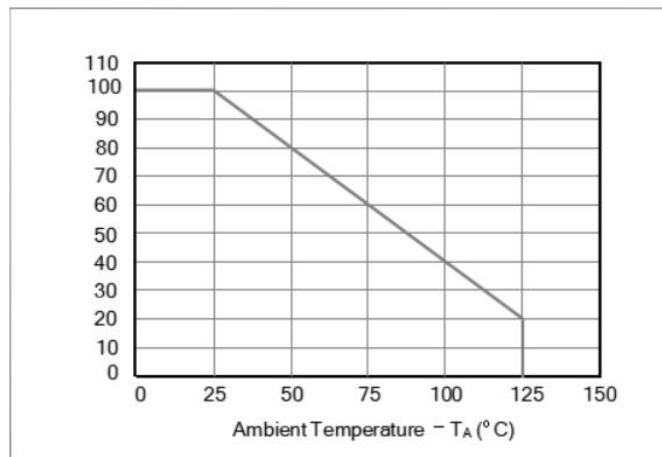
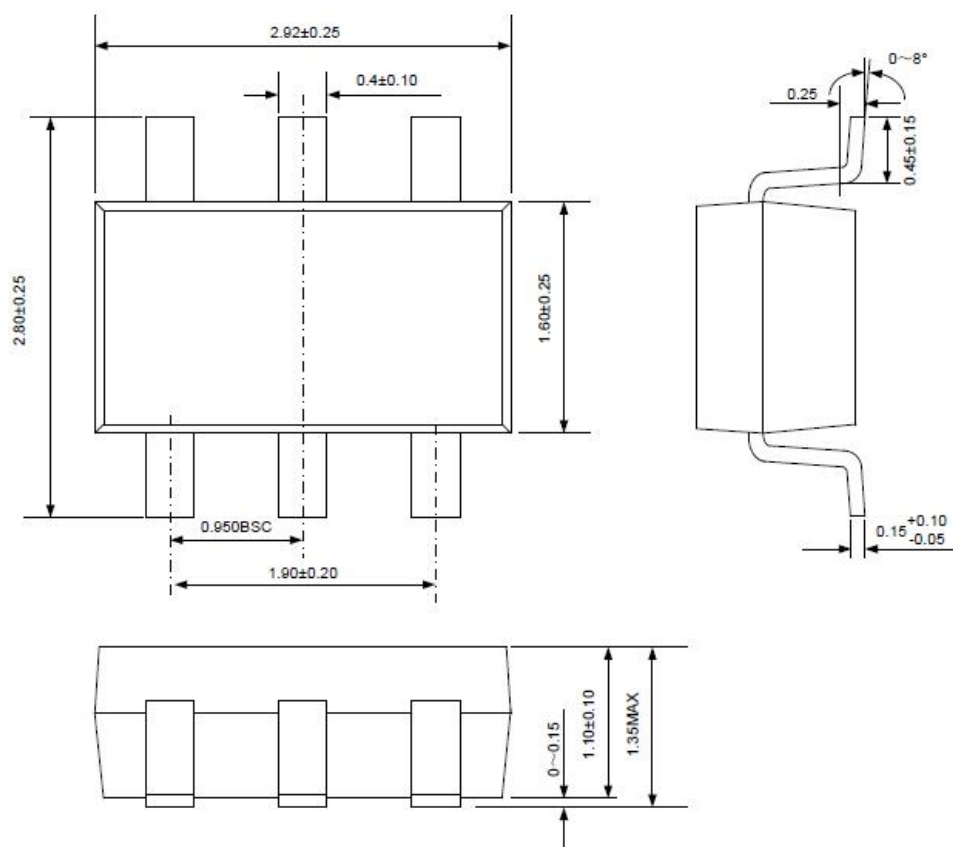


Fig3. Power Derating Curve



PACKAGE OUTLINE DIMENSIONS in millimeters:SOT23-6L



Disclaimer

Specifications are subject to change without notice.

The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.

Users should verify actual device performance in their specific applications.