

Features

- ◆ Ultra low leakage: nA level
- ◆ Low operating voltage:5V
- ◆ Low clamping voltage
- ◆ Complies with following standards:
 - IEC 61000-4-2 (ESD) immunity test
Air discharge: $\pm 25\text{kV}$
Contact discharge: $\pm 20\text{kV}$
 - IEC61000-4-5 (Lightning)6A (8/20 μs)
 - IEC61000-4-4 (EFT) 40A (5/50ns)
- ◆ ROHS Compliant

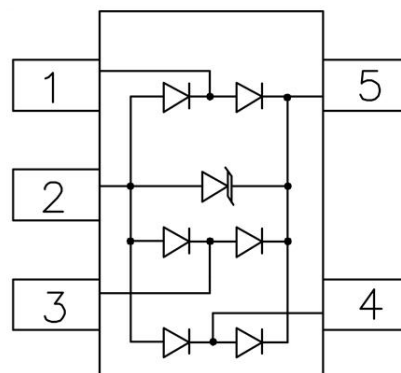
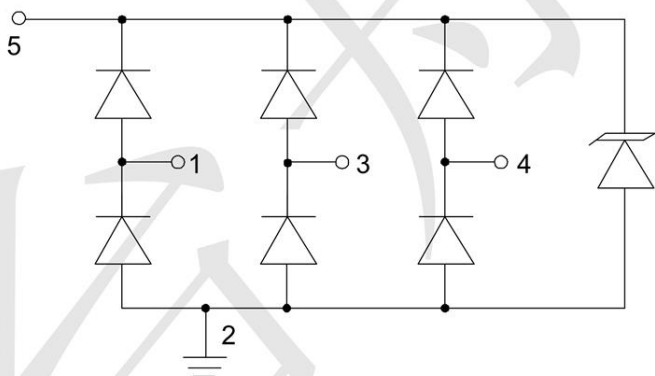
Mechanical Characteristics

- ◆ Package: SOT353(SC70-5)
- ◆ 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/7InchTape & Reel

Applications

- ◆ USB 2.0 and USB 3.0 Ports
- ◆ USB OTG
- ◆ Digital video interface(DVI)
- ◆ Monitor and Flat Panel Displays
- ◆ PCI Express and Serial SATA Ports
- ◆ Gigabit Ethernet
- ◆ IEEE 1394 firewire ports
- ◆ Consumer products (STB, DVD, DSC, DVC...)

Dimensions and Pin Configuration



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

Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20μs) (Vcc-GND)	P _{pk}	150	W
ESD per IEC61000-4-2 (Air)	V _{ESD}	±25	kV
ESD per IEC61000-4-2 (Contact)		±20	
Operating Temperature Range	T _J	-55 to +125	°C
Storage Temperature Range	T _{stg}	-55 to +150	°C

Electrical Characteristics (TA=25°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
Leakage Current	I _{Leak}			200	nA	V _{RWM} =5V
Clamping Voltage	V _C			15	V	I _{PP} =1A, T _p =8/20 μs
Clamping Voltage	V _C			25	V	I _{PP} =6A, T _p =8/20 μs
Junction Capacitance (I/O to GND)	C _J			1.0	pF	V _R =0V, f=1MHz,
Junction Capacitance (I/O to I/O)	C _J		0.5		pF	V _R =0V, f=1MHz,

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

Fig1. 8/20 μs Pulse Waveform

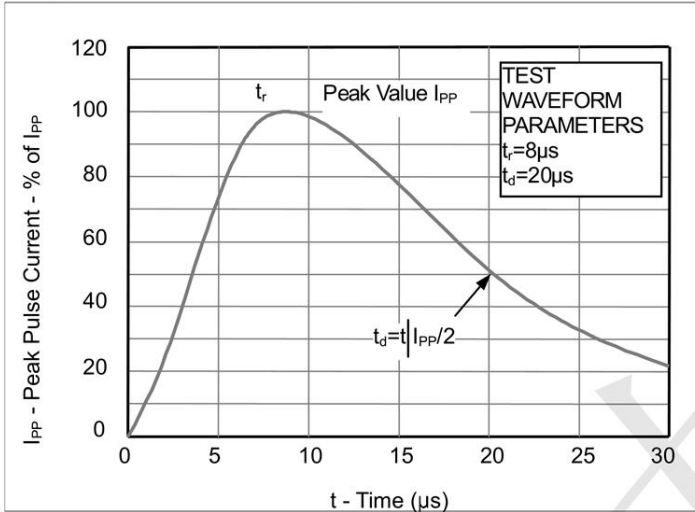


Fig2. ESD Pulse Waveform (according to IEC 61000-4-2)

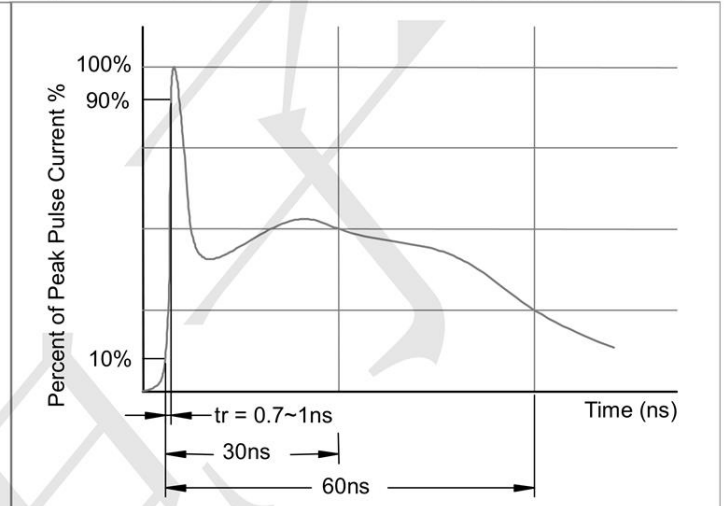


Fig3. Power Derating Curve

