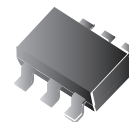


RoHS Device

Halogen Free

Features

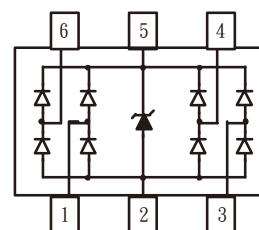
- Low operating voltage: 5V
- Ultra low capacitance: 0.7pF
- Solid-state silicon-avalanche and active circuit triggering technology
- Back-drive protection for power-down mode



SOT-363

Mechanical Characteristics

- SOT-363&SC-88 package
- Molding compound flammability rating: UL 94V-0
- Marking: Marking Code
- Packaging: Tape and Reel



Applications

- Video/Graphics Card
- Digital Visual Interface (DVI)
- USB2.0 Power and Data lines protection
- Notebook and PC Computers
- Monitors and Flat Panel Displays

IEC COMPATIBILITY (EN61000-4)

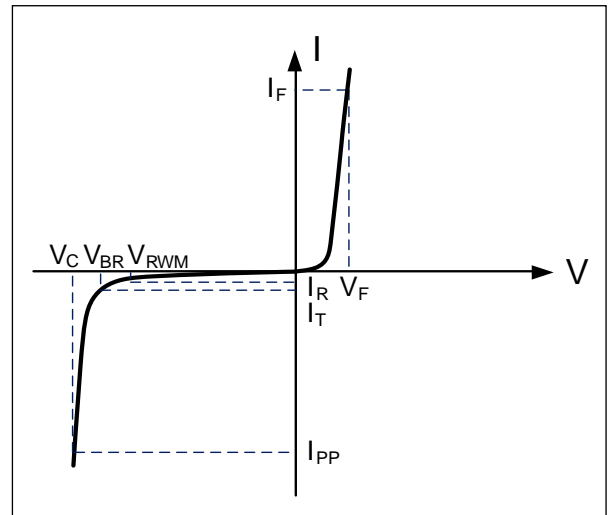
- IEC 61000-4-2 (ESD) ± 27 kV (air), ± 16 kV (contact)
- IEC 61000-4-4 (EFT) Level -3, 55A (5/50ns)
- IEC 61000-4-5 (Lightning) 6A (8/20us)

Absolute Maximum Rating

Rating	Symbol	Value	Units
Peak Pulse Power ($t_p = 8/20\mu s$)	P_{PP}	120	Watts
Peak Pulse Current ($t_p = 8/20\mu s$)	I_{pp}	6	A
Operating Temperature	T_J	-55 to + 85	$^{\circ}C$
Storage Temperature	T_{STG}	-55 to +150	$^{\circ}C$

Electrical Parameters (T=25°C)

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



Electrical Characteristics

Parameter	Symbol	Conditions	Minimum	Typical	Maximum	Units
Reverse Stand-Off Voltage	V_{RWM}	Pin5 to pin2 T=25°C			5.0	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1\text{mA}$ Pin 5 to pin2	6.0			V
Reverse Leakage Current	I_R	$V_{RWM}=5\text{V}$, T=25°C Pin 5 to pin2			5	μA
Forward Voltage	V_F	$I_T=10\text{mA}$		0.8	1	V
Clamping Voltage	V_C	$I_{PP}=6\text{A}$, $t_p=8/20\mu\text{s}$ I/O pin to GND		17.5	20	V
Junction Capacitance	C_j	$V_R=0\text{V}$, $f=1\text{MHz}$ I/O pin to GND		1.0	1.5	pF
		$V_R=0\text{V}$, $f=1\text{MHz}$ Between I/O pins		0.5		pF

Typical Characteristics

Figure 1: Peak Pulse Power vs. Pulse Time

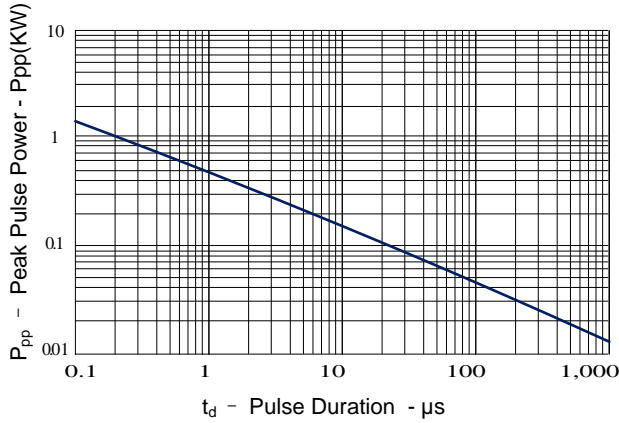


Figure 2: Power Derating Curve

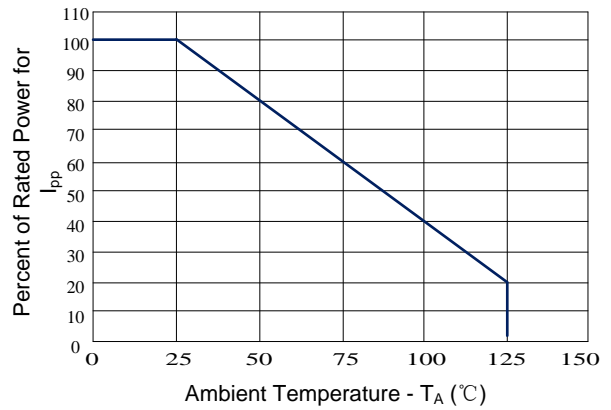


Figure 3: Pulse Waveform

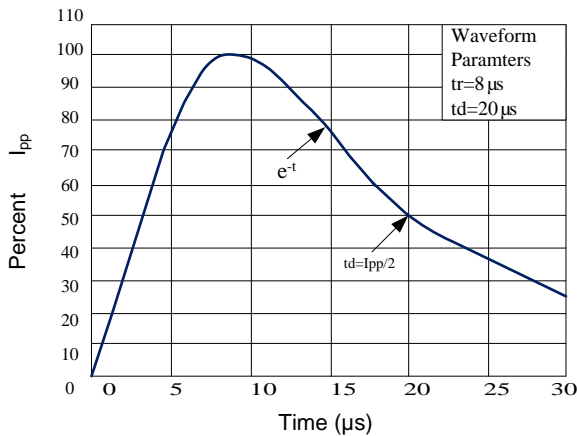


Figure 4: Clamping Voltage vs. Peak Pulse Current

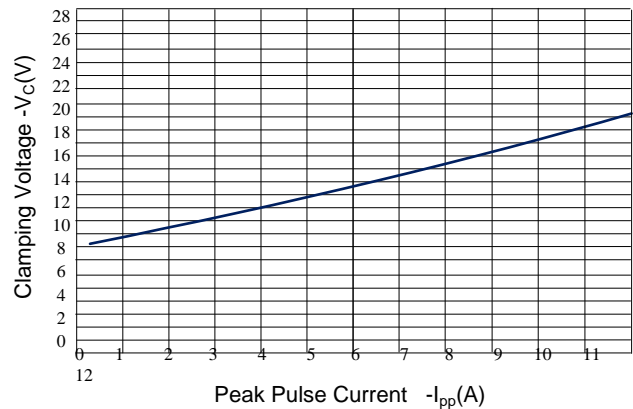


Figure 5: Capacitance vs. Reverse Voltage

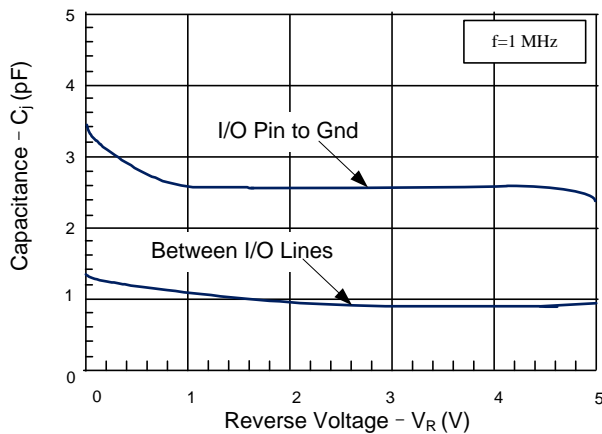
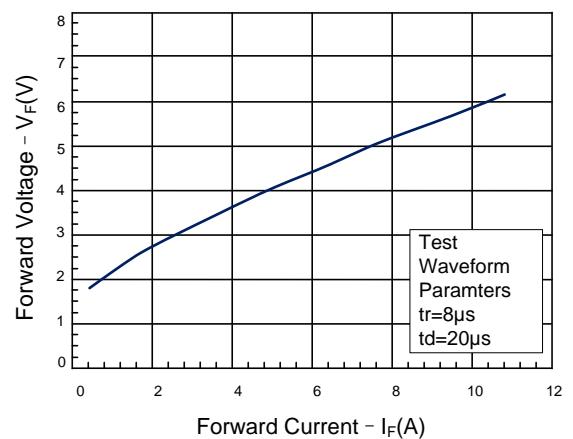


Figure 6: Forward Voltage vs. Forward Current



Outline Drawing – SOT-363

