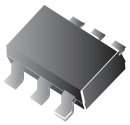
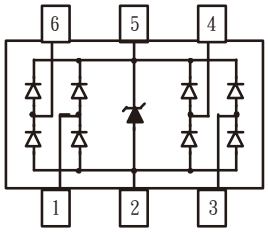
RoHS Device
Halogen Free

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 Powerand Data lines protection
- Notebook and PC Computers
- Monitors and Flat Panel Displays

IEC COMPA TIBILITY (EN61000-4)

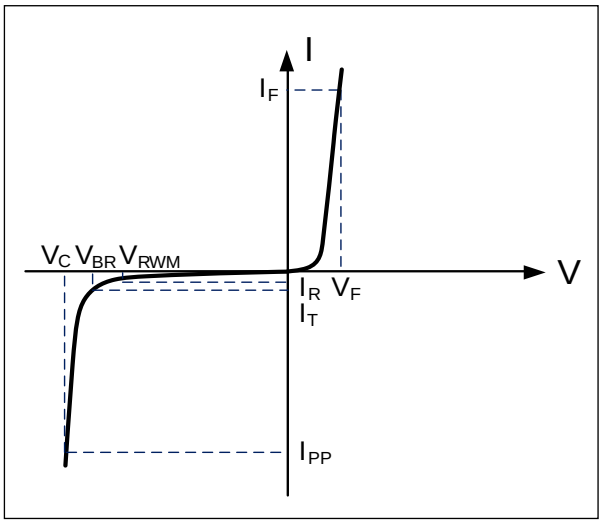
- IEC 61000-4-2 (ESD) ±27kV (air), ±16kV (contact)
- IEC 61000-4-4 (EFT) Level-3, 55A (5/50ns)
- IEC 61000-4-5 (Lightning) 6A (8/20us)

Absolute Maximum Rating

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

Electrical Parameters (T=25℃)

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=1mA Pin 5 to pin2	6.0			V
Reverse Leakage Current	I_R	V_{RWM}=5V, T=25°C Pin 5 to pin2			5	μA
Forward Voltage	V_F	I_T=10mA		0.8	1	V
Clamping Voltage	V_C	I_{PP}=6A, t_p=8/20μs I/O pin to GND		17.5	20	V
Junction Capacitance	C_j	V_R= 0V, f = 1MHz I/O pin to GND		1.0	1.5	pF
		V_R= 0V, f = 1MHz Between I/O pins		0.5		pF

Typical Characteristics

Figure 1: Peak Pulse Power vs. Pulse Time

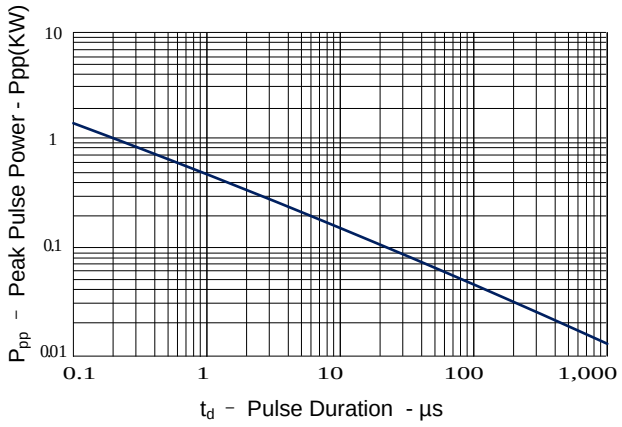


Figure 2: Power Derating Curve

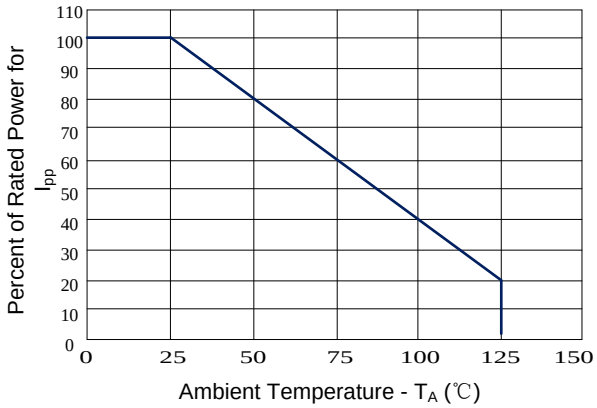


Figure 3: Pulse Waveform

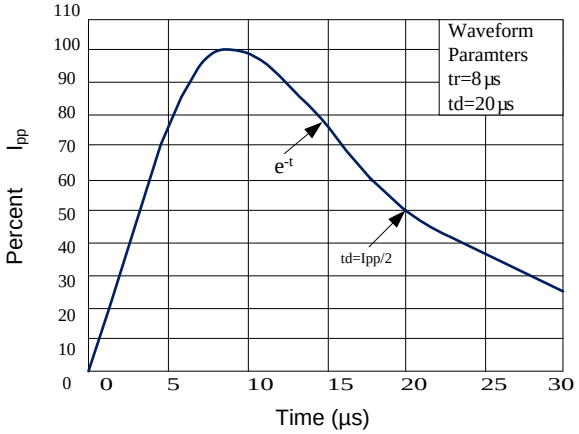


Figure 4: Clamping Voltage vs. Peak Pulse Current

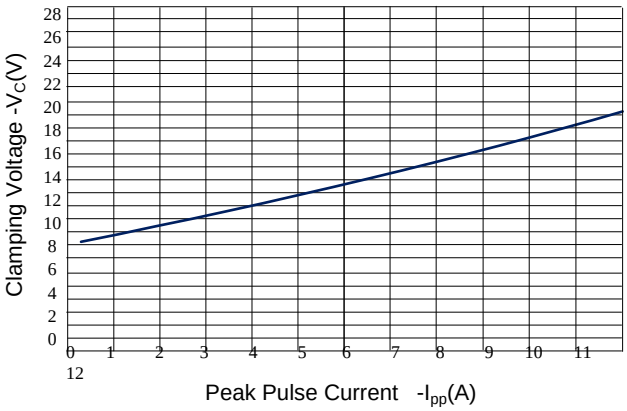


Figure 5: Capacitance vs. Reverse Voltage

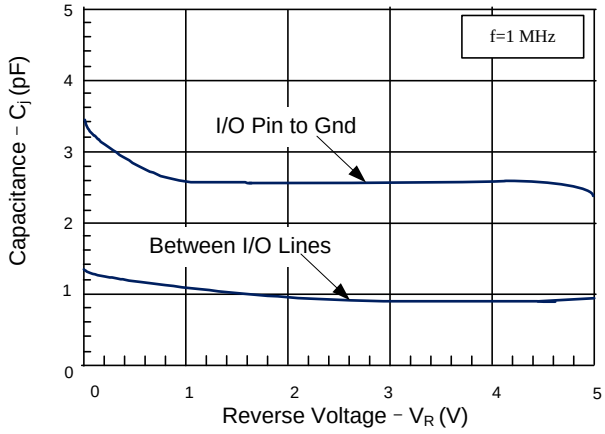
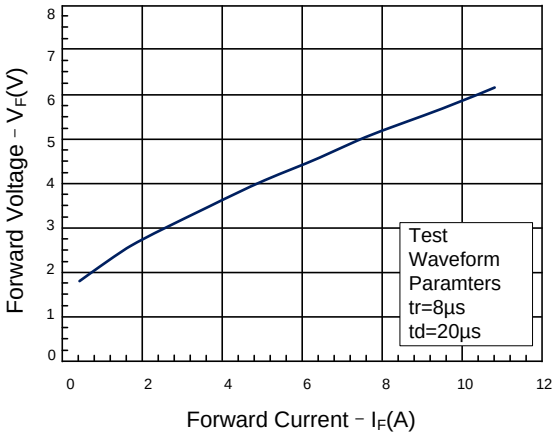
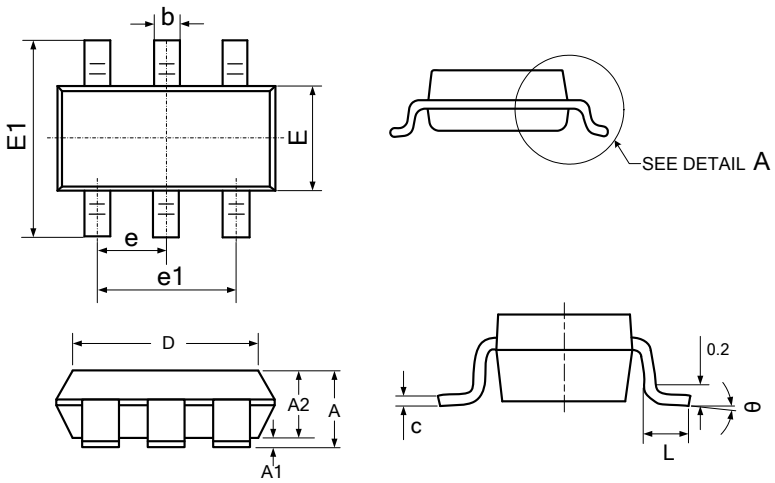


Figure 6: Forward Voltage vs. Forward Current

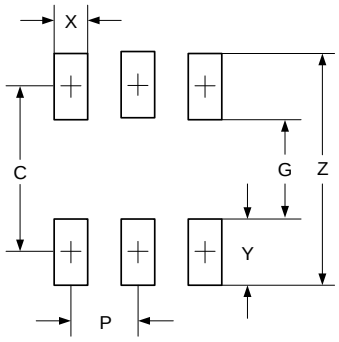


Outline Drawing – SOT-363

PACKAGE OUTLINE



DIMENSIONS				
SYMBOL	INCHES		MILLIMETER	
	MIN	MAX	MIN	MAX
A	0.041	0.049	1.050	1.250
A1	0.000	0.004	0.000	0.100
A2	0.041	0.045	1.050	1.150
D	0.111	0.119	2.820	3.020
E	0.059	0.067	1.500	1.700
E1	0.104	0.116	2.650	2.950
e	0.037(BSC)		0.950(BSC)	
e1	0.071	0.079	1.800	2.000
L	0.012	0.024	0.300	0.600
θ	0°	8°	0°	8°



DIMENSIONS		
DIM	INCHES	MILLIMETERS
Z	0.141	3.60
G	0.055	1.40
P	0.037	0.95
X	0.024	0.60
Y	0.043	1.10
C	(0.098)	(2.50)

Notes

THIS LAND PATTERN IS FOR REFERENCE PURPOSES ONLY. CONSULT YOUR MANUFACTURING GROUP TO ENSURE YOUR COMPANY'S MANUFACTURING GUIDELINES ARE MET.