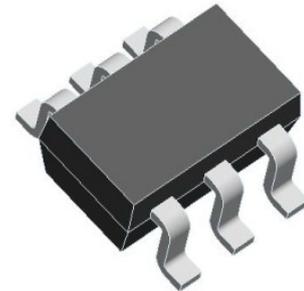


Features

- IEC 61000-4-2 Level 4 ESD Protection
 - $\pm 12\text{kV}$ Contact Discharge
 - $\pm 17\text{kV}$ Air Discharge
- 60W Peak pulse Power (8/20us)
- Low clamping voltage
- Working voltage: 5V
- Low leakage current
- RoHS compliant
- Protecting 4 unidirectional lines
- Ultra-low capacitance: 0.7pF Typ.

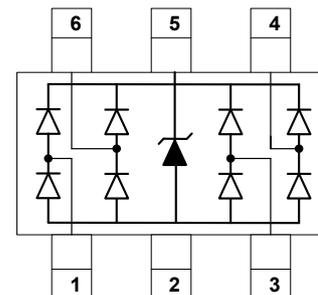


SOT-23-6

MARKING: V05

Applications

- Monitors and flat panel displays
- Set-top box and Digital TV
- Video graphics cards
- Digital Video Interface (DVI)
- Notebook Computers
- PCI Express and Serial SATA Ports



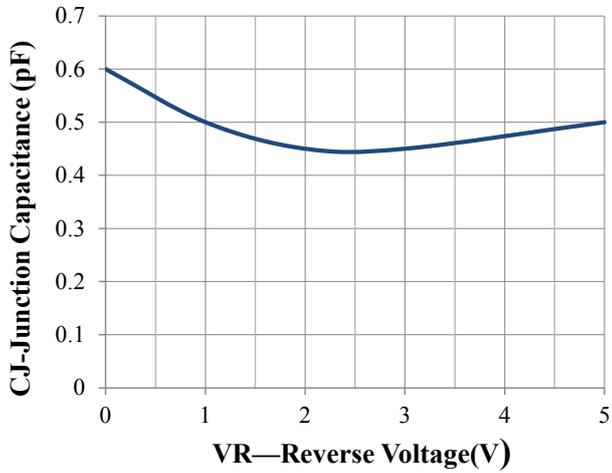
Absolute Maximum Ratings (TA=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20μs,I/O-GND)	Ppk	60	W
Peak Pulse Power (8/20μs,Vcc-GND)	Ppk	300	W
Peak Pulse Current (8/20μs,I/O-GND)	IPP	4.5	A
Peak Pulse Current (8/20μs,Vcc-GND)	IPP	17	A
ESD per IEC 61000-4-2 (Air)	V _{ESD,VDD}	±20	kV
ESD per IEC 61000-4-2 (Contact)	V _{ESD,I/O}	±15	
Operating Temperature Range	TJ	-55 to +125	°C
Storage Temperature Range	Tstg	-55 to +150	°C

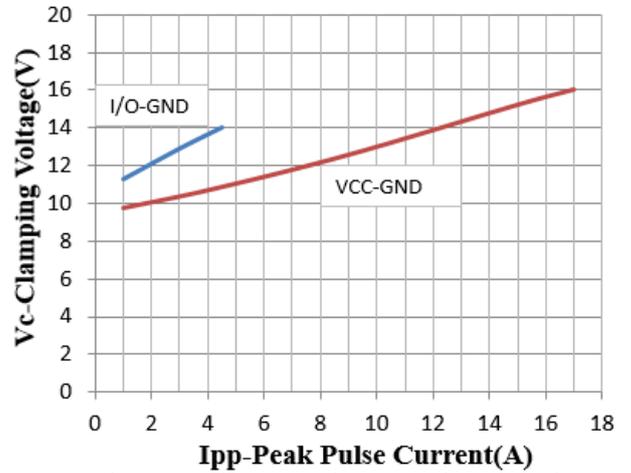
Electrical Characteristics (TA=25°C unless otherwise specified)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Working Voltage	V _{RWM}	Pin 5 to GND,I/O-GND			5.0	V
Breakdown Voltage	V _{BR}	I _T = 1mA(Pin 5 to GND,I/O-GND)	6.0	7.5	8.5	V
Reverse Leakage Current	I _R	V _{RWM} = 5.0V			0.5	μA
Forward Breakdown Voltage	V _F	I _F = 15mA,GND to Pin 5/IO		0.8	1.0	V
Clamping Voltage	V _C	IPP = 4.5A (8 x 20μs pulse, I/O to GND)		14.0	15.0	V
Clamping Voltage	V _C	IPP = 17A (8 x 20μs pulse,Pin 5 to GND)		16.0	18.0	V
Junction Capacitance	C _J	V _{pin5} = 5V, I/O=0V, f = 1MHz,I/O-GND		0.6	0.7	pF
Junction Capacitance	C _J	V _{pin5} = 5V, I/O=0V, f = 1MHz,I/O-I/O pins		0.3	0.4	pF

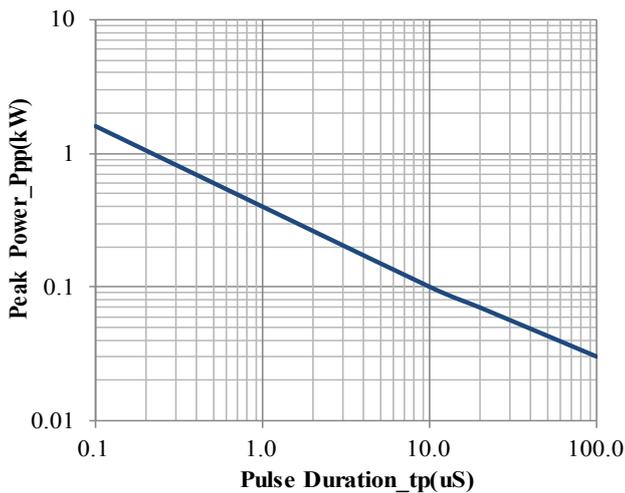
Typical Characteristics



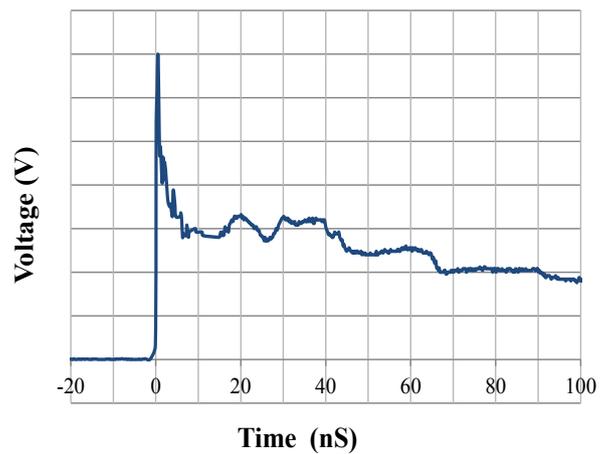
Junction Capacitance vs. Reverse Voltage



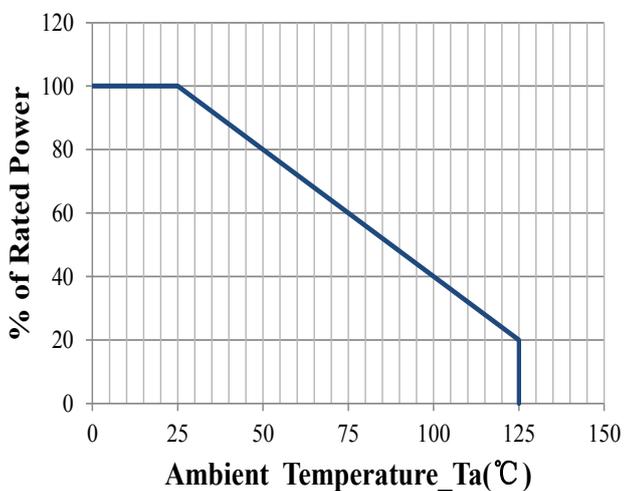
Clamping Voltage vs. Peak Pulse Current



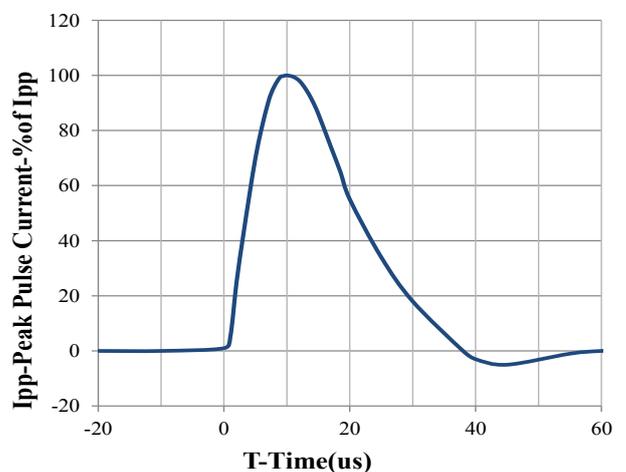
Peak Pulse Power vs. Pulse Time



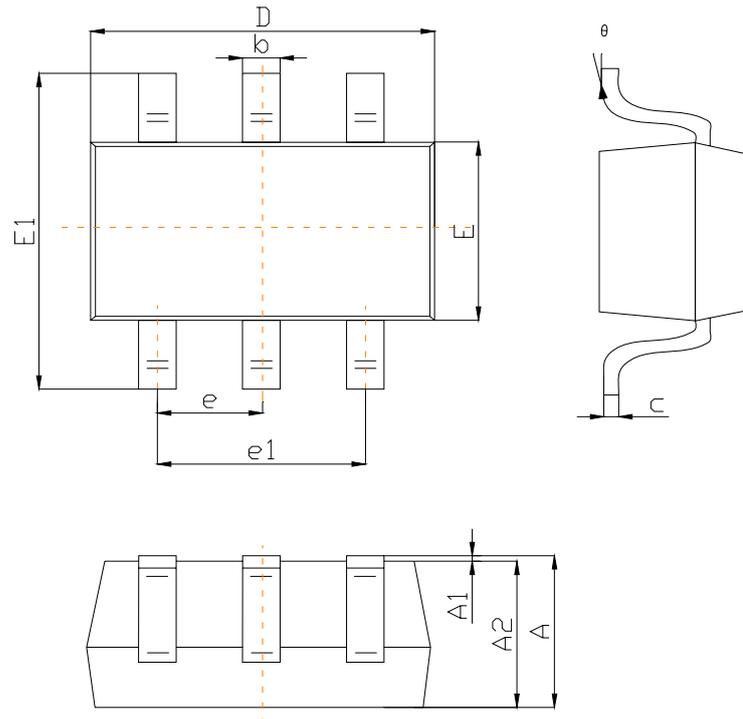
IEC61000-4-2 Pulse Waveform



Power Derating Curve



8 X 20us Pulse Waveform

SOT-23-6L PACKAGE OUTLINE DIMENSIONS


Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.050	1.250	0.041	0.049
A1	0.000	0.100		0.004
A2	1.050	1.150	0.041	0.045
b	0.300	0.500	0.012	0.020
c	0.100	0.200	0.004	0.008
D	2.820	3.020	0.111	0.119
E	1.500	1.700	0.059	0.067
E1	2.650	2.950	0.104	0.116
e	0,950(BSC)		0.037(BSC)	
e1	1.800	2.000	0.071	0.079
L	0.300	0.600	0.012	0.024
	0°	8°	0°	8°