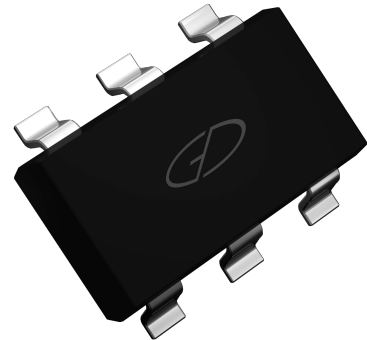


**Features**

- Low operating voltage: 5V
- Low capacitance: 0.7pF max (I/O to I/O)
- Solid-state silicon-avalanche and active circuit triggering technology
- Back-drive protection for power-down mode



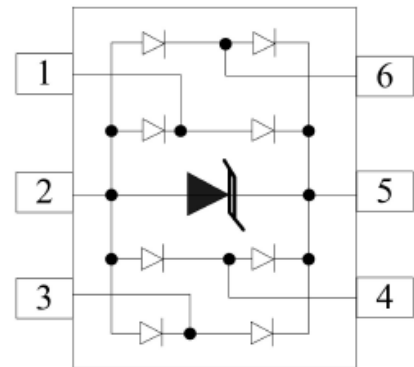
Package: SOT-23-6L

**IEC Compatibility (EN61000-4)**

- IEC 61000-4-2 (ESD) ±15kV (air), ±8kV (contact)
- IEC 61000-4-4 (EFT) Level-3,55A (5/50ns)
- IEC 61000-4-5 (Lightning) 7A (8/20µs)

**Mechanical Characteristics**

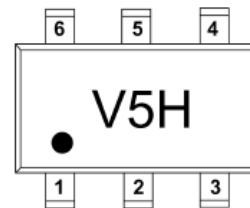
- SOT-23-6L package
- Molding compound flammability rating: UL 94V-0
- Marking: Marking Code
- Packaging: Tape and Reel
- RoHS Compliant



Schematic Diagram

**Applications**

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



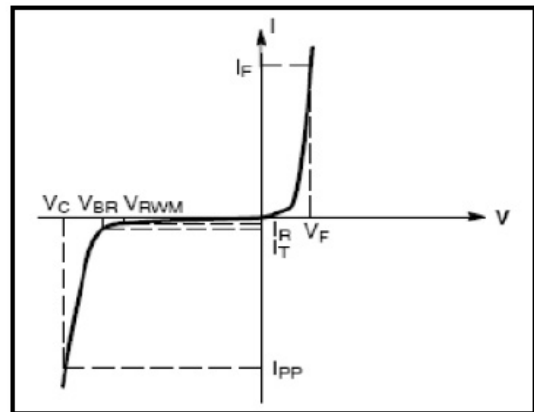
Marking Code

**Absolute Maximum Ratings** ( $T_A=25^{\circ}\text{C}$  unless otherwise specified)

Parameter	Symbol	Value	Units
Peak Pulse Power( $t_P = 8/20\mu\text{s}$ )	$P_{PP}$	120	W
Peak Pulse Current( $t_P = 8/20\mu\text{s}$ )	$I_{PP}$	7	A
Operating Temperature	$T_J$	-55 to +85	°C
Storage Temperature	$T_{STG}$	-55 to +150	

**Electrical Parameter**

Parameter	Symbol
Clamping Voltage @ $I_{PP}$	$V_C$
Peak Pulse Current	$I_{PP}$
Breakdown Voltage @ $I_T$	$V_{BR}$
Test Current	$I_T$
Reverse Leakage Current @ $V_{RWM}$	$I_R$
Reverse Standoff Voltage	$V_{RWM}$
Forward Voltage@ $I_F$	$V_F$
Forward Current	$I_F$



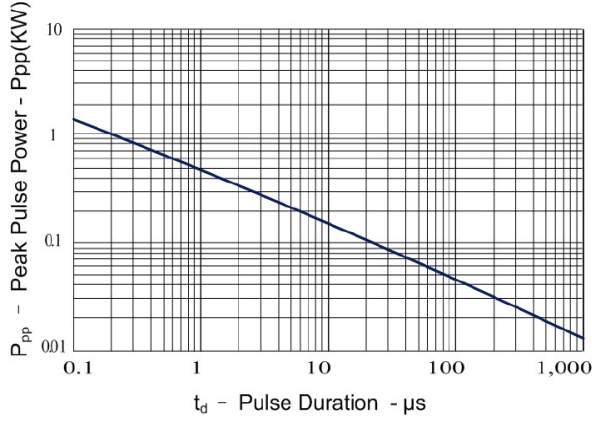
**V-I characteristics for a uni-directional TVS**

**Electrical Characteristics** ( $T_A=25^{\circ}\text{C}$  unless otherwise specified)

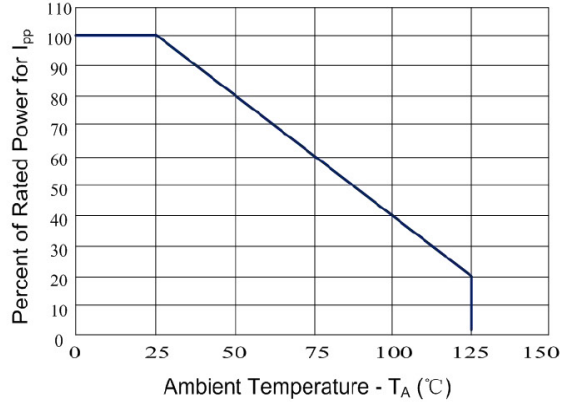
Parameter	Symbol	Test Condition	Value			Unit
			Min	Typ.	Max	
Reverse standoff voltage	$V_{RWM}$	Pin5 to pin2 $T=25^{\circ}\text{C}$	-	-	5	V
Breakdown voltage	$V_{BR}$	$I_T=1\text{mA}$ , Pin 5 to pin2	6	-	-	V
Reverse leakage current	$I_R$	$V_{RWM}=5\text{V}$ , $T=25^{\circ}\text{C}$ Pin 5 to pin2	-	-	5	$\mu\text{A}$
Clamping voltage	$V_C$	$I_{PP}=7\text{A}$ , $t_P=8/20\mu\text{s}$ I/O pin to GND	-	14.5	17.5	V
Forward voltage	$V_F$	$I_T=10\text{mA}$	-	0.8	1	V
Junction capacitance	$C_J$	$V_R=0\text{V}$ , $f=1\text{MHz}$ , I/O to GND	-	-	1.5	pF
		$V_R=0\text{V}$ , $f=1\text{MHz}$ , I/O to I/O	-	-	0.7	

**Ratings and Characteristic Curves**

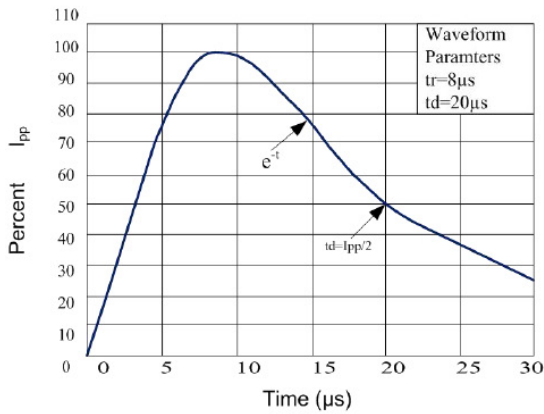
**Figure 1: Peak Pulse Power vs. Pulse Time**



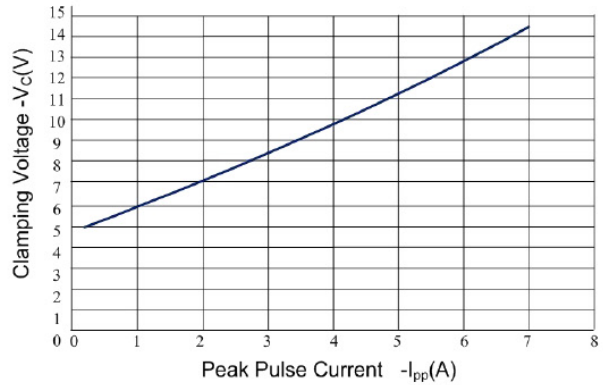
**Figure 2: Power Derating Curve**



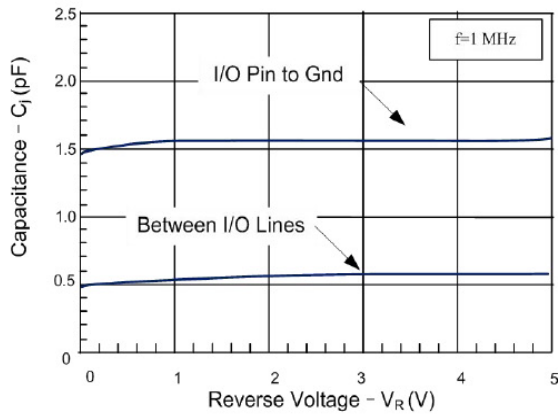
**Figure 3: Pulse Waveform**



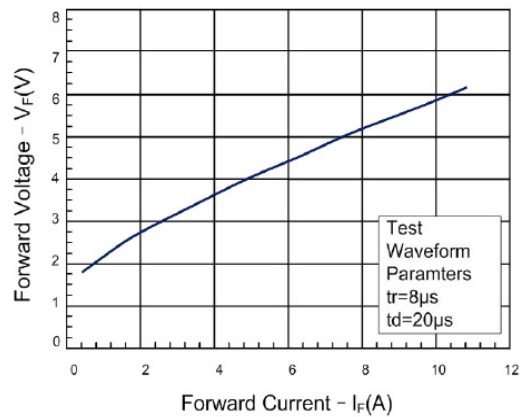
**Figure 4: Clamping Voltage vs. Peak Pulse Current**



**Figure 5: Capacitance vs. Reverse Voltage**

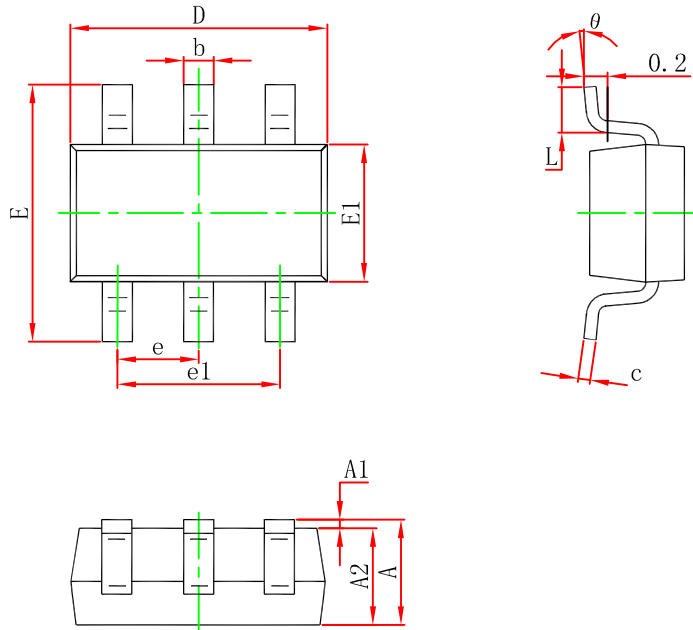


**Figure 6: Forward Voltage vs. Forward Current**



**Package Outline Dimensions**

SOT-23-6L



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	0.000	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
E1	1.500	1.700	0.059	0.067
E	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
θ	0°	8°	0°	8°