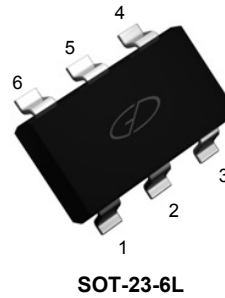
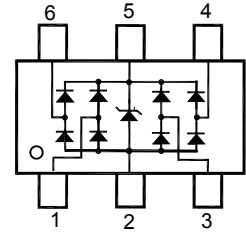


**Features**

- Low clamping voltage
- Low capacitance



SOT-23-6L



Schematic Diagram

1. I/O1 2. GND 3. I/O2  
4. I/O3 5. V<sub>CC</sub> 6. I/O4

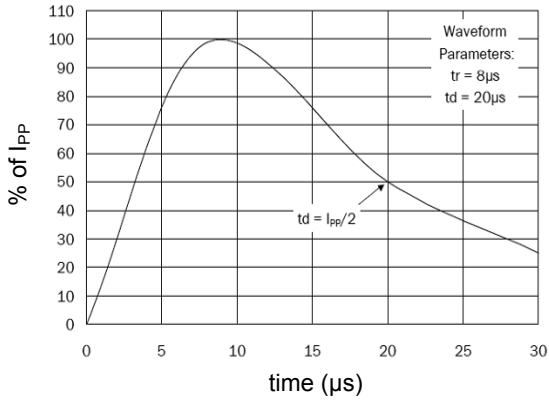
**Absolute Maximum Ratings** (T<sub>A</sub>=25°C unless otherwise specified)

Parameter	Symbol	Max.	Unit
Peak Pulse Power (T <sub>P</sub> =8/20μS)	P <sub>PK</sub>	300	W
ESD per IEC 61000-4-2 (Air)	V <sub>ESD</sub>	±30	kV
ESD per IEC 61000-4-2 (Contact)			
Peak Pulse Current (T <sub>P</sub> =8/20μS)	I <sub>PP</sub>	12	A
Operation Junction Temperature Range	T <sub>J</sub>	-55 to +125	°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150	°C

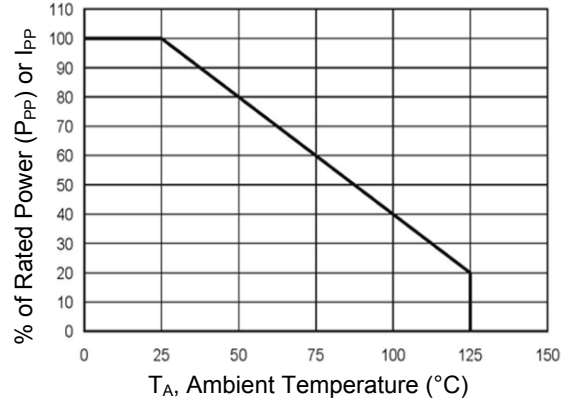
**Electrical Characteristics** (T<sub>A</sub>=25°C unless otherwise specified)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Reverse Stand-Off Voltage, @ Pin 5 to 2	V <sub>RWM</sub>	-	-	-	5	V
Reverse Breakdown Voltage, @ Pin 5 to 2	V <sub>(BR)R</sub>	I <sub>T</sub> =1mA	6	-	-	V
Reverse Current, @ Pin 5 to 2	I <sub>R</sub>	V <sub>RWM</sub> =5V	-	-	5	μA
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =15mA	-	-	1.2	V
Clamping Voltage, @ Any I/O Pin to Ground	V <sub>C</sub>	I <sub>PP</sub> =1A, T <sub>P</sub> =8/20μS	-	-	12.5	V
		I <sub>PP</sub> =5A, T <sub>P</sub> =8/20μS	-	-	17.5	
		I <sub>PP</sub> =12A, T <sub>P</sub> =8/20μS	-	-	25	
Junction Capacitance, @ Any I/O Pin to Ground	C <sub>J</sub>	V <sub>R</sub> =0V, f=1MHz	-	-	5	pF
Junction Capacitance, @ Between I/O Pins			-	0.7	-	

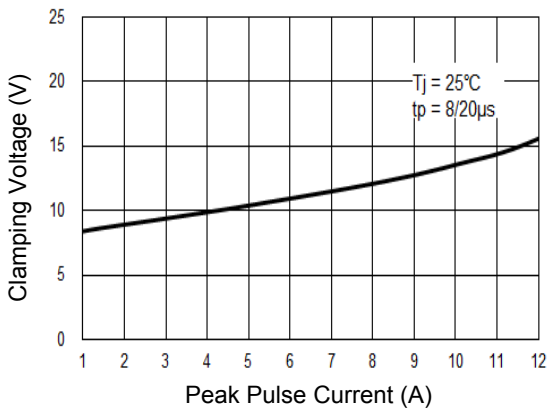
**Typical Characteristic Curves**



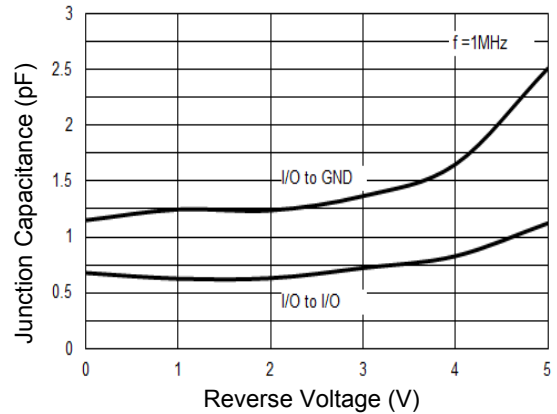
**Figure 1. Pulse Waveform**



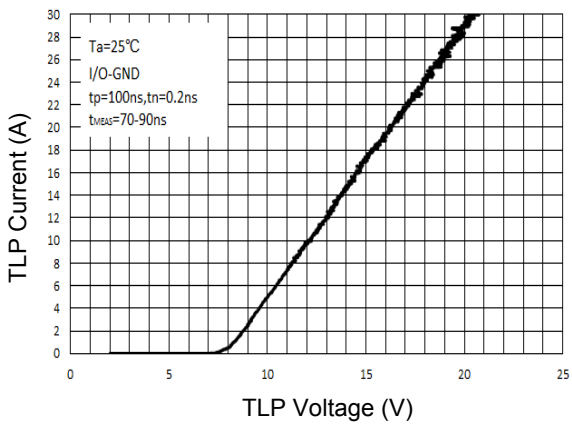
**Figure 2. Pulse Derating Curve**



**Figure 3. Clamping Voltage Curve**

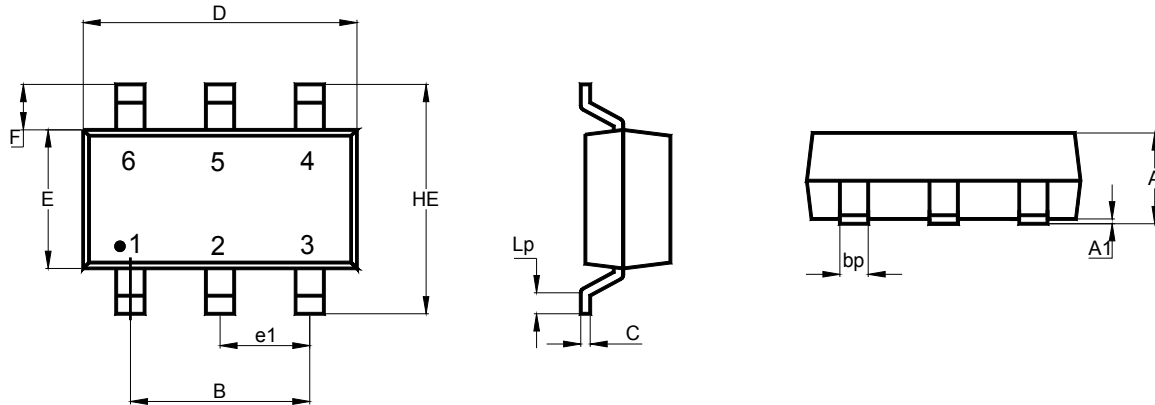


**Figure 4. Junction Capacitance**



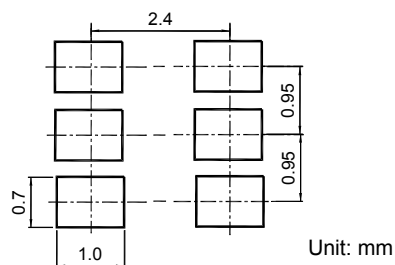
**Figure 5. TLP Curve**

**Package Outline Dimensions (SOT-23-6L)**



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.000	1.200	0.039	0.047
A1	0.000	0.100	0.000	0.004
B	1.700	2.100	0.067	0.083
C	0.080	0.200	0.003	0.008
D	2.700	3.100	0.106	0.122
E	1.300	1.700	0.051	0.067
e1	0.950 TYP.		0.037 TYP.	
F	0.600	0.650	0.024	0.026
HE	2.600	3.000	0.102	0.118
Lp	0.200	0.600	0.008	0.024
bp	0.300	0.500	0.012	0.020

**Recommended Pad Layout**



**Order Information**

Device	Package	Marking	Carrier	Quantity
GSER5U007	SOT-23-6L	V5	Tape & Reel	3,000pcs / Reel