

Features

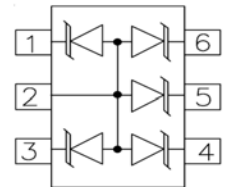
- 25W peak pulse power per line (TP=8/20μs)
- Protects up to 5 lines
- Working voltage: 5V
- Low clamping voltage
- Low leakage current
- Complies with following standards
 IEC 61000-4-2(ESD) ±16 KV(air), ±16KV(contact)
 IEC 61000-4-5 (Lightning) 1.8A (8/20μs)



SOT-563

Applications

- Audio Players
- Peripherals
- Printers
- Desktops PC, Laptops and Servers
- Microprocessor Based Equipment
- Cell Phone Handsets and Accessories
- Set Top Box



Schematic Diagram

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

Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20μs)	P _{PK}	25	W
Peak Pulse Current (8/20μs)	I _{PP}	1.8	A
ESD per IEC 61000-4-2 (Air)	V _{ESD}	±16	kV
ESD per IEC 61000-4-2 (Contact)		±16	
Operating Temperature Range	T _J	-55 to +125	°C
Storage Temperature Range	T _{stg}	-55 to +150	°C

Electrical Characteristics Per Line (T_A=25°C unless otherwise specified)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Working Voltage	V _{RWM}	-	-	-	5	V
Breakdown Voltage	V _{BR}	I _T = 1mA	6	-	8.5	V
Reverse Leakage Current	I _R	V _{RWM} = 5V	-	-	0.2	μA
Clamping Voltage	V _C	I _{PP} = 1A	-	-	10	V
		I _{PP} = 1.8A	-	-	12	V
Junction Capacitance	C _J	V _R = 0V, f = 1MHz	-	8.3	-	pF

Typical Characteristic Curves ($T_A=25^\circ\text{C}$ unless otherwise specified)

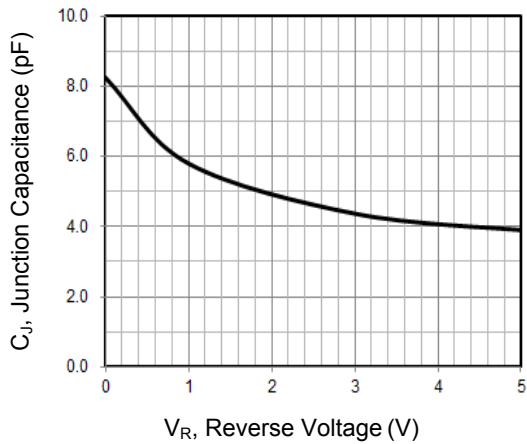


Figure 1. Junction Capacitance vs. Reverse Voltage

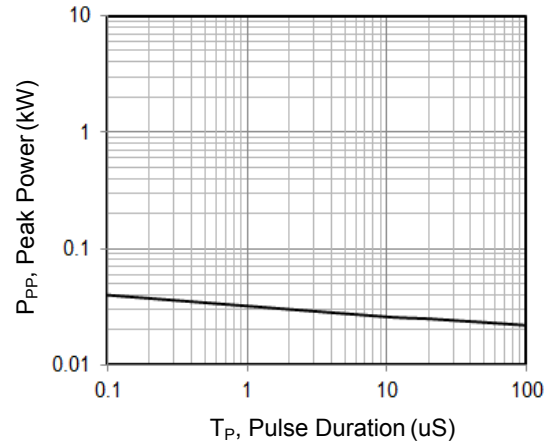


Figure 2. Peak Pulse Power vs. Pulse Time

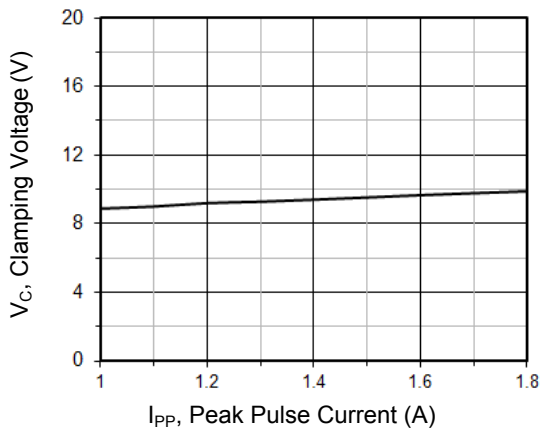


Figure 3. Clamping Voltage vs. Peak Pulse Current

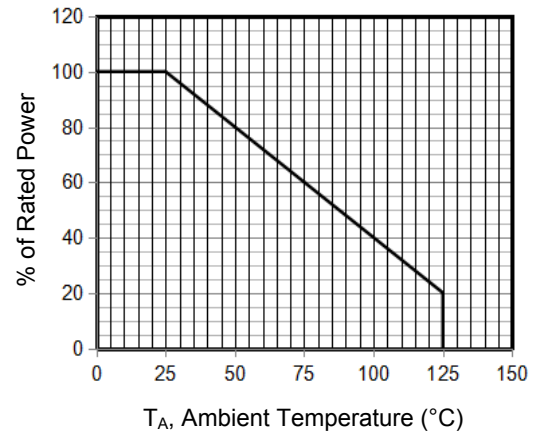


Figure 4. Power Derating Curve

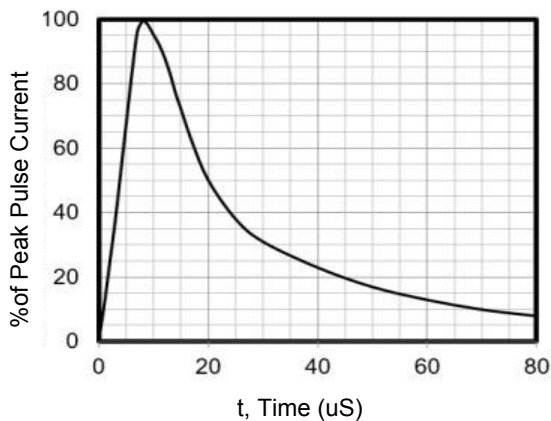


Figure 5. 8x20 μs Pulse Waveform

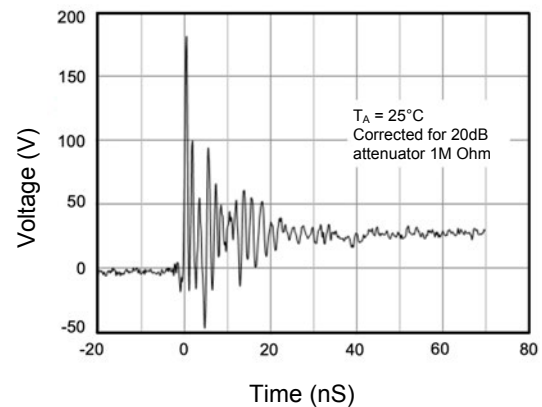
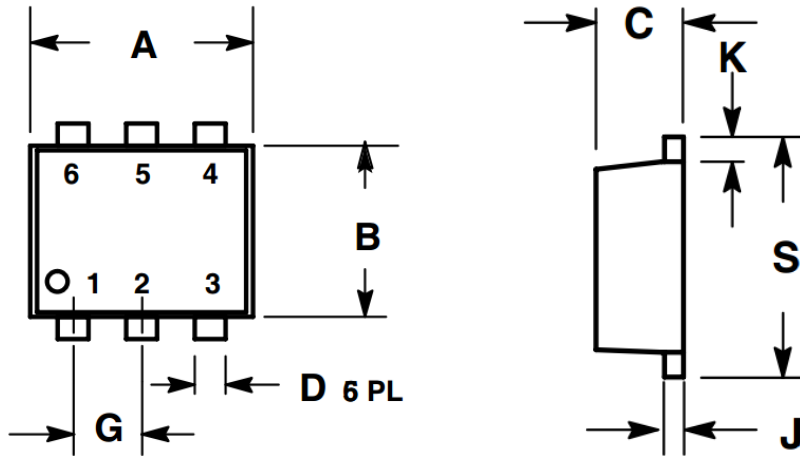


Figure 6. ESD Clamping Voltage 8 kV Contact per IEC61000-4-2

Package Outline Dimensions (SOT-563)



Symbol	Dimensions in Millimeters		Dimensions in Inches	
	Min	Max	Min	Max
A	1.50	1.70	0.059	0.067
B	1.10	1.30	0.043	0.051
C	0.50	0.60	0.020	0.024
D	0.17	0.27	0.007	0.011
G	0.50 BSC		0.020 BSC	
J	0.08	0.18	0.003	0.007
K	0.10	0.30	0.004	0.012
S	1.50	1.70	0.059	0.067

Order Information

Device	Package	Marking	Quantity	Carrier
GSEJ5U83	SOT-563	US6L	3,000 pcs / Reel	Tape & Reel