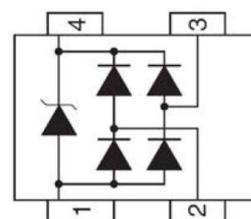


Features

- 100 Watts Peak Pulse Power ($T_p = 8/20\mu s$)
- Uni-directional Configuration
- Solid-state Silicon-avalanche Technology
- Low Clamping Voltage
- Low Leakage Current
- ESD Protection for High-Speed Data Lines to:
 IEC 61000-4-2 $\pm 8KV$ Contact $\pm 15KV$ air
 IEC 61000-4-4 (EFT) 40A (5/50ns)
 IEC 61000-4-5 (Lightning) 6.5A (8/20 μs)



SOT-143



Schematic Diagram

Applications

- Ethernet - 10/100 Base T
- FireWire
- Wireless Communications
- USB Interface

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

Parameter	Symbol	Value	Unit
Peak Pulse Power ($T_p=8/20\mu s$)	P_{PP}	100	W
Peak Pulse Current ($T_p=8/20\mu s$)	I_{PP}	6.5	A
Junction Temperature	T_J	-55 To +125	$^\circ C$
Storage Temperature	T_{STG}	-55 To +150	$^\circ C$

Electrical Characteristics ($T_A=25^\circ C$ unless otherwise specified)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Reverse Stand-off Voltage	V_{RWM}	-	-	-	5.0	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	6.0	-	-	V
Reverse Leakage Current	I_R	$V_R=5V$	-	-	1.0	μA
Clamping Voltage (SURGE)	V_C	$I_{PP}=6.5A, T_p=8/20\mu s$	-	16.0	17.8	V
Junction Capacitance	C_J	$V_R=0V, f=1MHz, I/O$ to I/O	-	0.4	0.6	pF
	C_J	$V_R=0V, f=1MHz, I/O$ to GND	-	0.8	1.0	pF

Typical Characteristic Curves

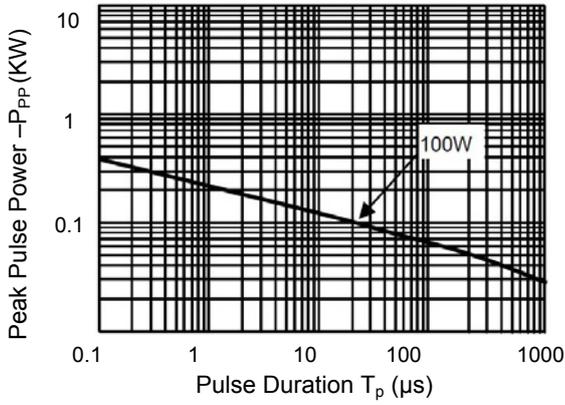


Figure 1. Peak Pulse Power Rating Curve

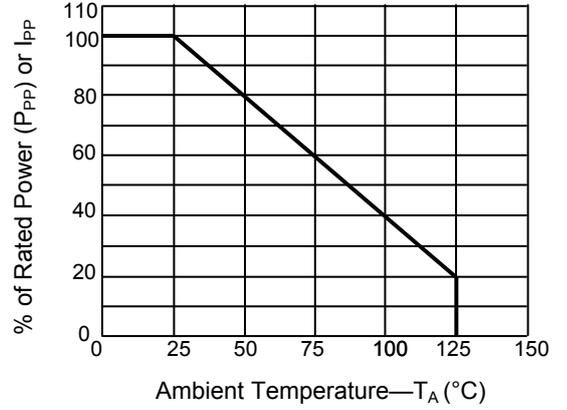


Figure 2. Pulse Derating Curve

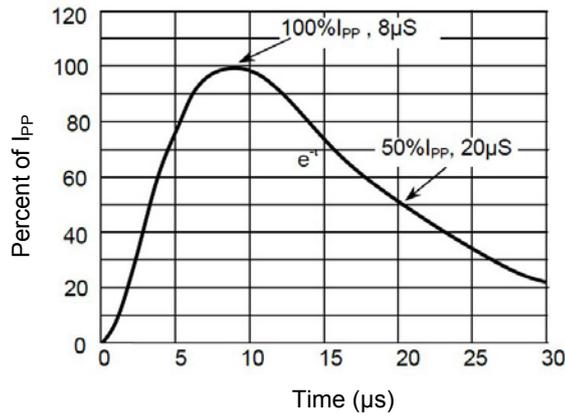


Figure 3. Pulse Waveform- 8/20 μs

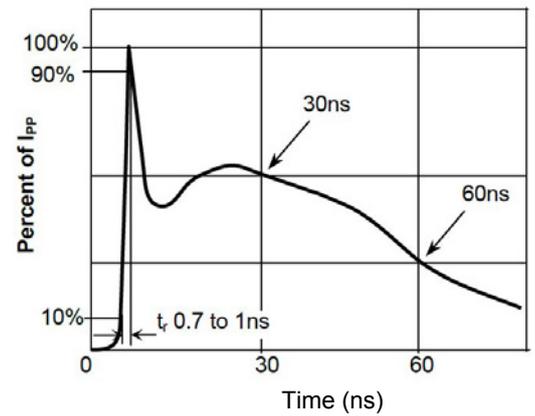
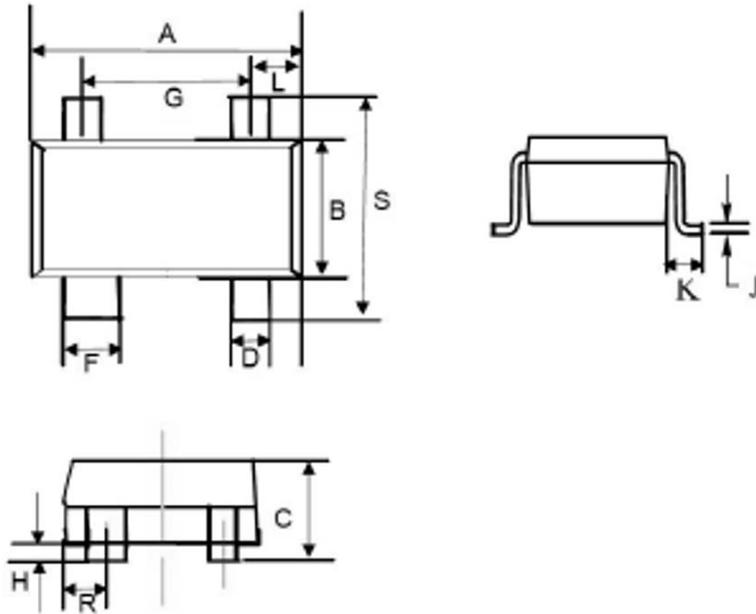


Figure 4. Pulse Waveform-ESD (IEC6100-4-2)

Product Dimensions (SOT-143)



DIM	MILIMETERS	
	MIN	MAX
A	2.80	3.04
B	1.20	1.39
C	0.84	1.14
D	0.39	0.50
F	0.79	0.93
G	1.78	2.03
H	0.013	0.10
J	0.08	0.15
K	0.46	0.60
L	0.445	0.60
R	0.72	0.83
S	2.11	2.48

Order Information

Device	Package	Marking	Carrier	Quantity	HSF Status
GSELP5U008	SOT-143	E5R	Tape & Reel	3000pcs/Reel	RoHS Compliant