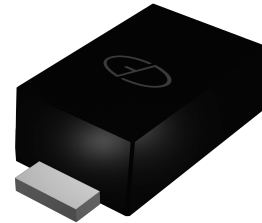


Features

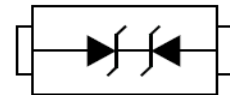
- 5A Peak pulse current per line ($t_p = 8/20\mu s$)
- SOD-923 package
- Bidirectional configurations
- Response time is typically $< 1ns$
- Low clamping voltage
- RoHS compliant
- Transient protection for data lines to IEC61000-4-2(ESD) $\pm 15kV$ (air), $\pm 8kV$ (contact)



SOD-923

Mechanical Characteristics

- Lead finish: 100% matte Sn(Tin)
- Mounting position: Any
- Qualified max reflow temperature: 260°C



Schematic Diagram

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

Parameter	Symbol	Value	Unit
Peak Pulse Current ($t_p = 8/20\mu s$)	I_{PP}	5	A
Junction Temperature	T_J	-45 to +125	°C
Storage temperature	T_{STG}	-45 to +125	°C

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

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Reverse stand-off Voltage	V_{RWM}	-	-	-	3.3	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	4.0	-	6.8	V
Reverse Leakage Current	I_R	$V_{RWM}=3.3V$	-	-	1.0	μA
Clamping Voltage	V_C	$I_{PP}=3A, T_p=8/20\mu s$	-	-	12	V
Junction Capacitance	C_J	$V_R=0V, f=1MHz$	-	8.0	20	pF

Typical Characteristic Curves

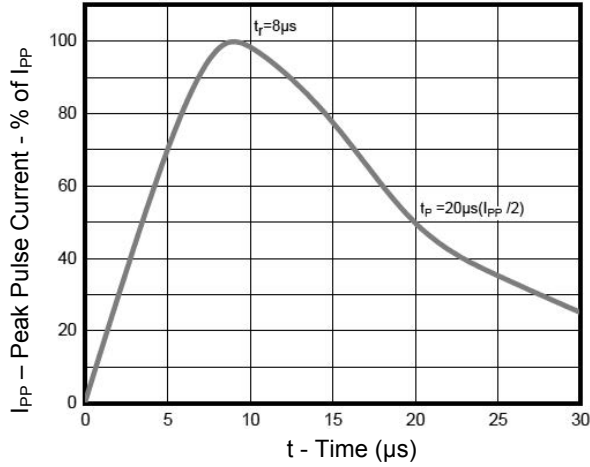


Figure 1. Pulse Waveform-8/20 μs

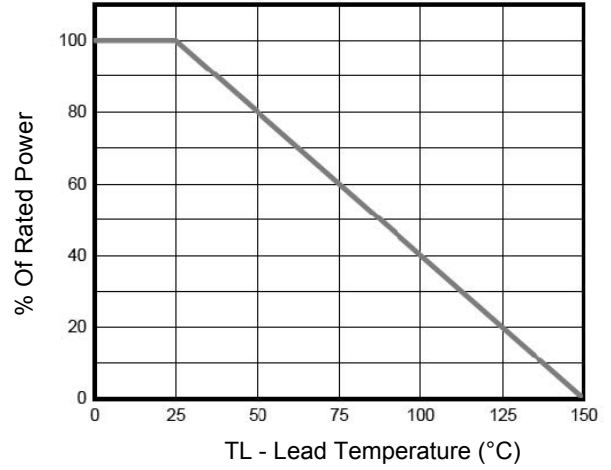


Figure 2. Power Derating Curve

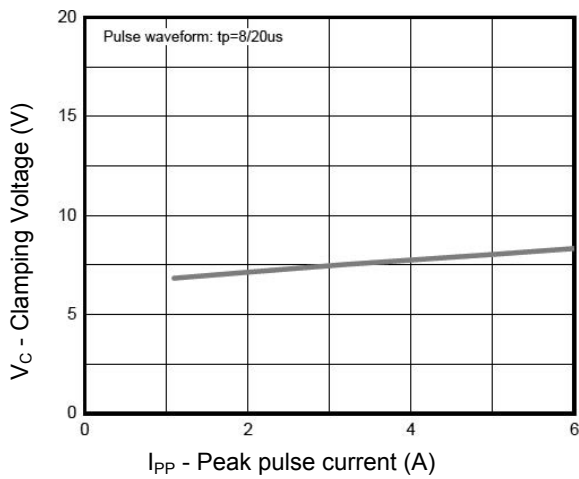


Figure 3. Clamping voltage vs. Peak pulse current

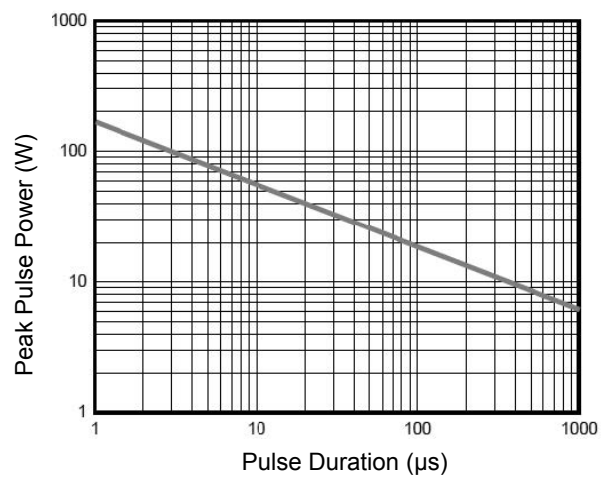
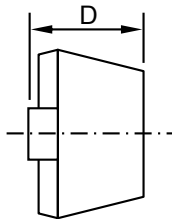
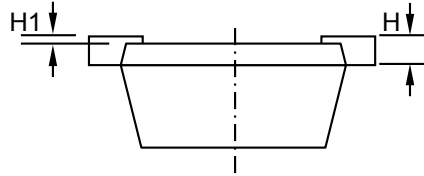
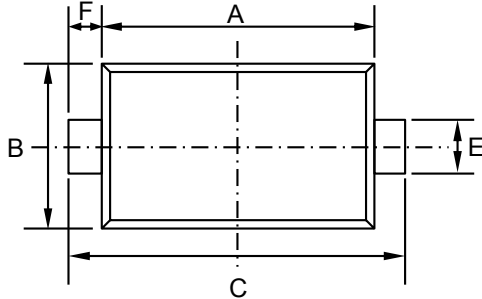


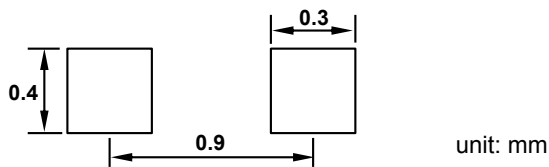
Figure 4. Non Repetitive Peak Pulse Power vs. Pulse time

Package Outline Dimensions (SOD-923)



SOD-923 (unit: mm)		
Dim.	Min.	Max.
A	0.75	0.85
B	0.55	0.65
C	0.90	1.10
D	0.35	0.43
E	0.15	0.25
F	0.05	0.15
H	0.07	0.17
H1	0.00	0.05

Recommended Pad Layout



Order Information

Device	Package	Marking Code	Carrier	Quantity	HSF Status
GSEM3B200	SOD-923	3B	Tape & Reel	8000/Reel	RoHS Compliant