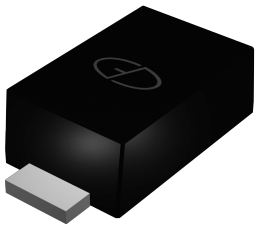
GSEM3B200
ESD Protection Diode

Features

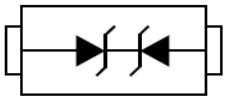
- 5A Peak pulse current per line (t_P = 8/20μs)
- SOD-923 package
- Bidirectional configurations
- Response time is typically < 1ns
- Low clamping voltage
- RoHS compliant
- Transient protection for data lines to IEC61000-4-2(ESD)±15kV(air), ±8kV(contact)



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°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Current (t_P = 8/20μS)	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°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=8/20μS	-	-	12	V
Junction Capacitance	C_J	V_R=0V, f=1MHz	-	8.0	20	pF

Typical Characteristic Curves

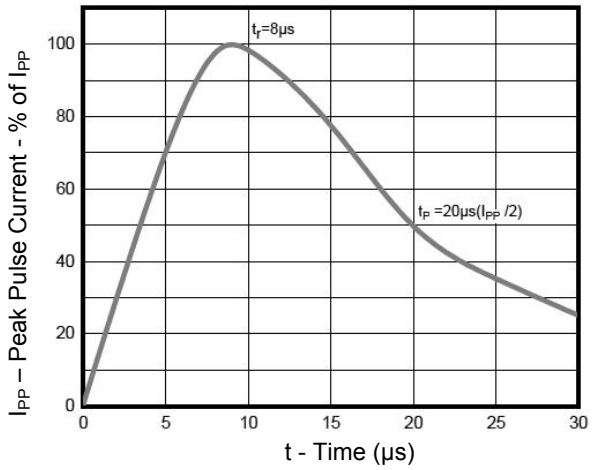


Figure 1. Pulse Waveform-8/20 μs

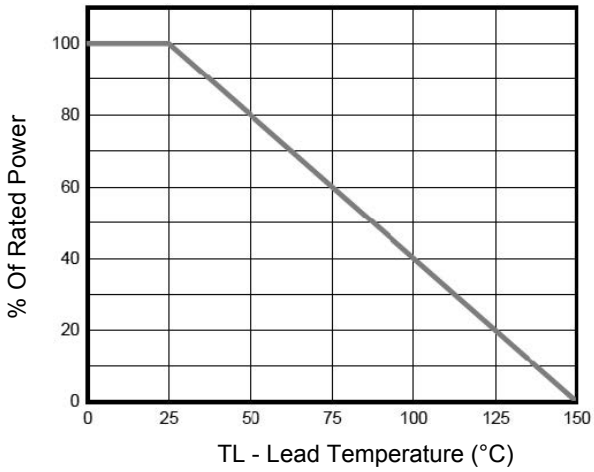


Figure 2. Power Derating Curve

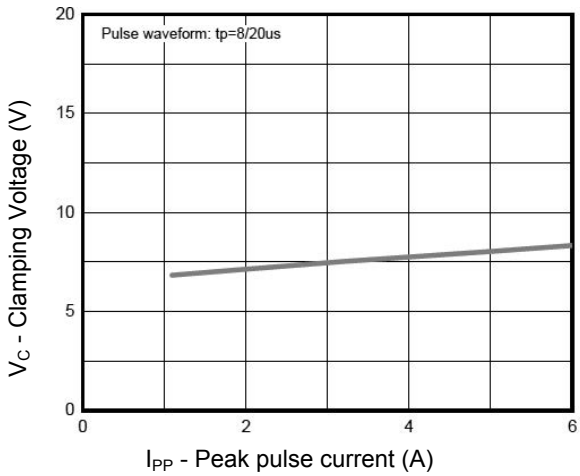


Figure 3. Clamping voltage vs. Peak pulse current

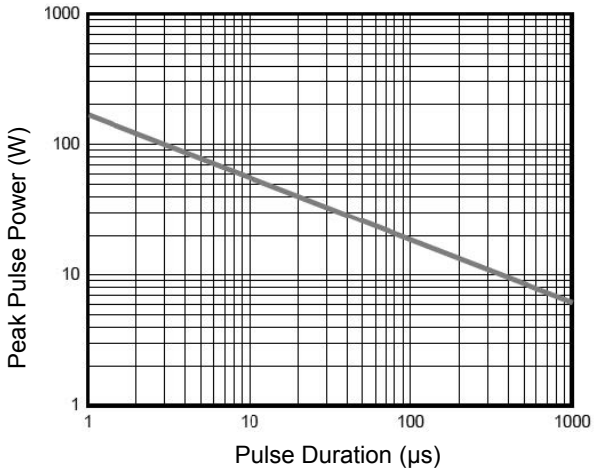
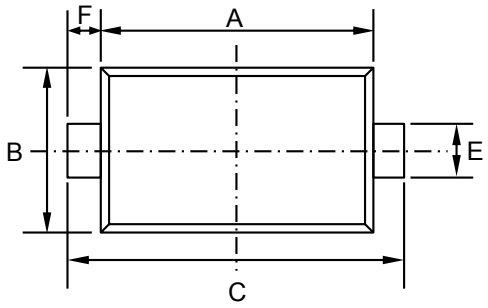
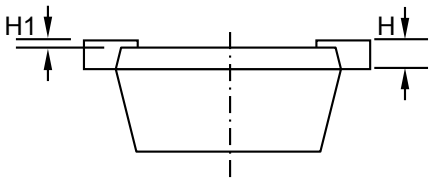
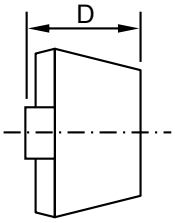


Figure 4. Non Repetitive Peak Pulse Power vs. Pulse time

Package Outline Dimensions (SOD-923)

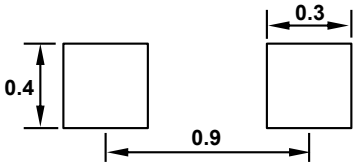






SOD-923 (unit：mm)		
Dim.	**Min.**	**Max.**
A	0.75	0.85
B	0.55	0.65
C	0.90	1.10
D	0.35	0.43
E	0.15	0.25
F	0.05	0.15
H	0.07	0.17
H1	0.00	0.05

Recommended Pad Layout



unit: mm

Order Information

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

Unikeyic Electronics

Global Electronic Components Distributor

Click to view pricing, inventory, delivery, and lifecycle information:

GOOD-ARK:

BC807-40 BZX84C3V3 GS2M GSFH5020 MMBT4401 MMBT619 SMBJ100CA 1N758A BZT52B4V3S HS2MA MUR1040CT SB240 SK3C0B SMCJ33A FS2BH GSFA95R500 GSFC0601 GSM3Z5V6BW F7A SK34 SK54A SMAJ7.0CA GSFP0380 GSHS1OB BZT52C13 BZX84C24 GSFH60R570 GSFL2004 GSFB0305 SK36B