

Features

- Working voltage: 3.3V
- Low Leakage current
- Low clamping voltage
- Solid-state silicon-avalanche technology
- Transient protection for data lines to
 IEC 61000-4-2 (ESD) ± 30 kV (air), ± 30 kV (contact)
 IEC 61000-4-5 (Surge) 10A (8/20 μ s)
 IEC 61000-4-4 (EFT) 40A (5/50ns)



SOD-882



Schematic Diagram

Applications

- Personal digital assistants (PDA's)
- Notebooks, Desktops, and Servers
- Cell phone, handsets and accessories
- Portable electronics
- Peripherals

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

Parameter	Symbol	Value	Unit
Peak Pulse Power (T _P =8/20 μ S)	P _{PP}	95	W
Peak Pulse Current (T _P =8/20 μ S)	I _{PP}	10	A
ESD According to IEC 61000-4-2 Air Discharge	V _{ESD}	± 30	kV
ESD According to IEC 61000-4-2 Contact Discharge		± 30	kV
Lead Soldering Temperature	T _L	260 (10sec)	°C
Operating Temperature	T _{OP}	-55 To +125	°C
Storage Temperature	T _{STG}	-55 To +150	°C

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

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Reverse Stand-Off Voltage	V _{RWM}	-	-	-	3.3	V
Reverse Breakdown Voltage	V _{BR}	I _T =1mA	3.7	4.1	5	V
Reverse Leakage Current	I _R	V _{RWM} =3.3V	-	-	10	nA
Clamping Voltage ¹	V _C	I _{PP} =5A, T _P =8/20 μ S	-	6	7	V
		I _{PP} =10A, T _P =8/20 μ S	-	8.5	9.5	V
Junction Capacitance	C _J	V _R =0V, f=1MHz	-	8	10	pF

Note: 1) Non-repetitive current pulse, according to IEC 61000-4-5.

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

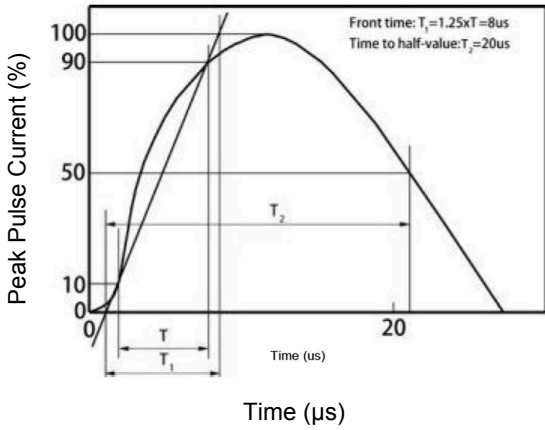


Figure 1. 8/20 μs Waveform per IEC 61000-4-5

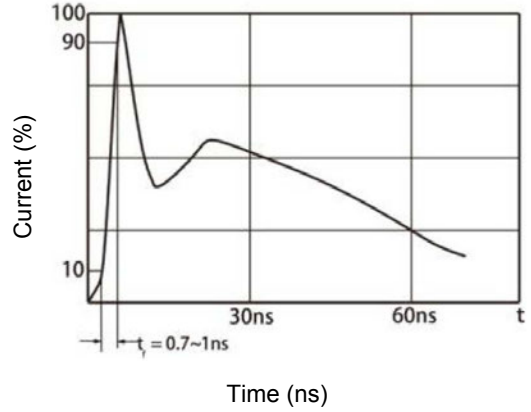


Figure 2. Contact Discharge Current Waveform per IEC 61000-4-2

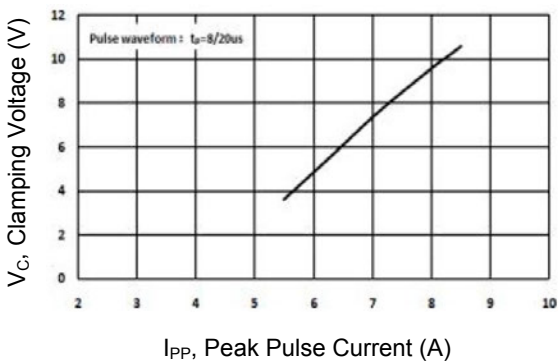


Figure 3. Clamping Voltage vs. Peak Pulse Current

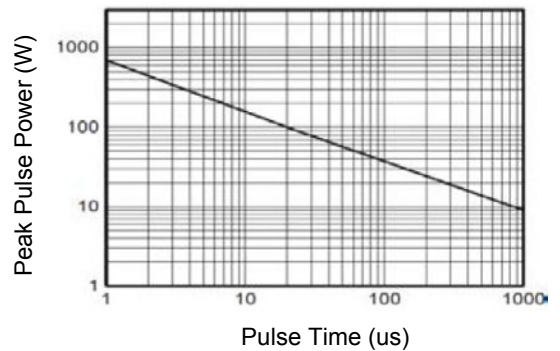


Figure 4. Non-Repetitive Peak Pulse Power vs. Pulse Time

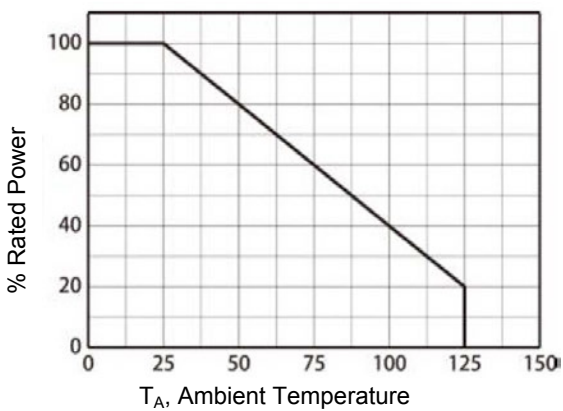


Figure 5. Power Derating vs. Ambient Temperature

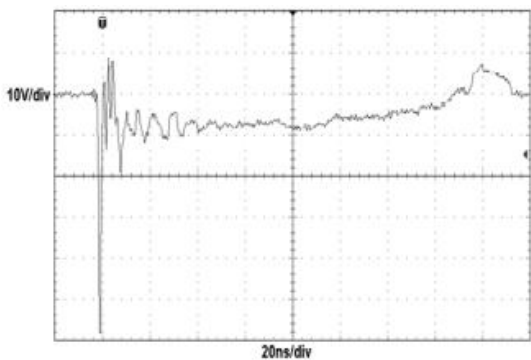


Figure 6. ESD Clamping (+8KV Contact Discharge)

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

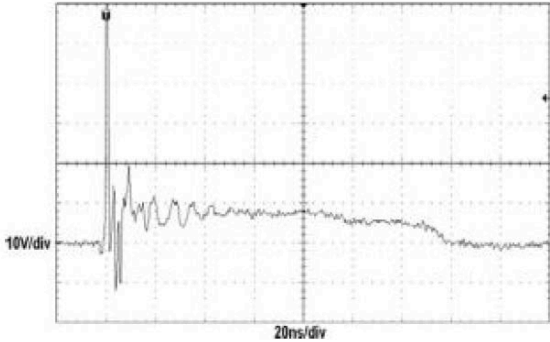
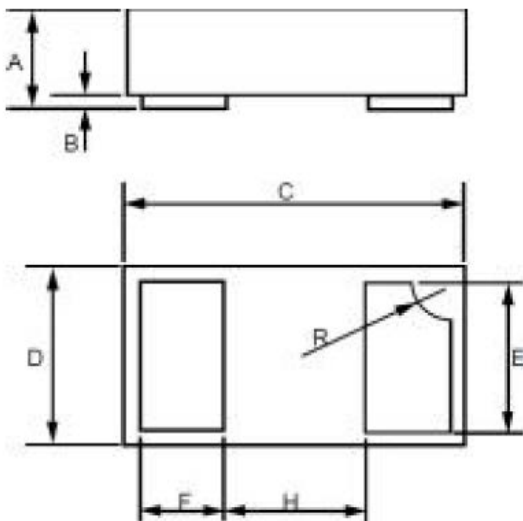


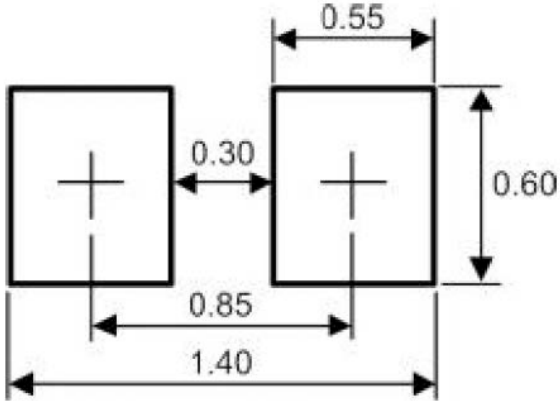
Figure 7. ESD Clamping (-8KV Contact Discharge)

Package Outline Dimensions (SOD-882)



Symbol	Dimensions in Millimeters		Dimensions in Inches	
	Min	Max	Min	Max
A	0.460	0.510	0.018	0.020
B	0.000	0.050	0.000	0.002
C	0.950	1.050	0.037	0.041
D	0.550	0.650	0.022	0.025
E	0.450	0.550	0.017	0.021
F	0.200	0.300	0.008	0.012
H	0.400 TYP		0.015 TYP	
R	0.050	0.150	0.001	0.005

Recommended Pad Layout (Unit: mm)



Note: This recommended land pattern is for reference purpose only.

Order Information

Device	Package	Marking	Carrier	Quantity
GSEZ3B080	SOD-882	F3	Tape & Reel	10,000 pcs/Reel