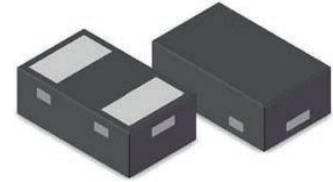


Features

- 60 Watts peak pulse power ($T_p=8/20\mu s$)
- SOD-882 Package
- Bidirectional configurations
- R2R + zener technology
- Low clamping voltage
- Low leakage current
- Ultra low capacitance ($C_J=0.3pF$ typ.)
- Protection one data/power line to: IEC 61000-4-2 $\pm 10kV$ contact $\pm 15kV$ air IEC 61000-4-4 (EFT) 40A (5/50ns) IEC 61000-4-5 (Lightning) 3A (8/20 μs)
- RoHS compliant



SOD-882



Schematic Diagram

Applications

- USB3.0, firewire, DVI, HDMI, S-ATA
- Thunderbolt, display port
- Mobile HDMI Link, MDDI, MIPI, SWP / NFC

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

Rating	Symbol	Value	Units
Peak Pulse Power ($t_p=8/20\mu s$)	P_{PP}	60	W
Peak Pulse Current ($t_p=8/20\mu s$)	I_{PP}	3	A
ESD per IEC 61000-4-2 (Air)	V_{ESD}	15	kV
ESD per IEC 61000-4-2 (Contact)		10	
Maximum Lead Soldering Temperature	T_L	260 (10seconds)	$^\circ C$
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}	$I_T=1mA$	6.5	8.5	-	V
Reverse Leakage Current	I_R	$V_R=5.0V$	-	5	100	nA
Clamping Voltage (IEC 61000-4-5)	V_C	$I_{PP}=3A$	-	-	20.5	V
Trigger Voltage (IEC 61000-4-2)	V_T	$V_{ESD}=8kV$	-	135	-	V
Clamping Voltage (IEC 61000-4-2)	V_C	$V_{ESD}=8kV$	-	20	-	V
Junction Capacitance	C_J	$V_R=0V, F=1MHz$	-	0.3	0.35	pF

Typical Characteristic Curves

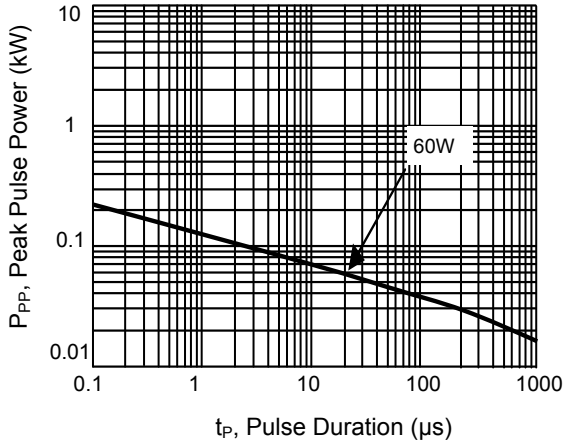


Figure 1. Peak Pulse Power Rating Curve

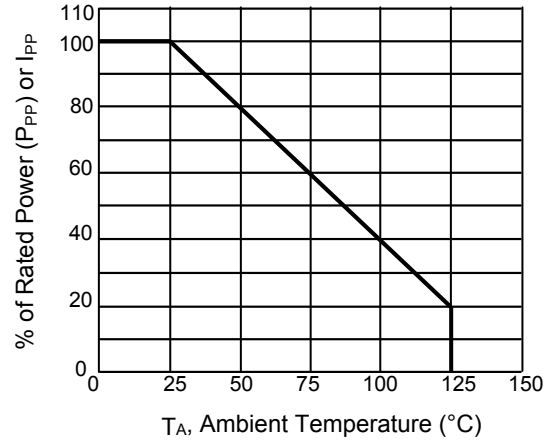


Figure 2. Pulse Derating Curve

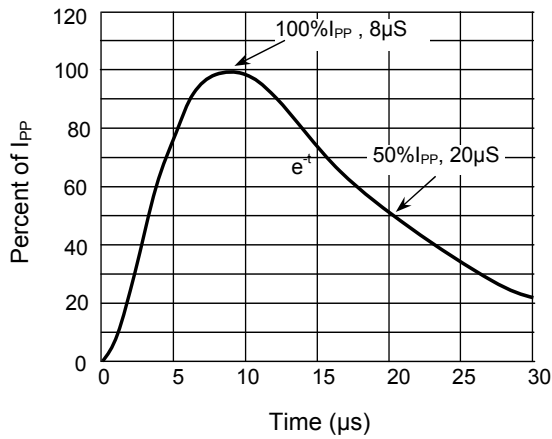


Figure 3. Pulse Waveform-8/20μs

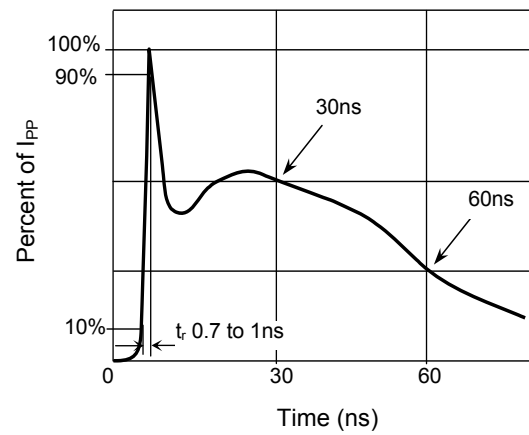


Figure 4. Pulse Waveform-ESD (IEC61000-4-2)

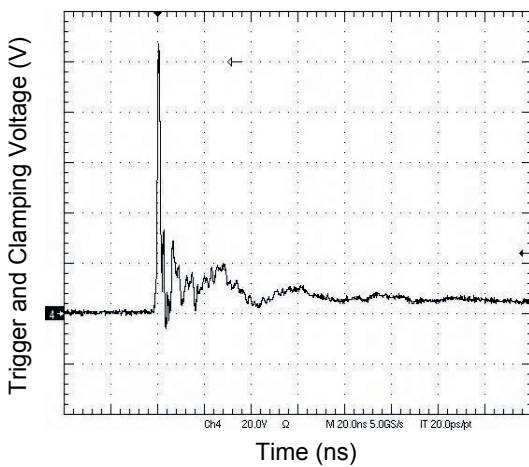


Figure 5. IEC61000-4-2 +8kV Contact Discharge

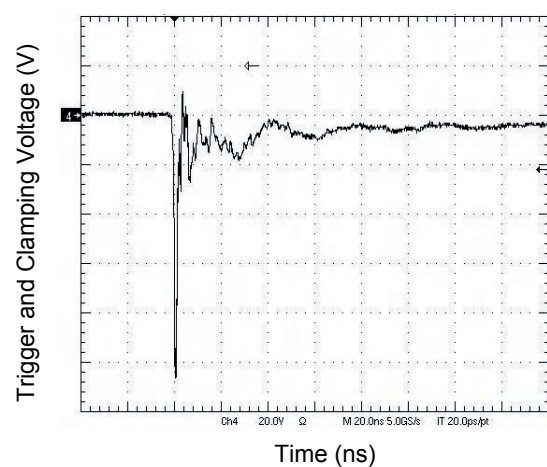
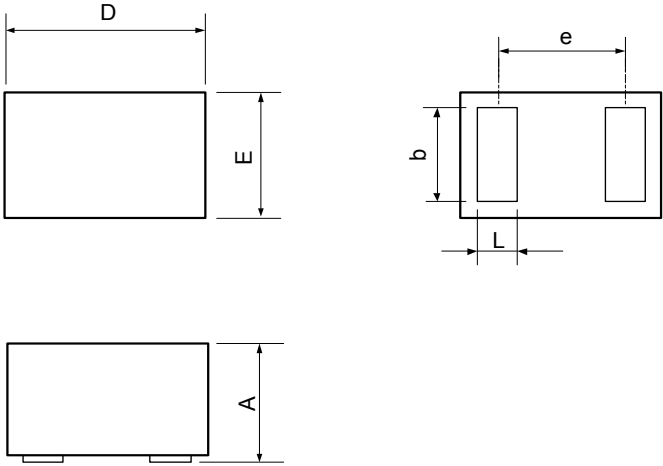


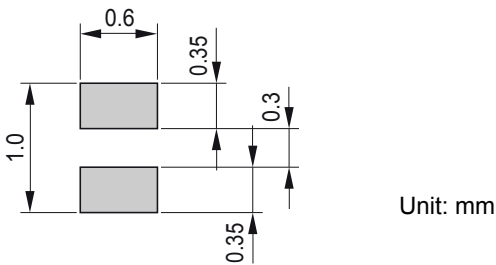
Figure 6. IEC61000-4-2 -8kV Contact Discharge

Package Outline Dimensions (SOD-882)



Symbol	Dimensions in Millimeters		Dimensions in Inches	
	Min	Max	Min	Max
D	0.950	1.050	0.037	0.041
E	0.550	0.650	0.022	0.026
A	0.450	0.550	0.018	0.022
b	0.450	0.550	0.018	0.022
L	0.200	0.300	0.008	0.012
e	0.650 BSC		0.026 BSC	

Recommended Pad Layout



Order Information

Device	Package	Marking	Carrier	Quantity
GSEWT5B003C	SOD-882	P	Tape & Reel	10,000pcs / Reel