

### Features

- 60Watts 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 $\mu s$ )



Package: 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)

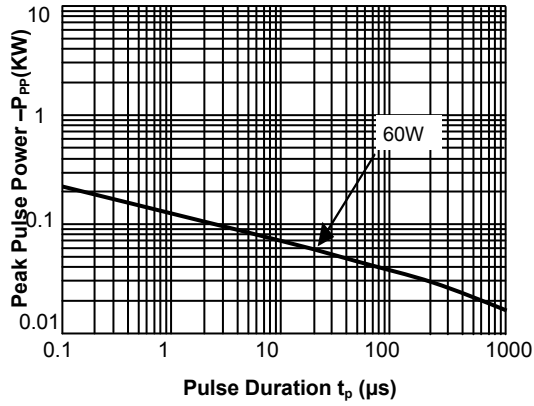
Parameter	Symbol	Value	Unit
Peak Pulse Power ( $T_p=8/20\mu S$ )	$P_{PP}$	60	W
ESD contact/air discharge (IEC-61000-4-2)	$V_{ESD}$	10/15	kV
Peak Pulse Current ( $t_p = 8/20\mu S$ )	$I_{PP}$	3	A
Junction Temperature	$T_J$	-55 to +125	$^\circ C$
Storage temperature	$T_{STG}$	-55 to +150	$^\circ C$
Maximum Lead Solder Temperature(10 second duration)	$T_L$	260	$^\circ C$

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

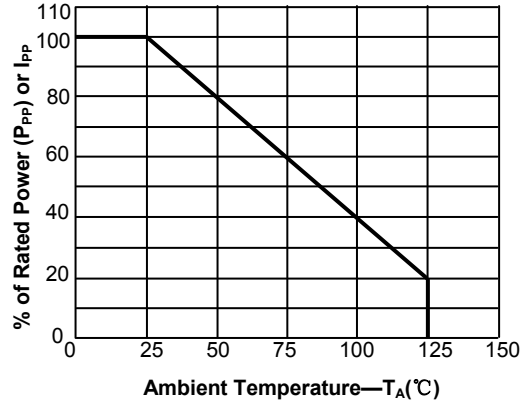
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse stand-off Voltage	$V_{RWM}$		-	-	5.0	V
Reverse Breakdown Voltage	$V_{BR}$	$I_T=1mA$	6.5	8.5	-	V
Reverse Leakage Current	$I_R$	$V_R=5.0V$	-	5	100	nA
Clamping Voltage (IEC 61000-4-5)	$V_C$	$I_{PP}=3A$	-	-	20.5	V
Trigger Voltage (IEC 61000-4-2)	$V_T$	$V_{ESD}=8kV$	-	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**

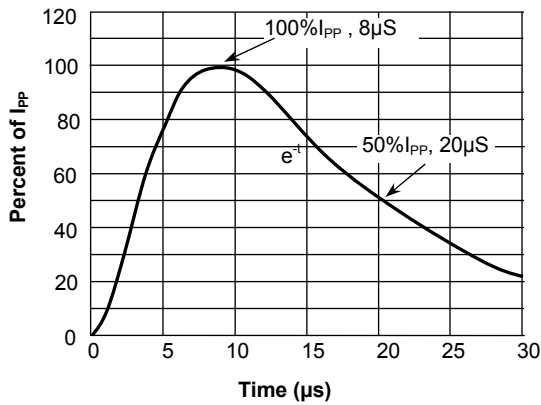
**Fig.1 Peak Pulse Power Rating Curve**



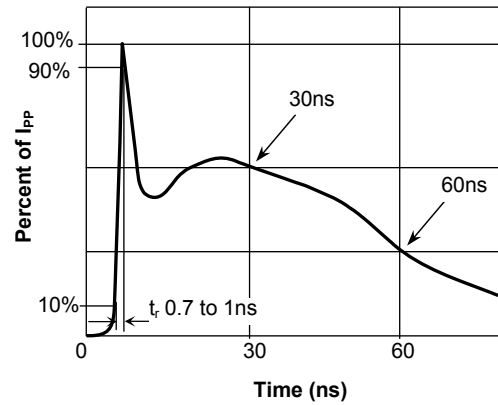
**Fig.2 Pulse Derating Curve**



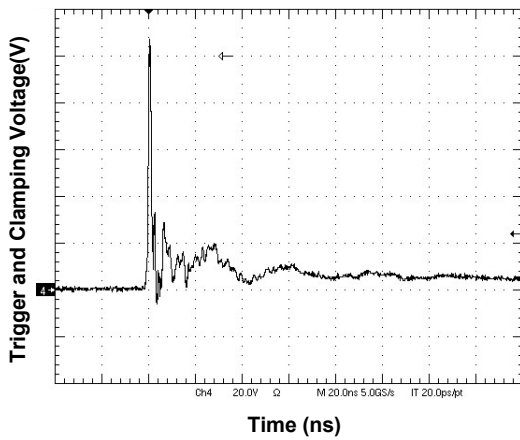
**Fig.3 Pulse Waveform-8/20 $\mu s$**



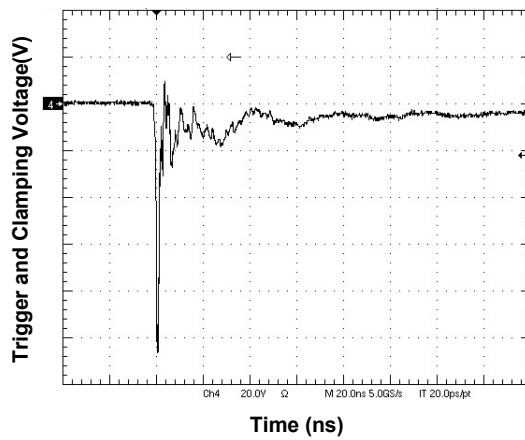
**Fig.4 Pulse Waveform-ESD(IEC61000-4-2)**



**Fig.5 IEC61000-4-2 +8kV Contact Discharge**

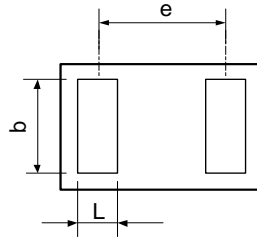
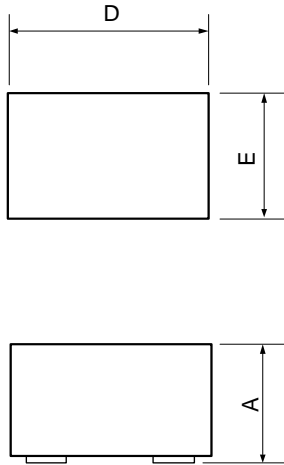


**Fig.6 IEC61000-4-2 -8kV Contact Discharge**



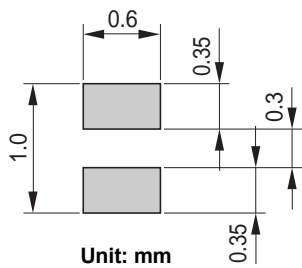
**Package Outline Dimensions**

SOD-882



Symbol	Milimeter		
	min	nom	max
D	0.95	1.00	1.05
E	0.55	0.60	0.65
A	0.45	0.50	0.55
b	0.45	0.50	0.55
L	0.20	0.25	0.30
e	0.65BSC		

**Recommended Pad Layout**



**Order Information**

MPN	Package	Marking	Quantity	HSF Status
GSEWT5B003	SOD-882	P	10,000pcs / Reel	RoHS Compliant