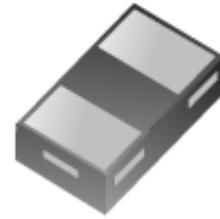


Features

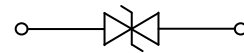
- 100Watts peak pulse power ($t_p = 8/20\mu s$)
- Bidirectional configurations
- Low clamping voltage
- Low leakage current
- Ultra low capacitance ($C_j=0.3pF$ typ.)
- Protection one data/power line to:
 - IEC 61000-4-2 $\pm 15kV$ contact $\pm 15kV$ air
 - IEC 61000-4-4 (EFT) 40A (5/50ns)
 - IEC 61000-4-5 (Lightning) 5A (8/20 μs)



Package: SOD-882

Applications

- USB 3.0, USB 2.0, MHL
- HDMI 2.0, Display Port 1.3, eSATA
- Ultrabooks, Notebooks
- Smart Phones
- Tablets, eReaders
- High Speed Serial Interfaces



Schematic Diagram

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_P	100	W
ESD contact/air discharge (IEC-61000-4-2)	V_{ESD}	15/15	kV
Peak Pulse Current ($t_p = 8/20\mu S$)	I_{PP}	5	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	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	$I_{PP}=5A$			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

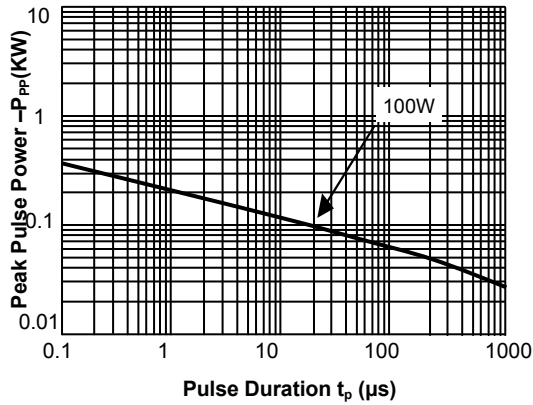


Fig.2 Pulse Derating Curve

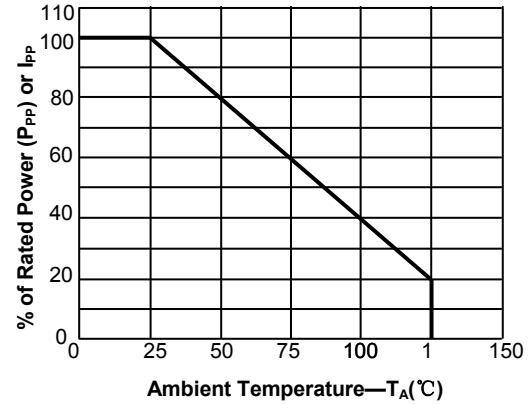


Fig.3 Pulse Waveform-8/20μs

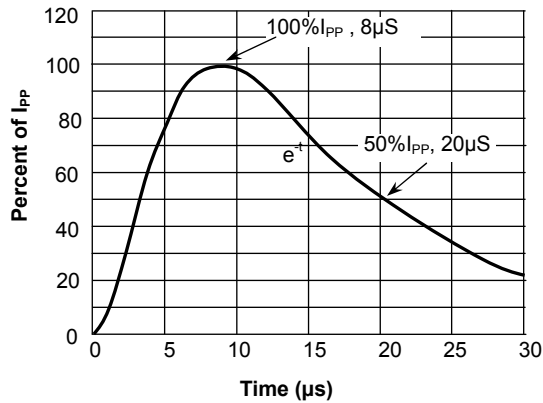


Fig.4 Pulse Waveform-ESD(IEC61000-4-2)

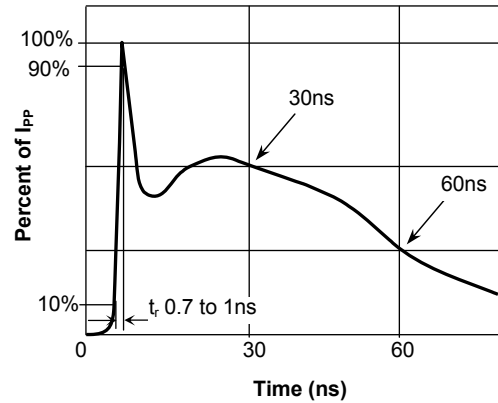


Fig.5 IEC61000-4-2 +8kV Contact Discharge

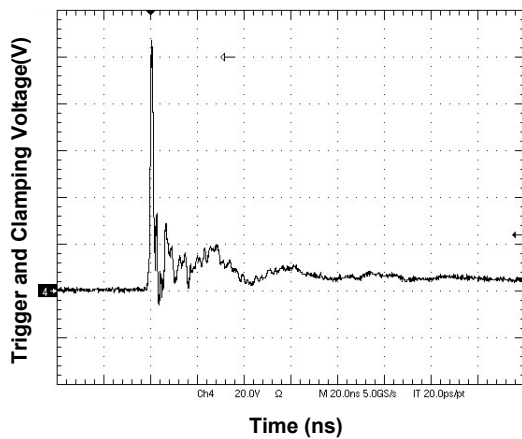
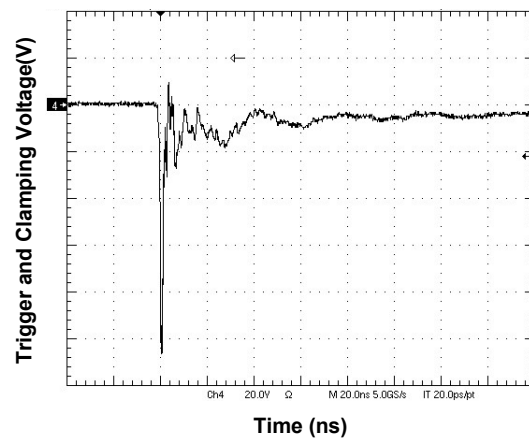
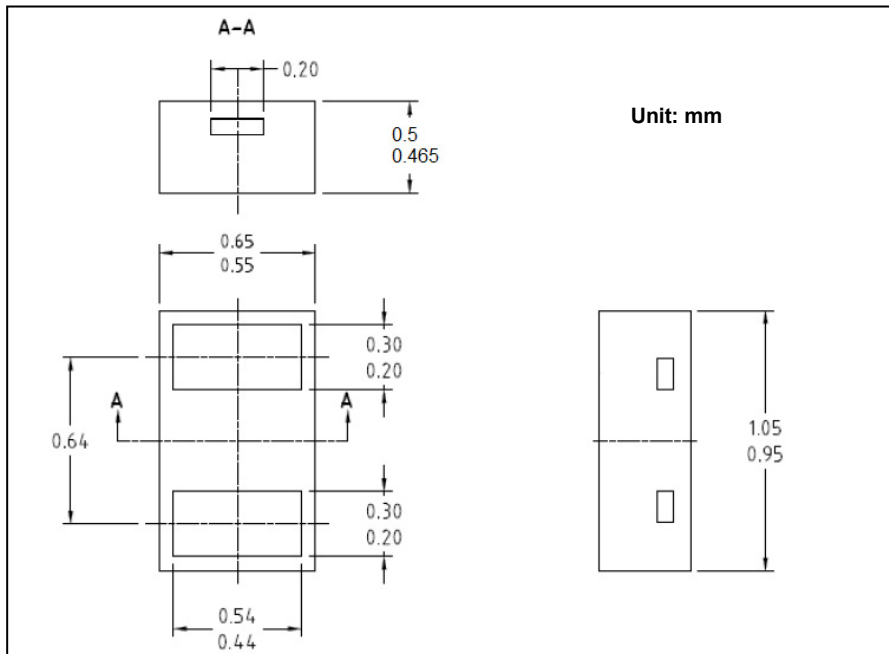


Fig.6 IEC61000-4-2 -8kV Contact Discharge



Product Dimensions SOD-882



Order Information

Device	Package	Marking	Carrier	Quantity	HSF Status
SPESPLC5VD882SP-2B	SOD-882	P	Tape & Reel	10000pcs / Reel	RoHS compliant