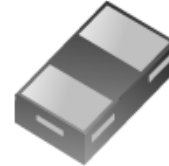


Features

- 100 Watts peak pulse power ($t_p = 8/20\mu s$)
- SOD-882 package
- Low clamping voltage
- Low Leakage current
- Response Time is Typically $< 1\text{ ns}$
- ESD Rating of Class 3 ($> 16\text{ kV}$) per Human Body Model
- IEC61000-4-2 Level 4 ESD Protection



SOD-882

Applications

- High Speed Data Lines
- Cellular Handsets and Accessories
- Serial and Parallel Ports
- Portable Devices and Peripherals
- Notebooks, Tablets



Schematic Diagram

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

Parameter	Symbol	Value	Unit
Peak Pulse Power ($T_P=8/20\mu s$)	P_{PP}	100	W
Peak Pulse Current ($T_P = 8/20\mu s$)	I_{PP}	8.7	A
IEC 61000 -4-2 (ESD) Air Discharge Contact Discharge		+15 +8	kV
ESD Voltage Per Human Body Model		16	kV
Total Power Dissipation on FR-5 Board @ $T_A=25^\circ\text{C}$	P_D	150	mW
Lead Solder Temperature – Maximum (10 Second Duration)	T_L	260	$^\circ\text{C}$
Junction and Storage temperature	T_J, T_{STG}	-55 to +150	$^\circ\text{C}$

Electrical Characteristics ($T_A=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Reverse Stand-Off Voltage	V_{RWM}	-	-	-	5	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1\text{mA}$	6.2	-	-	V
Reverse Leakage Current	I_R	$V_R=5\text{V}$	-	-	1	μA
Clamping Voltage	V_C	$I_{PP}=8.7\text{A}, T_P=8/20\mu s$	-	-	12.3	V
Junction Capacitance	C_J	$V_R=0\text{V}, f=1\text{MHz}$	-	65	-	pF

Typical Characteristic Curves

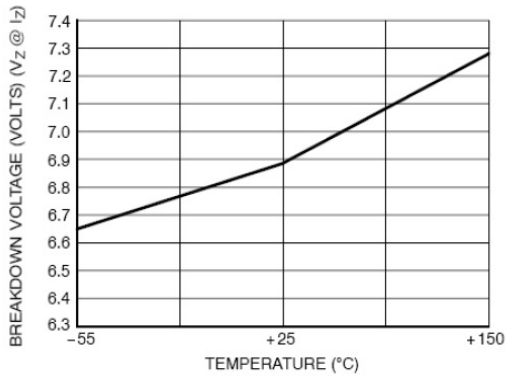


Figure 1. Typical Breakdown Voltage versus Temperature

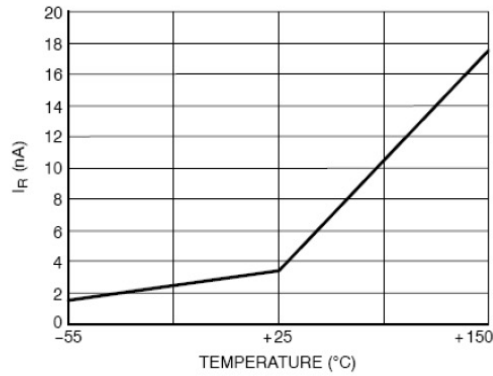


Fig 2. Typical Leakage Current versus Temperature

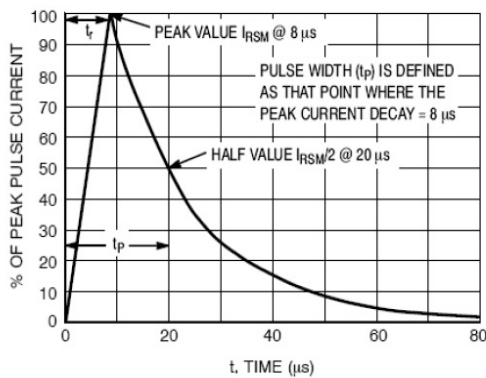


Figure 3. 8*20 μs Pulse Waveform

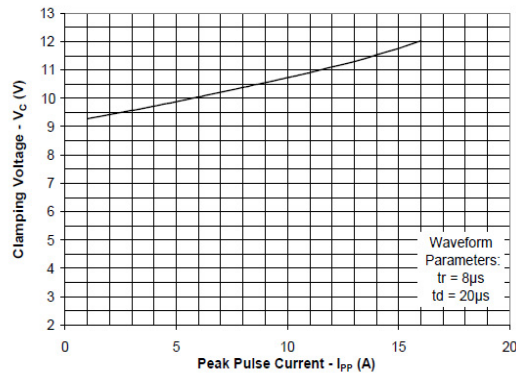


Fig 4. Normalized Junction Capacitance Voltage vs. Reverse Voltage

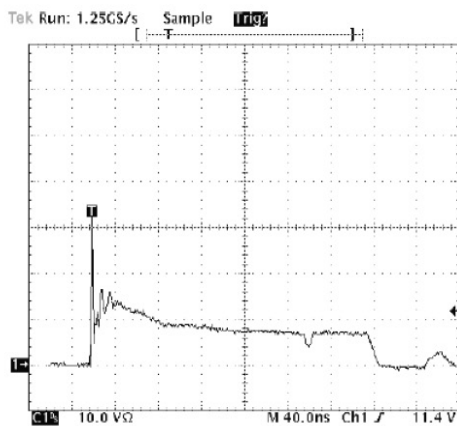


Figure 5. Positive 8kV contact per IEC 61000-4-2-LESD8D5.0T5G

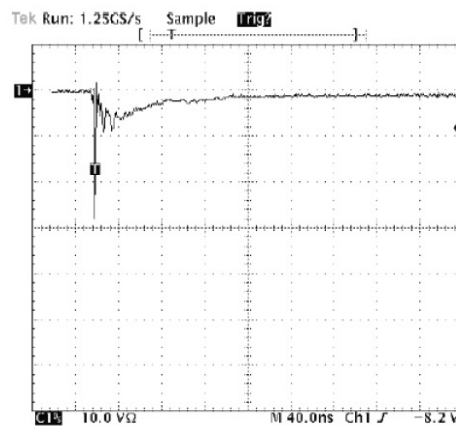
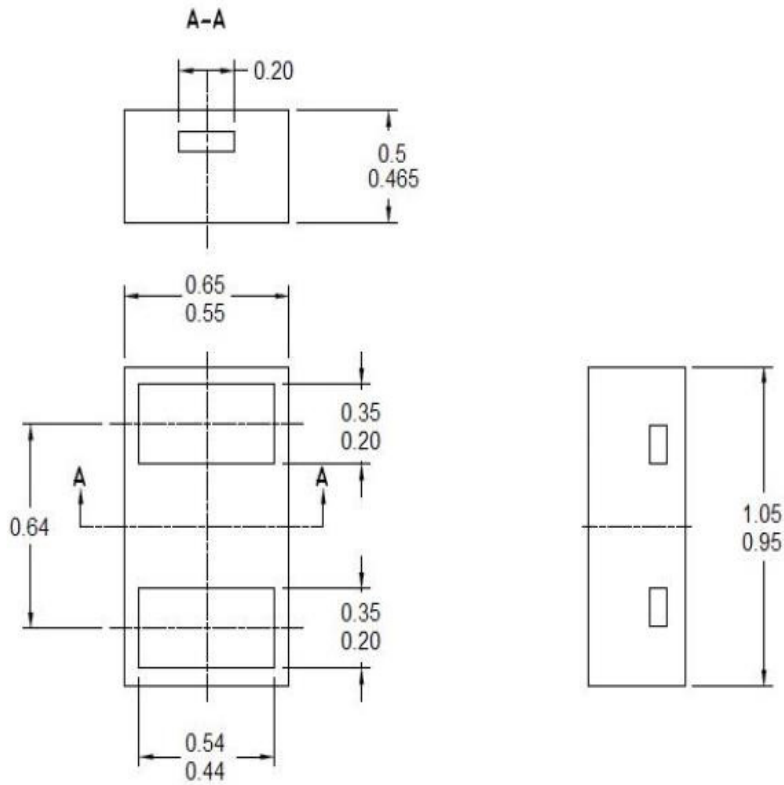


Fig 6. Negative 8kV contact per IEC 61000-4-2-LESD8D5.0T5G



Product Dimensions SOD-882



Order Information

Device	Package	Marking	Carrier	Quantity	HSF Status
SPESP5VD882-2U	SOD-882	5U	Tape & Reel	10000pcs / Reel	RoHS compliant