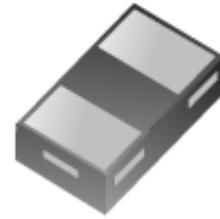


# SESLC5VD882S-2B

## Low Capacitance ESD Protection Diode

### Features

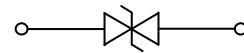
- 100Watts peak pulse power ( $t_p = 8/20\mu s$ )
- Bidirectional configurations
- Low clamping voltage
- Low leakage current
- Ultra low capacitance ( $C_j=0.3pF$  typ.)
- Protection one data/power line to:
  - IEC 61000-4-2  $\pm 15kV$  contact  $\pm 15kV$  air
  - IEC 61000-4-4 (EFT) 40A (5/50ns)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



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)

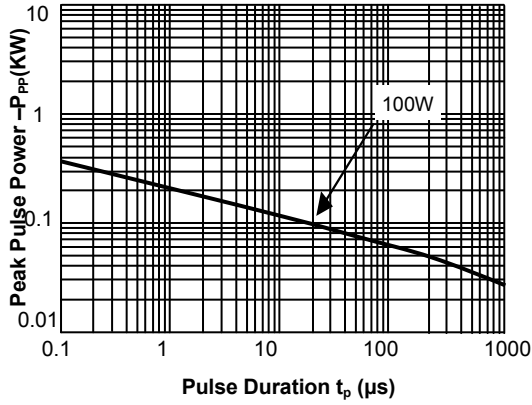
Parameter	Symbol	Value	Unit
Peak Pulse Power ( $T_P=8/20\mu S$ )	$P_P$	100	W
ESD contact/air discharge (IEC-61000-4-2)	$V_{ESD}$	15/15	kV
Peak Pulse Current ( $t_P = 8/20\mu S$ )	$I_{PP}$	5	A
Junction Temperature	$T_J$	-55 to +125	$^\circ C$
Storage temperature	$T_{STG}$	-55 to +150	$^\circ C$
Maximum Lead Solder Temperature(10 second duration)	$T_L$	260	$^\circ C$

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

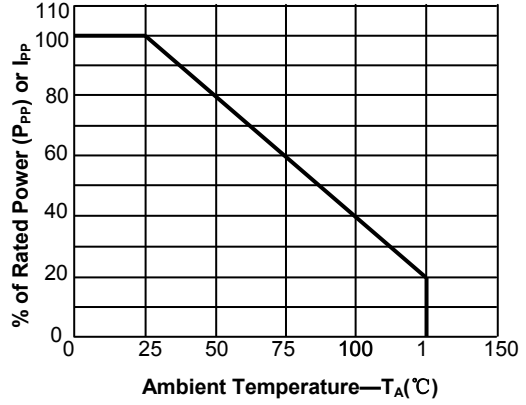
Parameter	Symbol	Condition	Min	Typ	Max	Unit
Reverse stand-off Voltage	$V_{RWM}$				5.0	V
Reverse Breakdown Voltage	$V_{BR}$	$I_T=1mA$	6.5	8.5		V
Reverse Leakage Current	$I_R$	$V_R=5.0V$		5	100	nA
Clamping Voltage (IEC 61000-4-5)	$V_C$	$I_{PP}=5A$			20.5	V
Trigger Voltage (IEC 61000-4-2)	$V_T$	$V_{ESD}=8kV$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

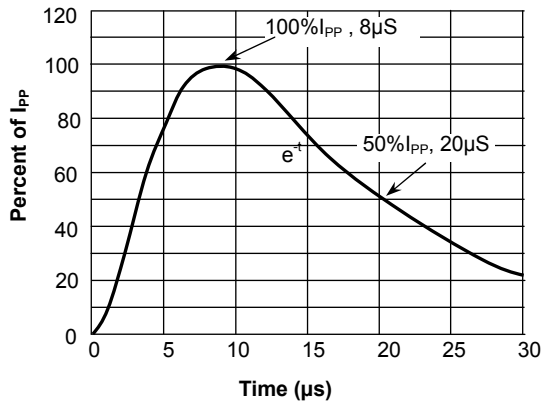
**Fig.1 Peak Pulse Power Rating Curve**



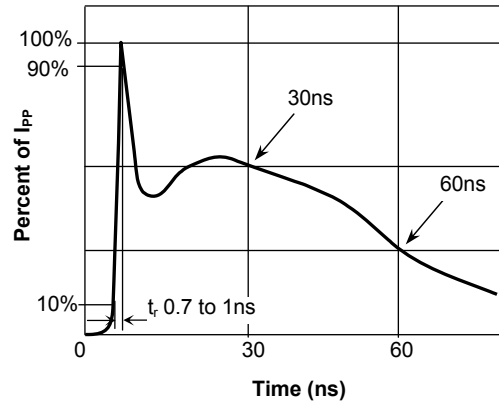
**Fig.2 Pulse Derating Curve**



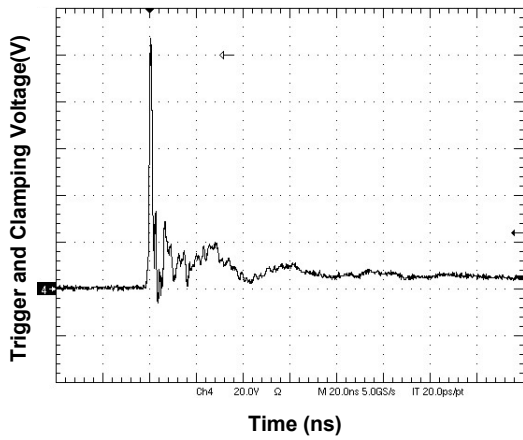
**Fig.3 Pulse Waveform-8/20μs**



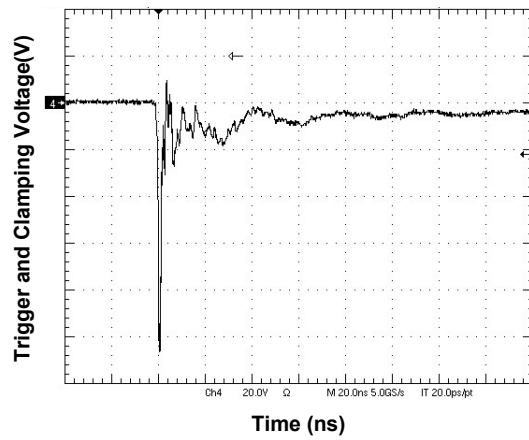
**Fig.4 Pulse Waveform-ESD(IEC61000-4-2)**



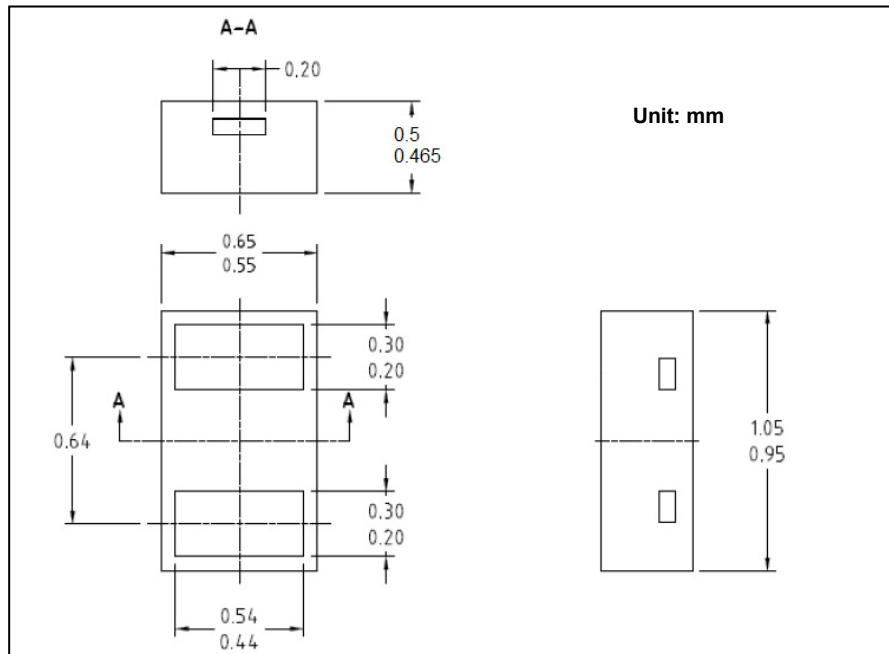
**Fig.5 IEC61000-4-2 +8kV Contact Discharge**



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



**Product Dimensions**      SOD-882



**Order Information**

Device	Package	Marking	Carrier	Quantity	HSF Status
SESLC5VD882S-2B	SOD-882	P	Tape & Reel	10000pcs / Reel	RoHS compliant