

#### **Features**

- 100Watts peak pulse power (tp = 8/20s)
- SOD-882 Package
- Bidirectional configurations
- R2R + Zener technology
- Low clamping voltage
- Low leakage current
- Ultra low capacitance (Cj=0.3pF typ.)
- Protection one data/power line to:

  IEC 61000-4-2 ±15kV contact ±15kV air

  IEC 61000-4-4 (EFT) 40A (5/50ns)

  IEC 61000-4-5 (Lightning) 5A (8/20µs)
- RoHS compliant

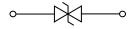
## **Applications**

- USB3.0, Firewire, DVI, HDMI, S-ATA
- Thunderbolt, Display Port
- Mobile HDMI Link, MDDI, MIPI, SWP / NFC

### SESLC5VD882S-2B



**SOD-882** 



**Schematic Diagram** 

## **Absolute Maximum Ratings**

 $(T_A=25^{\circ}C, Unless otherwise specified.)$ 

Parameter	Symbol	Value	Unit
Peak Pulse Power (T <sub>P</sub> =8/20µS)	P <sub>PP</sub>	100	W
ESD contact/air discharge (IEC-61000-4-2)	$V_{ESD}$	15/15	kV
Peak Pulse Current ( t₂ = 8/20µS )	I <sub>PP</sub>	5	Α
Junction Temperature	$T_J$	-55 to +125	$^{\circ}$
Storage temperature	T <sub>STG</sub>	-55 to +150	$^{\circ}$
Maximum Lead Solder Temperature(10 second duration)	TL	260	$^{\circ}$

#### **Electrical Characteristics**

(T<sub>A</sub>=25 $^{\circ}$ C, Unless otherwise specified.)

Parameter	Symbol	Condition	Min	Тур	Max	Unit
Reverse stand-off Voltage	$V_{RWM}$				5.0	V
Reverse Breakdown Voltage	$V_{BR}$	I <sub>T</sub> =1mA	6.5	8.5		V
Reverse Leakage Current	I <sub>R</sub>	V <sub>R</sub> =5.0V		5	100	nA
Clamping Voltage (IEC 61000-4-5)	V <sub>C</sub>	I <sub>PP</sub> =5A			20.5	V
Junction Capacitance	CJ	V <sub>R</sub> =0V, f=1MHz		0.3	0.35	pF

www.semiteltech.com 1/4 2021.03 REV.A3



# **Typical Characteristic Curves**

Fig.1 Peak Pulse Power Rating Curve

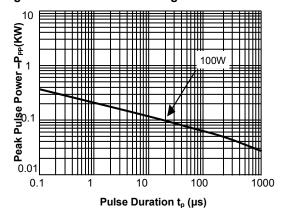


Fig.3 Pulse Waveform-8/20µs

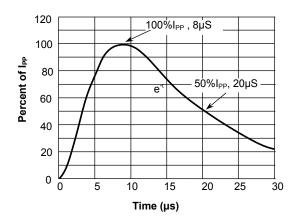


Fig.5 IEC61000-4-2 +8kV Contact Discharge

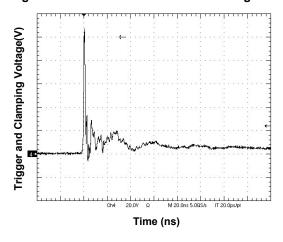


Fig.2 Pulse Derating Curve

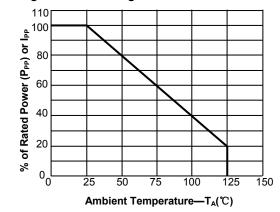


Fig.4 Pulse Waveform-ESD(IEC61000-4-2)

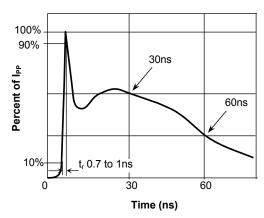
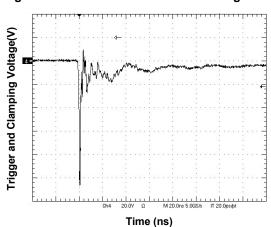


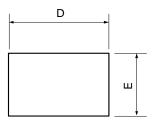
Fig.6 IEC61000-4-2 -8kV Contact Discharge

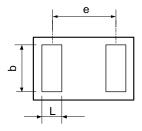


www.semiteltech.com 2/4 2021.03 REV.A3



# **Product Dimensions**





Symbol	Milimeter				
	min	nom	max		
D	0.95	1.00	1.05		
Е	0.55	0.60	0.65		
Α	0.45	0.50	0.55		
b	0.45	0.50	0.55		
L	0.20	0.25	0.30		
е	0.65BSC				



# **Order Information**

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

www.semiteltech.com 3/4 2021.03 REV.A3

## Semitel Ultra Low Capacitance ESD/Transient Protection Diode

#### **CAUTION / WARNING**

- Information in this document is believed to be accurate and reliable. However, SEMITEL does not give any representations or warranties, expressed or implied, as to the accuracy or completeness of such information and shall have no liability for the consequences of use of such information.
- Users should independently evaluate the suitability of and test each product selected for their own applications, and SEMITEL assumes no liability whatsoever relating to the choice, selection or use of the SEMITEL products and services described herein.
- SEMITEL reserves the right to change or update, without notice, any information contained in this publication; to change, without notice, the design, construction, processing, or specification of any product; and to discontinue or limit production or distribution of any product.
- · Information in this document supersedes and replaces all information previously supplied.
- Products are not designed, authorized or warranted to be suitable for use in medical, military, aircraft, space or life support equipment, nor in
  applications where failure or malfunction of an SEMITEL product can reasonably be expected to result in personal injury, death or severe property or
  environmental damage. SEMITEL accepts no liability for inclusion and/or use of SEMITEL products in such equipment or applications and therefore
  such inclusion and/or use is at the customer's own risk.
- This document as well as the item(s) described herein may be subject to export control regulations. Export might require a prior authorization from national authorities
- Resale of SEMITEL products with provisions different from the statements and/or technical features set forth in this document shall immediately void
  any warranty granted by SEMITEL for the SEMITEL product or service described herein and shall not create or extend in any manner whatsoever, any
  liability of SEMITEL.
- SEMITEL expressly disclaims all implied warranties regarding the information contained herein, including, but not limited to, any implied warranties of merchantability or fitness for a particular purpose. SEMITEL only obligations are those in the SEMITEL Standard Terms and Conditions of Sale and in no case will SEMITEL be liable for any incidental, indirect, or consequential damages arising from the sale, resale, use, or misuse of its products.

Specifications are subject to change without notice © Copyright 2005, Semitel Electronics

Semitel . ® is a registered trademark of Semitel Electronics

All rights reserved

www.semiteltech.com 4/4 2021.03 REV.A3