

ESD15VD8B

Feature

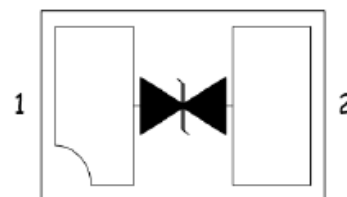
- Ultra low leakage:nA level
- Operating voltage:15V
- Low clamping voltage
- Complies with following standards:
 - IEC 61000-4-2 (ESD)immunity test
 - Air discharge:+30kV
 - Contact discharge:+30kV
 - IEC61000-4-4 (EFT) 40A (5/50ns)
 - IEC61000-4-5 (Lightning) 3A (8/20us)
- RoHS Compliant

Applications

- USB 2.0 power and data line
- Set-top box and digital TV
- Digital video interface (DVI)
- Notebook Computers
- SIM Ports
- 10/100 Ethernet



PIN Configuration



Mechanical Characteristics

- Package: SOD882
- Lead Finish: Lead Free
- UL Flammability Classification Rating 94V-0
- Quantity Per Reel:10,000pcs
- Reel Size:7 inch
- Device Marking:15S

Absolute Maximum Ratings (Tamb=25C unless otherwise specified)

Parameter	Symbol	Value	Units
Peak Pulse Power (8/20us)	Ppk	70	W
Peak Pulse Current (8/20us)	IPP	3	A
ESD per IEC 61000-4-2(Air)	VESD	±30	KV
ESD per IEC 61000-4-2(Contact)		±30	
Operating Temperature Range	Tj	-55 to 150	℃
Storage Temperature Range	Tstg	-55 to 150	℃

Electrical Characteristics (T =25° C unless otherwise specified)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Working Voltage	VRWM				15	6.5
Breakdown Voltage	VBR	IT=1mA	15.5		18.5	V
Reverse Leakage Current	IR	VRWM=15V			0.1	V
Clamping Voltage	Vc	IPP=1A(8X20μs pulse)			18.9	uA
Clamping Voltage	Vc	IPP=3A(8X20μs pulse)			22.5	V
Junction Capacitance	CJ	VR=0V,f=1MHZ		10		pF

Typical Performance Characteristics(TA=25C unless otherwise Specified)

Figure 1 - Pulse Waveform-ESD (IEC61000-4-2)

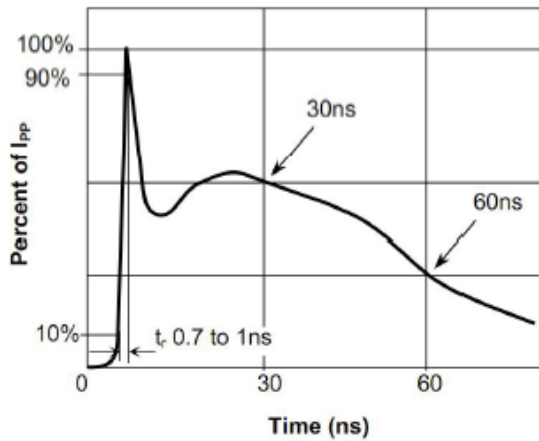


Figure 2- Transmission Line Pulse (TLP)

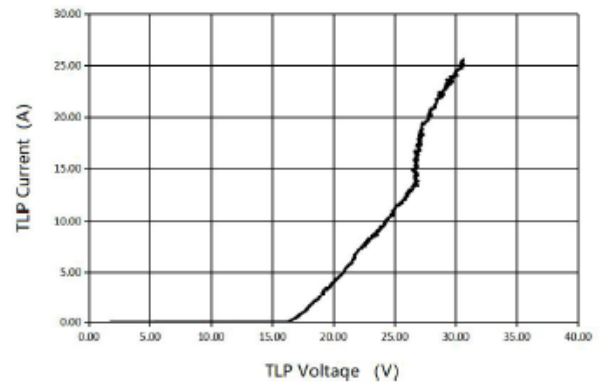


Figure 3 - Capacitance vs.Reveres Voltage

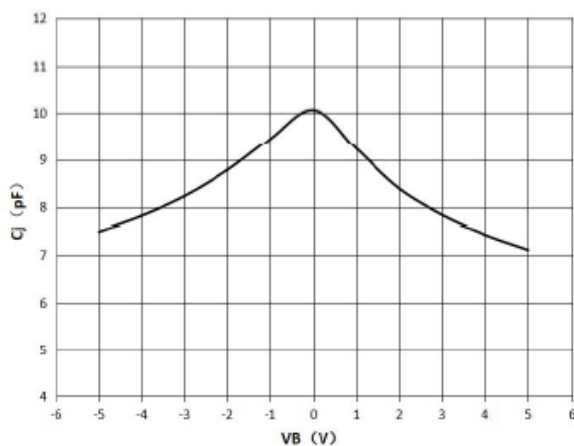
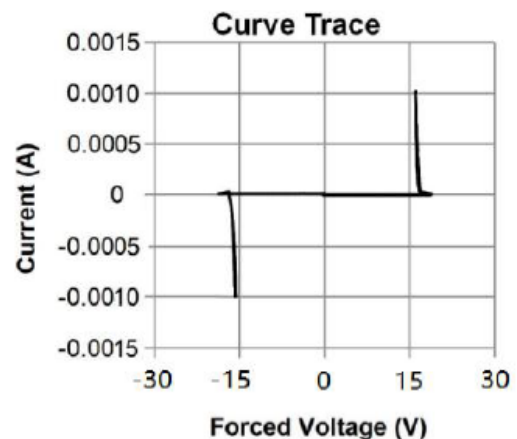
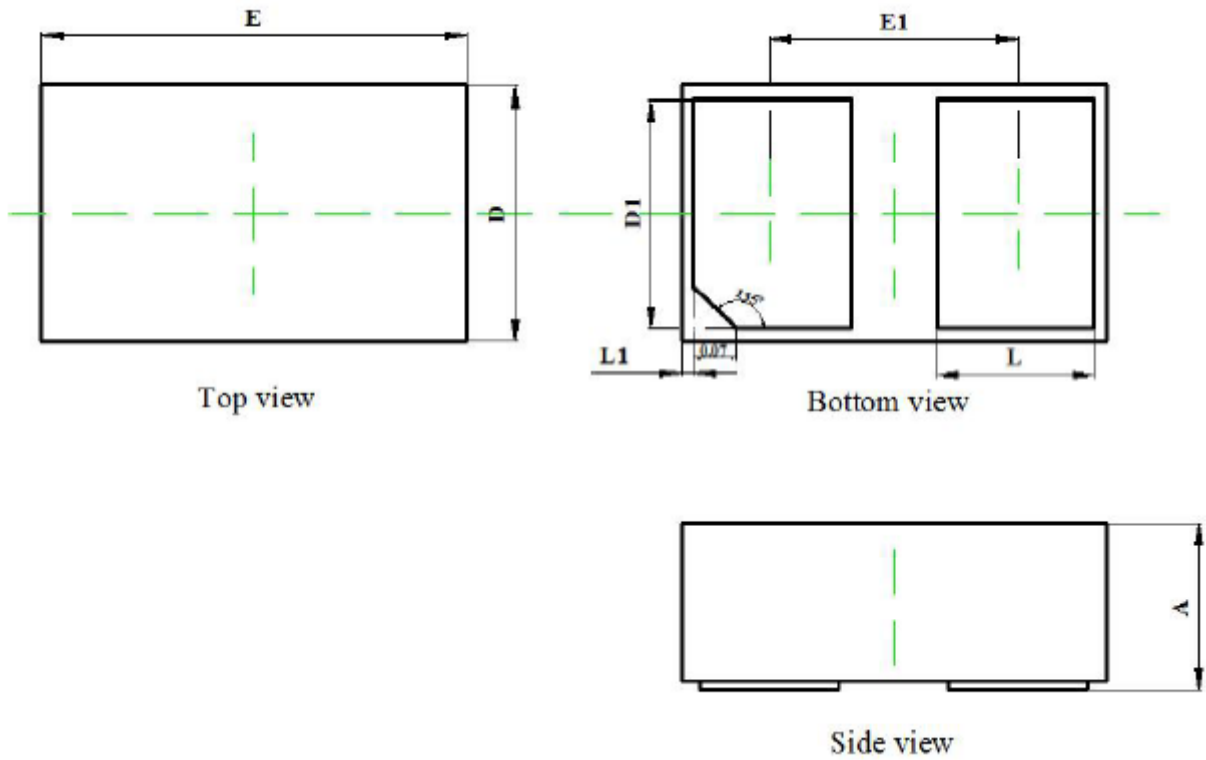


Figure4 - IV Curve Forward Voltage)



PACKAGE OUTLINE DIMENSIONS in millimeters :SOD882



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.350	0.450	0.014	0.018
D	0.550	0.650	0.022	0.026
E	0.950	1.050	0.037	0.041
D1	0.420	0.520	0.017	0.020
E1	0.550	0.650	0.022	0.026
L	0.270	0.370	0.011	0.015
L1	0.000	0.100	0.000	0.004

Disclaimer

Specifications are subject to change without notice.

The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.

Users should verify actual device performance in their specific applications.