



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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CFTVS5V0BULC

**SURFACE MOUNT SILICON
BI-DIRECTIONAL
ULTRA LOW CAPACITANCE
TRANSIENT VOLTAGE SUPPRESSOR**



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CFTVS5V0BULC is an ultra low capacitance, low leakage, fast response, bi-directional TVS in the space saving SOD-882L surface mount package. This device is designed to protect sensitive equipment connected to high speed data lines against ESD damage.

MARKING CODE: U



FEATURES:

- Space saving SOD-882L package
- Ultra low capacitance
- Low leakage current

APPLICATIONS:

- High speed data line protection ideal for USB 3.1, Thunderbolt and HDMI 2.0 standards
- User interface protection
- Charging/power port protection

MAXIMUM RATINGS: ($T_A=25^\circ\text{C}$)

Peak Power Dissipation (8x20 μs)
 Electrical Fast Transient (IEC 61000-4-4) (5x50ns)
 ESD Voltage (IEC 61000-4-2, Air)
 ESD Voltage (IEC 61000-4-2, Contact)
 Operating Junction Temperature
 Storage Temperature


SYMBOL

SYMBOL		UNITS
P _{PK}	14	W
EFT	40	A
V _{ESD}	20	kV
V _{ESD}	20	kV
T _J	-55 to +125	°C
T _{stg}	-55 to +150	°C

ELECTRICAL CHARACTERISTICS: ($T_A=25^\circ\text{C}$)

Maximum Reverse Stand-off Voltage V _{RWM}	Breakdown Voltage		Test Current I _T	Maximum Reverse Leakage Current I _R @ V _{RWM}	Maximum Clamping Voltage (8x20 μs) V _C @ I _{PP}		Typical TLP Clamping Voltage (Note 1) V _{CL} @ I _{PP}		Typical Dynamic Resistance (Note 1) R _{DYN}	Typical Junction Capacitance @ 0V Bias C _J	Maximum Junction Capacitance @ 0V Bias C _J
	MIN V	MAX V			V	A	V	A			
5.0	6.0	10	1.0	100	14	1.0	15	1.6	2.94	0.2	0.35
							20	3.3			

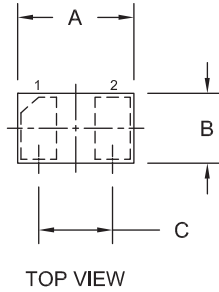
Note 1: Transmission Line Pulse (TLP) conditions: Z₀=50 Ω , t_p=100ns

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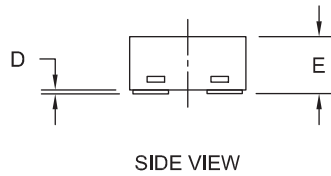


SOD-882L CASE - MECHANICAL OUTLINE

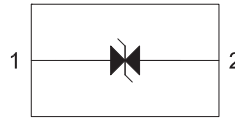


SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.037	0.041	0.95	1.05
B	0.022	0.026	0.55	0.65
C	0.026		0.65	
D	0.000	0.002	0.00	0.05
E	0.012	0.016	0.30	0.40
F	0.018	0.022	0.45	0.55
G	0.008	0.012	0.20	0.30

SOD-882L (REV:R2)



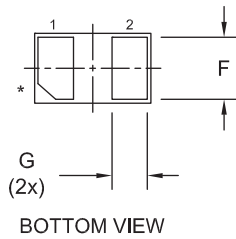
PIN CONFIGURATION



LEAD CODE:

- 1) Anode 1
- 2) Anode 2

MARKING CODE: U



* Pin 1 chamfer may appear on any corner.

R2

R5 (23-July 2015)

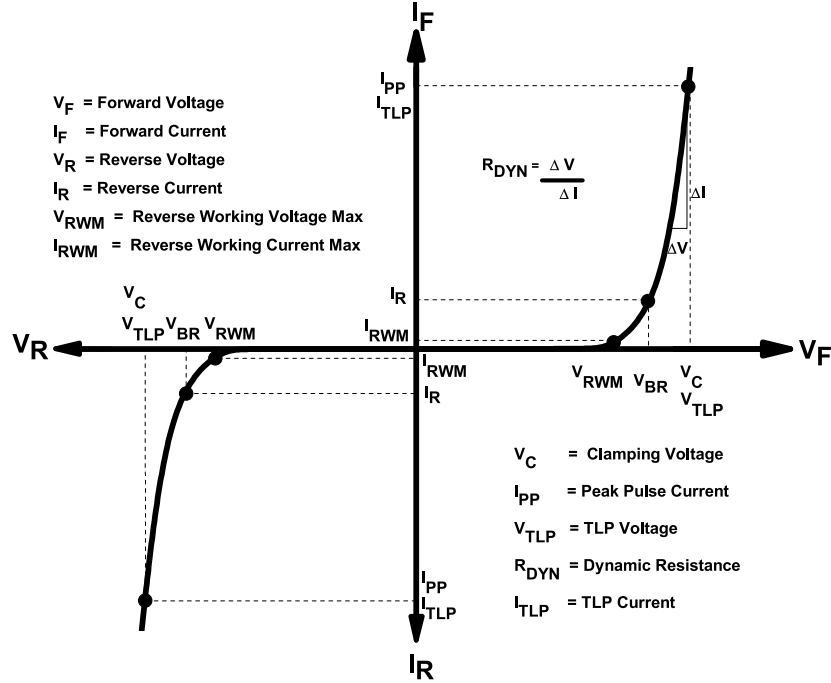
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Definition of Electrical Characteristics

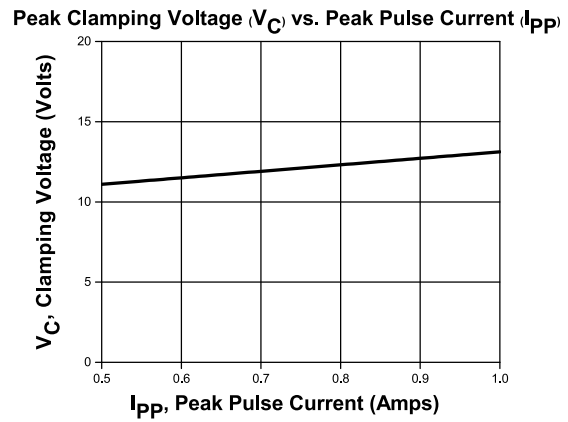
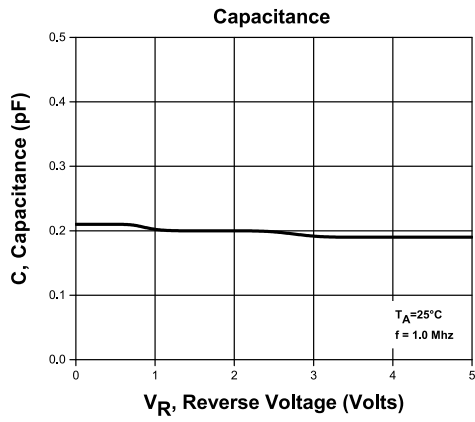
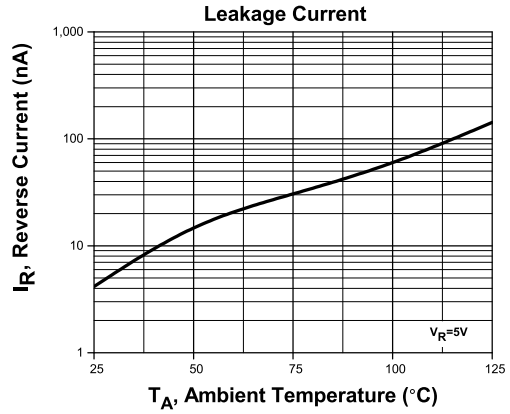
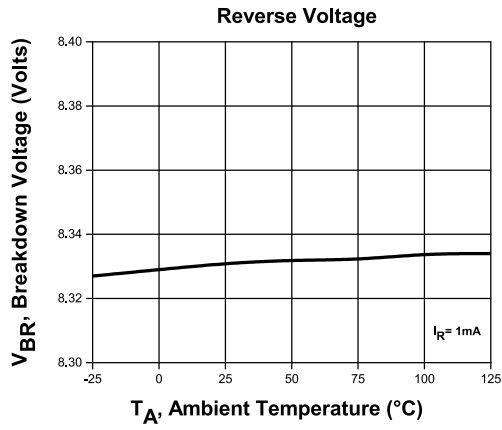


R5 (23-July 2015)

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TYPICAL ELECTRICAL CHARACTERISTICS



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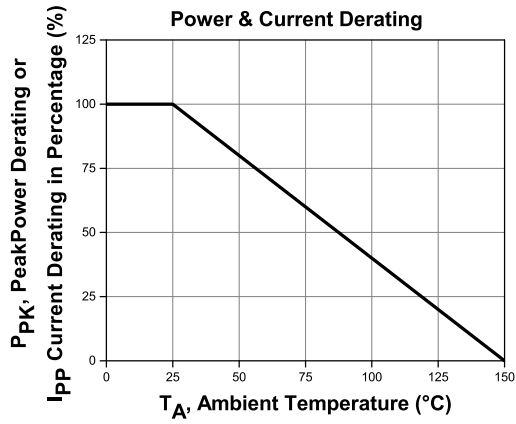
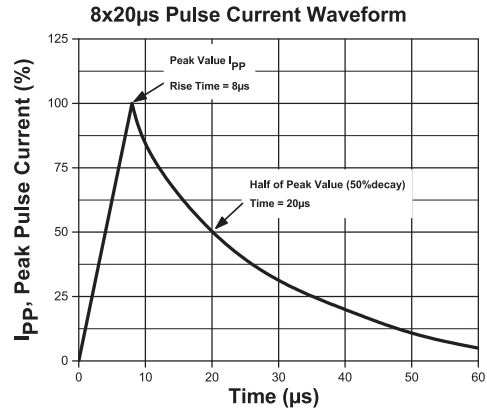
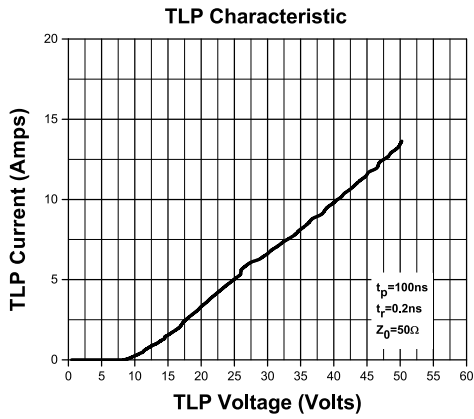
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TYPICAL ELECTRICAL CHARACTERISTICS



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OUTSTANDING SUPPORT AND SUPERIOR SERVICES



PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options
- Custom bar coding for shipments
- Custom product packing

DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2nd day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities
- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix "TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix "PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

CONTACT US

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