  
**CFTVS3V3B**  
**SURFACE MOUNT SILICON**  
**BI-DIRECTIONAL**  
**TRANSIENT VOLTAGE SUPPRESSOR**



[www.centrasemi.com](http://www.centrasemi.com)



**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CFTVS3V3B is a low leakage, fast response, bi-directional TVS in the space saving SOD-882 surface mount package. This device is designed to protect sensitive equipment connected to high speed data lines against ESD damage.

**MARKING CODE: 3**

**APPLICATIONS:**

- Data line protection
- User interface protection
- Charging/power port protection

**FEATURES:**

- Space saving SOD-882 package
- Low leakage current

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

Peak Power Dissipation (8x20 $\mu\text{s}$ )  
 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
$P_{PK}$	W
EFT	A
$V_{ESD}$	kV
$V_{ESD}$	kV
$T_J$	$^\circ\text{C}$
$T_{stg}$	$^\circ\text{C}$

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

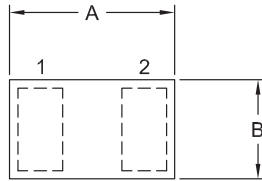
Maximum Reverse Stand-off Voltage $V_{RWM}$	Minimum Breakdown Voltage $V_{BR} @ I_T$	Test Current $I_T$	Maximum Reverse Leakage Current $I_R @ V_{RWM}$	Maximum Clamping Voltage (8x20 $\mu\text{s}$ ) $V_C @ I_{PP}$		Typical TLP Clamping Voltage (Note 1) $V_{CL} @ I_{PP}$		Typical Dynamic Resistance (Note 1) $R_{DYN}$	Maximum Junction Capacitance @ 0V Bias $C_J$
				V	A	V	A		
3.3	3.5	2.0	0.5	6.5	1.0	6.0	4.0	0.25	10
				8.0	5.0	7.0	8.0		

Note 1: Transmission Line Pulse (TLP) conditions:  $Z_0=50\Omega$ ,  $t_p=100\text{ns}$

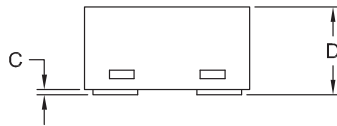
  
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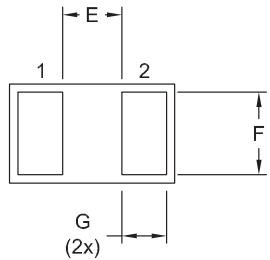
**SOD-882 CASE - MECHANICAL OUTLINE**



TOP VIEW



SIDE VIEW

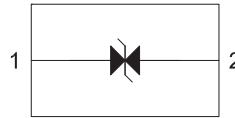


BOTTOM VIEW R2

SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.037	0.042	0.95	1.05
B	0.022	0.026	0.55	0.65
C	0.000	0.002	0.00	0.05
D	0.017	0.022	0.45	0.55
E	0.014		0.36	
F	0.017	0.022	0.45	0.55
G	0.008	0.013	0.22	0.32

SOD-882 (REV:R2)

**PIN CONFIGURATION**



**LEAD CODE:**

- 1) Anode 1
- 2) Anode 2

**MARKING CODE: 3**

R8 (28-July 2015)

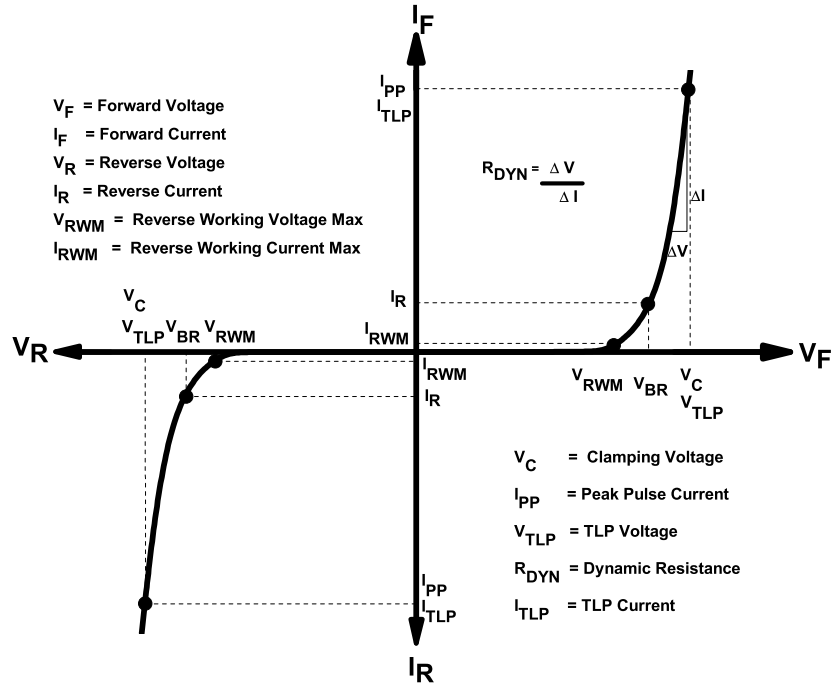
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### Definition of Electrical Characteristics

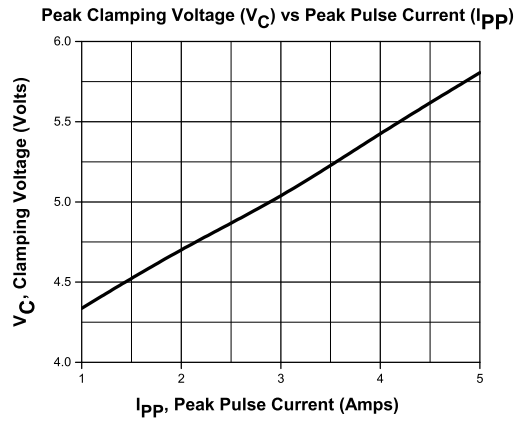
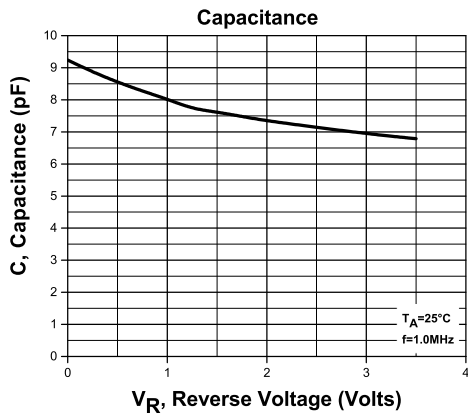
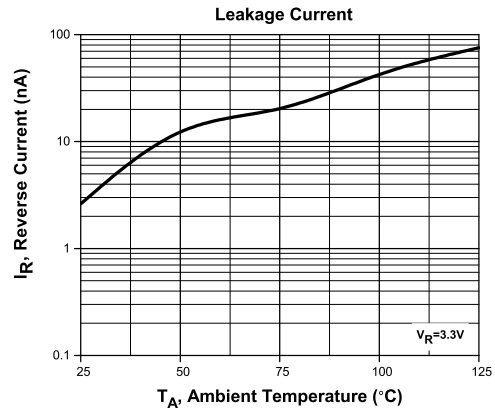
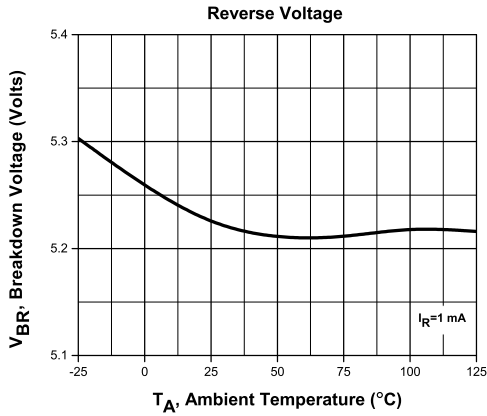


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**TYPICAL ELECTRICAL CHARACTERISTICS**

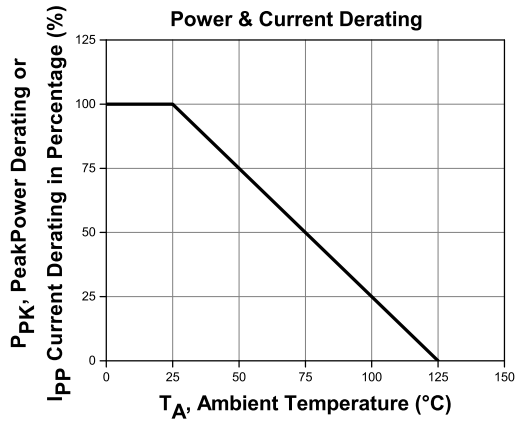
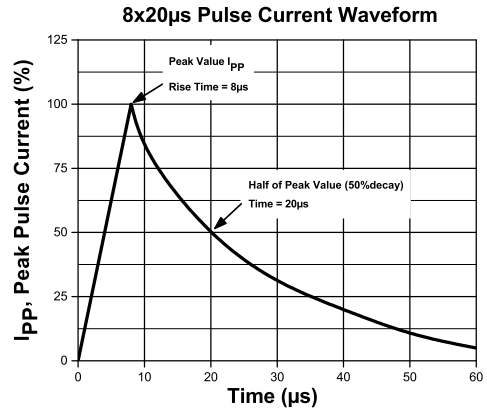
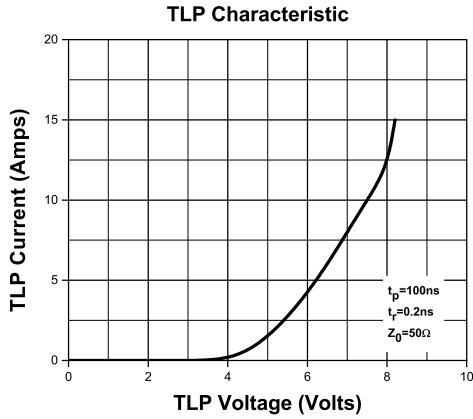


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**TYPICAL ELECTRICAL CHARACTERISTICS**



R8 (28-July 2015)

## OUTSTANDING SUPPORT AND SUPERIOR SERVICES



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### 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

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### DESIGNER SUPPORT/SERVICES

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

- Free quick ship samples (2<sup>nd</sup> 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

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### CONTACT US

#### Corporate Headquarters & Customer Support Team

Central Semiconductor Corp.  
145 Adams Avenue  
Hauppauge, NY 11788 USA  
Main Tel: (631) 435-1110  
Main Fax: (631) 435-1824  
Support Team Fax: (631) 435-3388  
[www.centalsemi.com](http://www.centalsemi.com)

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