
CFTVS3V3B
SURFACE MOUNT SILICON
BI-DIRECTIONAL
TRANSIENT VOLTAGE SUPPRESSOR



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 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

P_{PK} 40
 EFT 40
 V_{ESD} 30
 V_{ESD} 30
 T_J -55 to +125
 T_{stg} -55 to +150


UNITS

W
 A
 kV
 kV
 $^\circ\text{C}$
 $^\circ\text{C}$

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

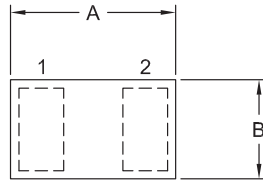
Maximum Reverse Stand-off Voltage V_{RWM}	Minimum Breakdown Voltage $V_{BR} @ I_T$	Test Current I_T	Maximum Reverse Leakage Current $I_R @ V_{RWM}$	Maximum Clamping Voltage (8x20 μs) $V_C @ I_{PP}$		Typical TLP Clamping Voltage (Note 1) $V_{CL} @ I_{PP}$		Typical Dynamic Resistance (Note 1) R_{DYN}	Maximum 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: $Z_0=50\Omega$, $t_p=100\text{ns}$

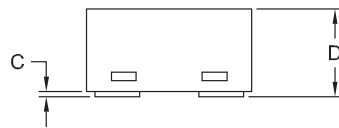

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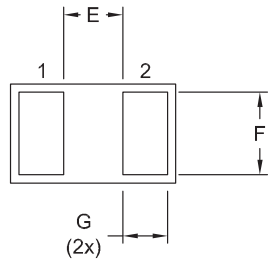
SOD-882 CASE - MECHANICAL OUTLINE



TOP VIEW



SIDE VIEW

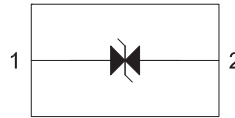


BOTTOM VIEW R2

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

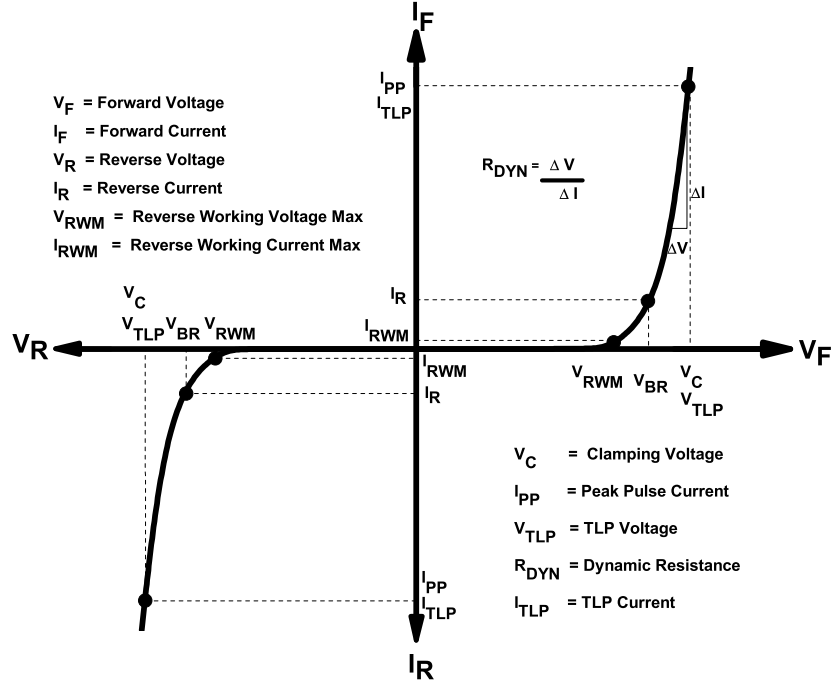
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R8 (28-July 2015)


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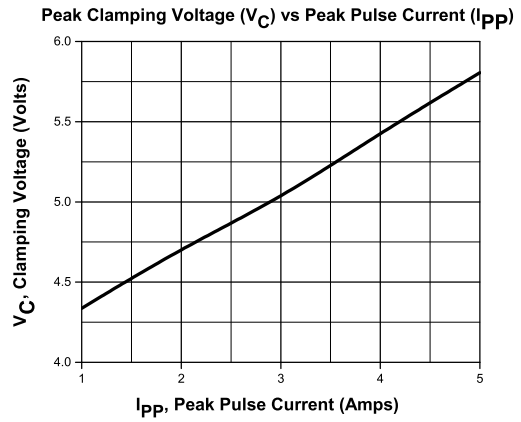
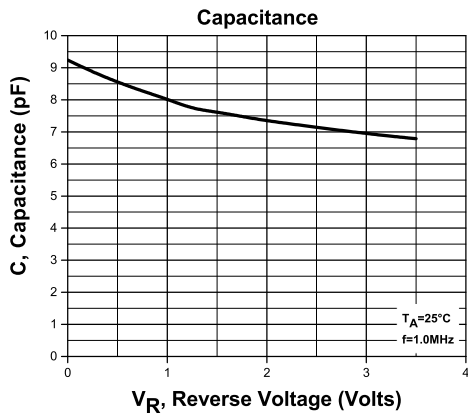
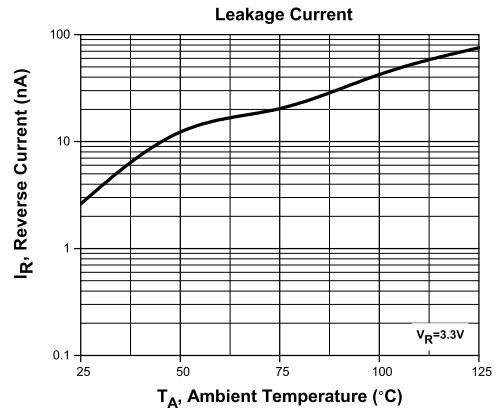
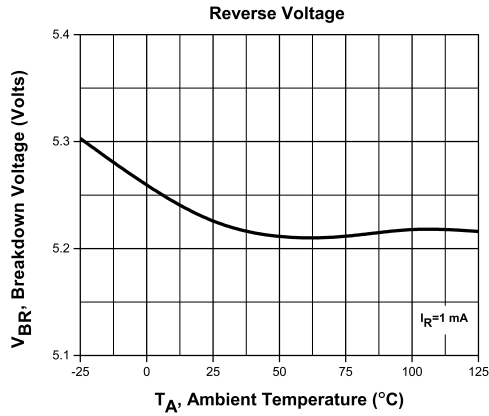
Definition of Electrical Characteristics





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TYPICAL ELECTRICAL CHARACTERISTICS

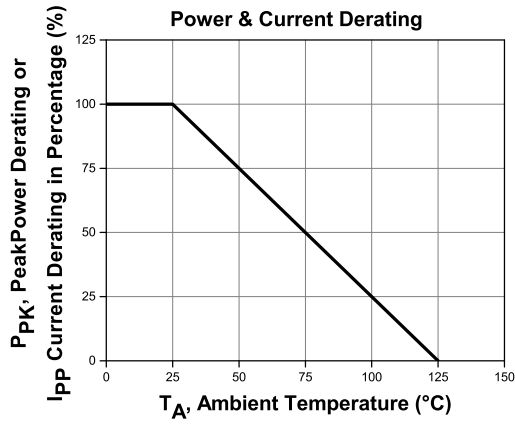
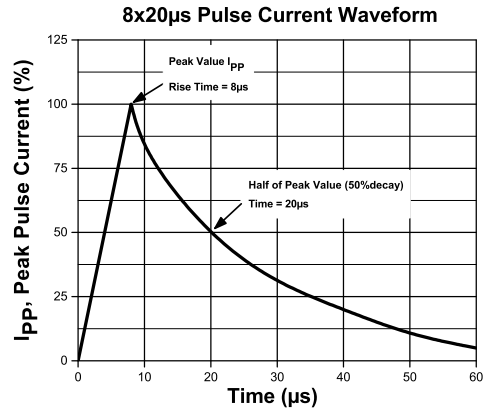
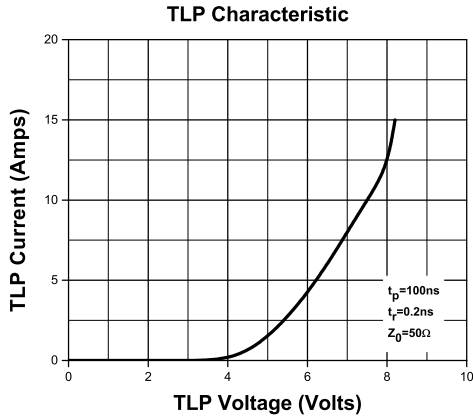


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TYPICAL ELECTRICAL CHARACTERISTICS



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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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