

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)
ESD Voltage (IEC 61000-4-2, Air)
ESD Voltage (IEC 61000-4-2, Contact)
Operating Junction Temperature
Storage Temperature

SYMBOL

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

UNITS

W
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 Clamping Voltage TLP (Note 1) $V_C @ I_{PP}$	Peak Pulse Current I_{PP}	Typical Dynamic Resistance (Note 1) R_{DYN}	Maximum Junction Capacitance @ 0V Bias C_J
V	V	μA	μA	V	V	A	Ω	pF
3.3	3.5	2.0	0.5	6.5	5.0	1.0	0.25	10
				8.0	6.0	5.0		

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

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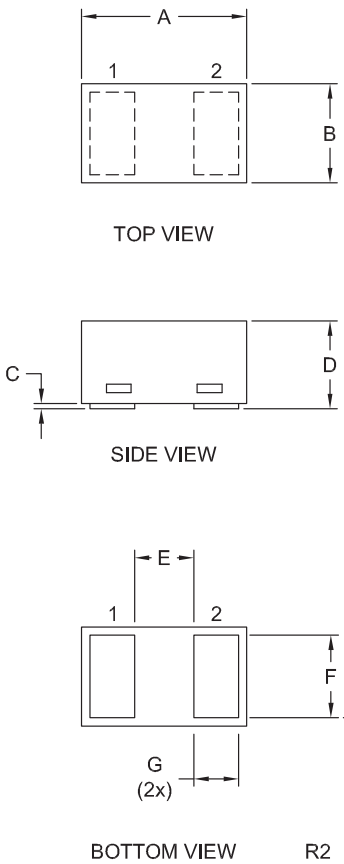
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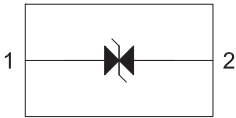
SOD-882 CASE - MECHANICAL OUTLINE



SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
A	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

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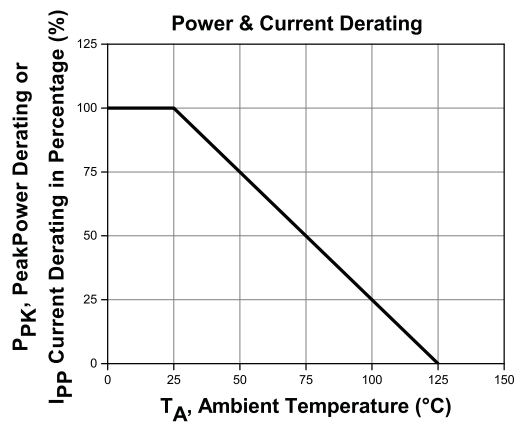
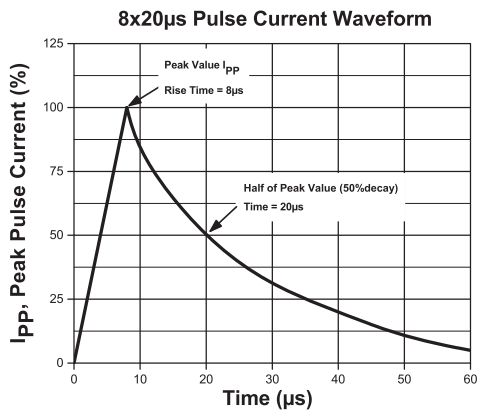
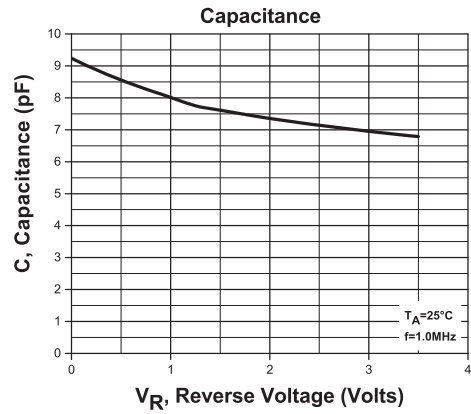
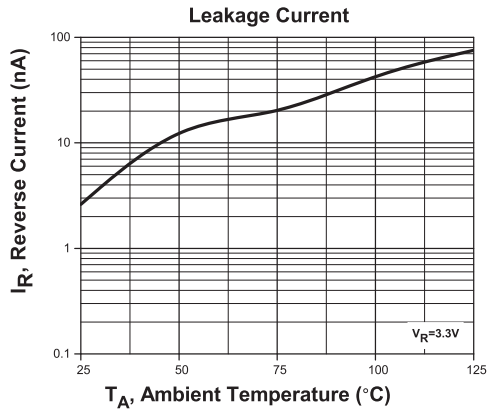
SURFACE MOUNT SILICON

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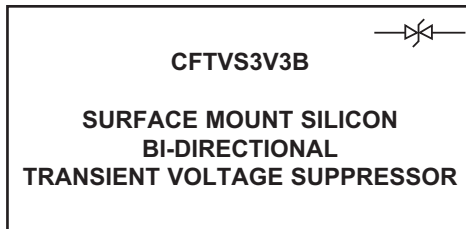
TRANSIENT VOLTAGE SUPPRESSOR



TYPICAL ELECTRICAL CHARACTERISTICS



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SERVICES

- Bonded Inventory
- Custom Electrical Screening
- Custom Electrical Characteristic Curves
- SPICE Models
- Custom Packaging
- Package Base Options
- Custom Device Development/ Multi Discrete Modules (MDM™)
- Bare Die Available for Hybrid Applications

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