

CTLTVS6V2

**SURFACE MOUNT SILICON
UNI-DIRECTIONAL
TRANSIENT VOLTAGE SUPPRESSOR**



www.centrasemi.com



DESCRIPTION:

The CENTRAL SEMICONDUCTOR CTLTVS6V2 is a low leakage, fast response silicon TVS packaged in an ultra small, ultra low profile TLM2D3D6 surface mount case. This device is designed to protect sensitive equipment against ESD damage.

MARKING CODE: S

APPLICATIONS:

- User interface protection
- Voltage rail protection
- Data line protection
- Voltage clamping

FEATURES:

- Ultra small, ultra low profile 0.3mm x 0.6mm x 0.3mm leadless surface mount package
- High peak pulse current capability
- 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 and Storage Junction Temperature

SYMBOL

P_{PK} 35
 EFT 40
 V_{ESD} 15
 V_{ESD} 8.0
 T_J, T_{stg} -55 to +150


UNITS

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

ELECTRICAL CHARACTERISTICS: ($T_A=25^\circ\text{C}$) $V_F=1.0\text{V MAX @ } I_F=10\text{mA}$

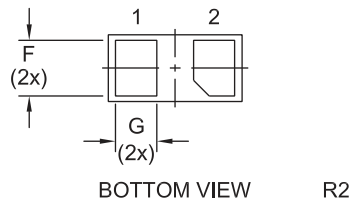
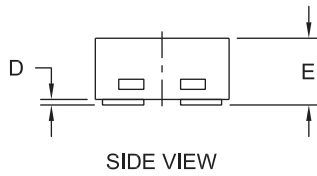
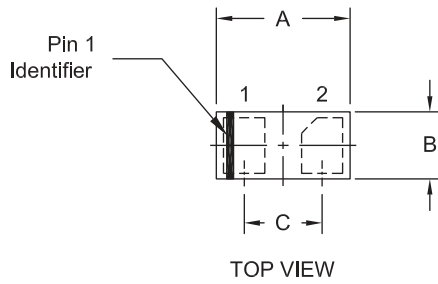
Maximum Reverse Stand-off Voltage V_{RWM}	Breakdown Voltage			Test Current I_T	Maximum Reverse Leakage Current $I_R @ V_{RWM}$	Maximum Clamping Voltage (8x20 μs) $V_C @ I_{PP}$		Typical TLP Clamping Voltage (Note 1) $V_{CL} @ I_{PP}$		Typical Dynamic Resistance (Note 1) R_{DYN}	Typical Junction Capacitance @ 0V Bias C_J
	MIN V	NOM V	MAX V			V	A	V	A		
4.0	5.8	6.2	6.6	5.0	1.0	10.7	3.0	7.0	1.5	0.54	25
								10	7.0		

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

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TLM2D3D6 CASE - MECHANICAL OUTLINE



SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.022	0.026	0.55	0.65
B	0.010	0.014	0.25	0.35
C	0.014		0.35	
D	0.000	0.002	0.00	0.05
E	0.011	0.013	0.28	0.32
F	0.008	0.012	0.20	0.30
G	0.005	0.009	0.13	0.24


TLM2D3D6 (REV: R2)

LEAD CODE:

- 1) Cathode
- 2) Anode

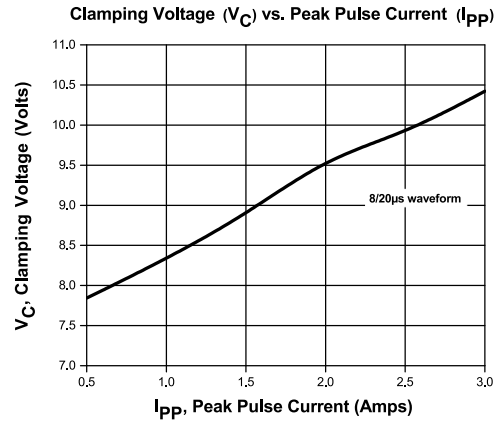
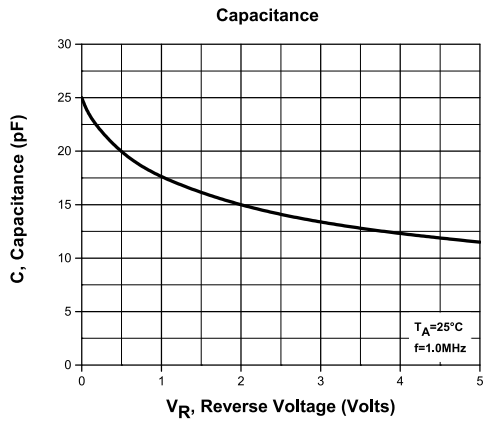
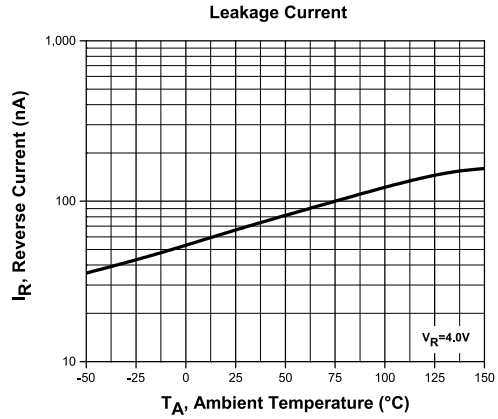
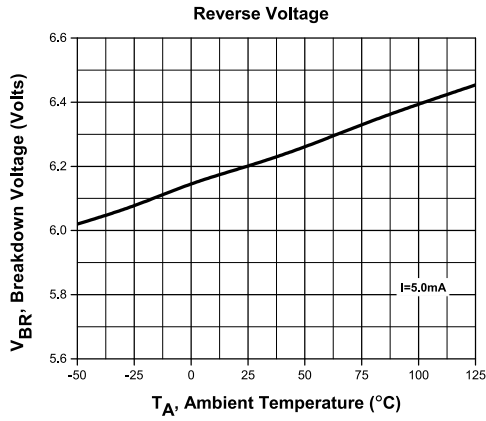
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R3 (26-October 2015)



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TYPICAL ELECTRICAL CHARACTERISTICS

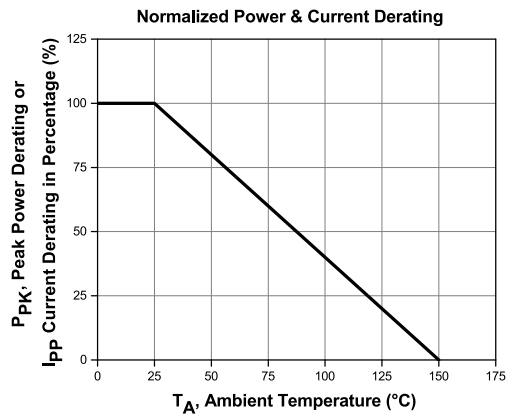
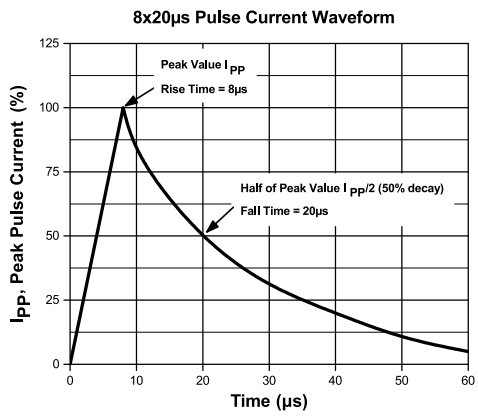
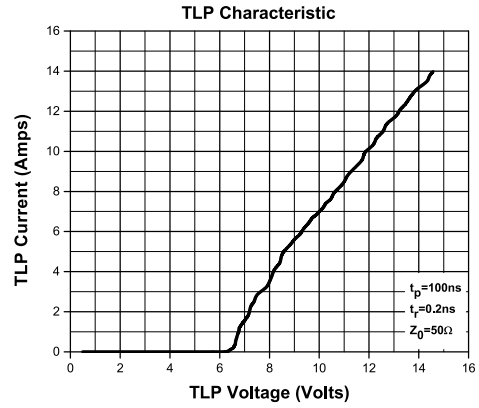
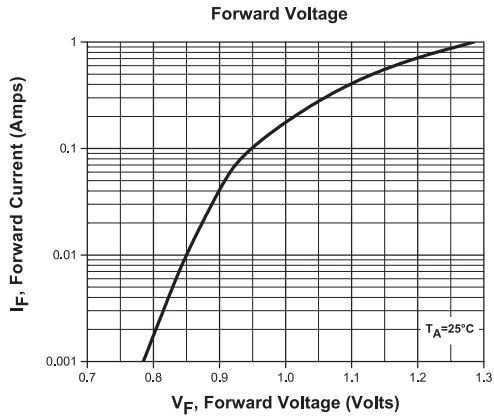


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TYPICAL ELECTRICAL CHARACTERISTICS



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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

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.centrasemi.com

Worldwide Field Representatives:
www.centrasemi.com/wwreps

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For the latest version of Central Semiconductor's **LIMITATIONS AND DAMAGES DISCLAIMER**, which is part of Central's Standard Terms and Conditions of sale, visit: www.centrasemi.com/terms



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Product End of Life Notification

PDN ID:	PDN01132
Notification Date:	9/13/19
Last Buy Date:	3/13/20
Last Shipment Date	9/13/20

Summary: The CTLTVS6V2 transient voltage suppressor is discontinued and now classified as End of Life (EOL).

Although Central Semiconductor Corp. makes every effort to continue to produce devices that have been proclaimed EOL (End of Life) by other manufacturers, it is an accepted industry practice to discontinue certain devices when customer demand falls below a minimum level of sustainability. Accordingly, the following product(s) have been transitioned to End of Life status as part of Central's ongoing Product Management Process. Any replacement products are noted below. The effective date for placing last purchase orders will be six (6) months from the date of this notice and twelve (12) months from the notice date for final shipments, and minimum order quantities may apply. The last purchase and shipment dates may be extended if inventory is available.

<u>Central Part Number</u>	<u>Replacement</u>
CTLTVS6V2 BK	N/A, Stock Only
CTLTVS6V2 TR	N/A, Stock Only

Central would be happy to assist you by providing additional information or technical data to help locate an alternate source if we have no replacement available. Please email your requests to engineering@centrasemi.com.

DISCLAIMER: This End of Life (EOL) notification is in accordance with JEDEC standard JESD48 - Product Discontinuance. Central Semiconductor Corp. will make every effort to offer life-time buy (LTB) opportunities and/or offer replacement devices to existing customers for discontinued devices, however, one or both may not be possible for all devices. Please contact your local Central Semiconductor sales representative for LTB opportunities/additional information.