CTLTVS5V0B

SURFACE MOUNT SILICON BI-DIRECTIONAL LOW CAPACITANCE TRANSIENT VOLTAGE SUPPRESSOR



Top View Bottom View

TLM2D3D6 CASE

Central Semiconductor Corp.

www.centralsemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CTLTVS5V0B is a low capacitance, ultra low leakage, fast response, bi-directional TVS in the space saving TLM2D3D6 surface mount package. This device is designed to protect sensitive equipment connected to high speed data lines against ESD damage.

MARKING CODE: 5

APPLICATIONS:

- High speed data line protection
- User interface protection
- Charging/power port protection
- Serial/parallel port protection

FEATURES:

- Ultra space saving TLM2D3D6 package
- Low capacitance
- Ultra low leakage current

MAXIMUM RATINGS: (T_A=25°C)	**SYMBOL**		**UNITS**
Peak Power Dissipation (8x20μs)	P_{PK}	30	W
Electrical Fast Transient (IEC 61000-4-4) (5x50ns)	EFT	40	A
ESD Voltage (IEC 61000-4-2, Air)	V_{ESD}	16	kV
ESD Voltage (IEC 61000-4-2, Contact)	V_{ESD}	16	kV
Operating Junction Temperature	T_J	-55 to +125	°C
Storage Temperature	T_{stg}	-55 to +150	°C

ELECTRICAL CHARACTERISTICS: (T_A=25°C)

Maximum Reverse Stand-off Voltage V_{RWM}	Breakdown Voltage V_{BR} @ I_T		Test Current I_T	Maximum Reverse Leakage Current I_R @ V_{RWM}	Maximum Clamping Voltage (8x20μs) 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	MIN V	MAX V	mA	μA	V	A	V	A	Ω	pF
5.0	5.5	10	1.0	0.1	12	1.0	9.5	4.0	0.5	3.5
					15	2.0	11.5	8.0		

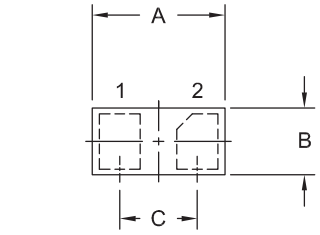
Note 1: Transmission Line Pulse (TLP) conditions: Z_0=50Ω, tp=100ns

R6 (23-July 2015)

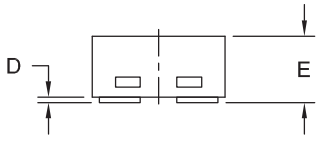
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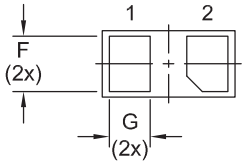
TLM2D3D6 CASE - MECHANICAL OUTLINE



TOP VIEW



SIDE VIEW

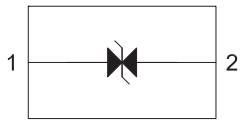


BOTTOM VIEW R2

DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	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)

PIN CONFIGURATION



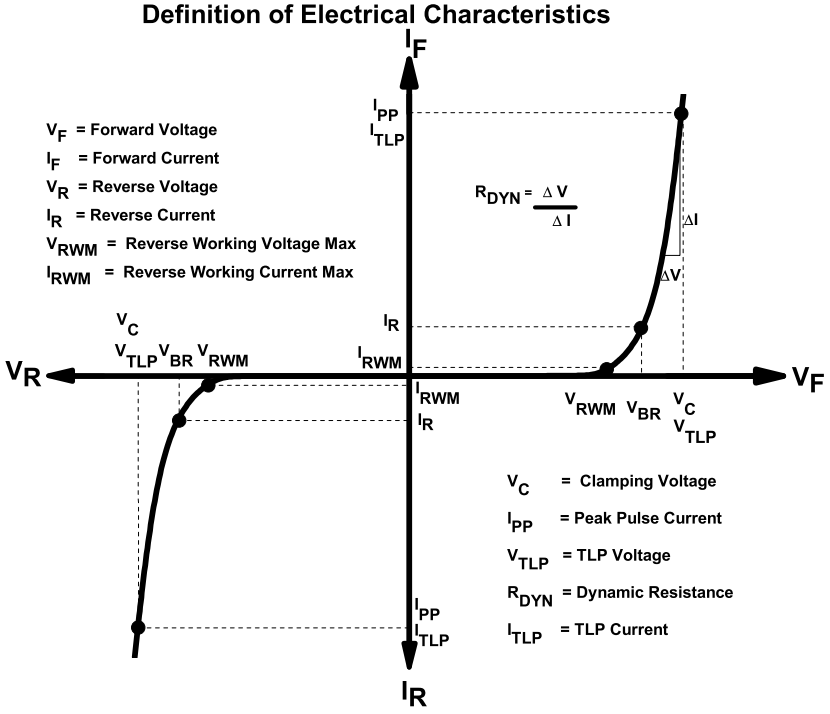
LEAD CODE:
1) Anode 1
2) Anode 2

MARKING CODE: 5

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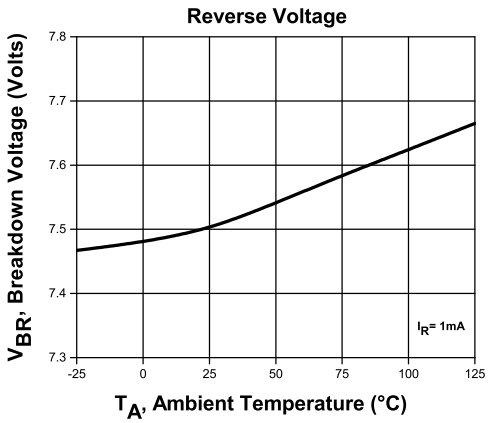
Definition of Electrical Characteristics

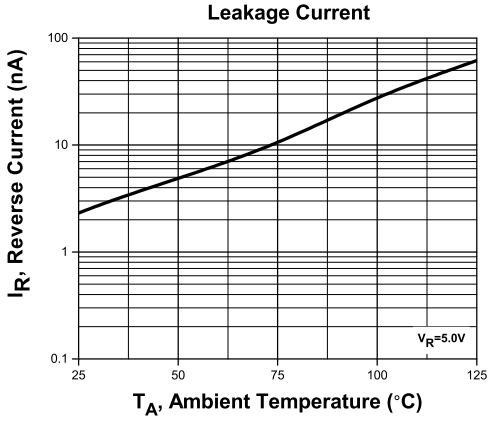


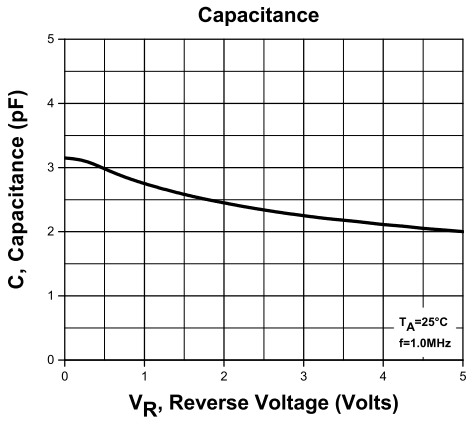
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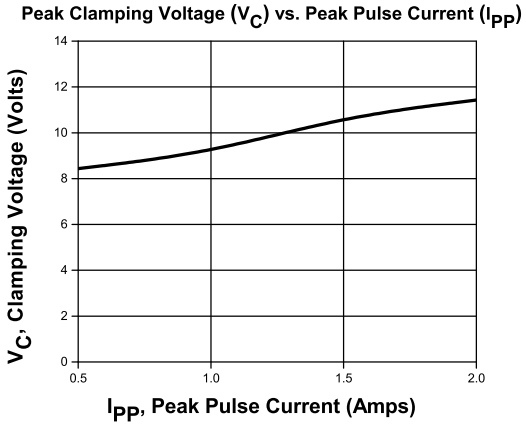
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TYPICAL ELECTRICAL CHARACTERISTICS





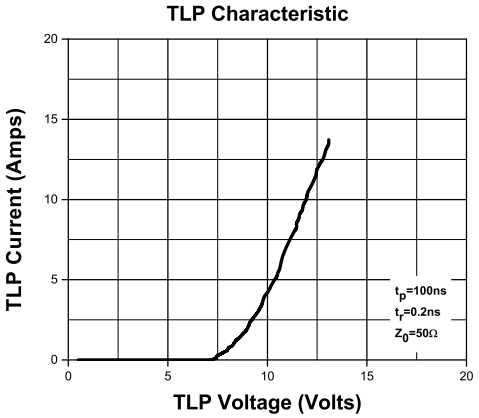


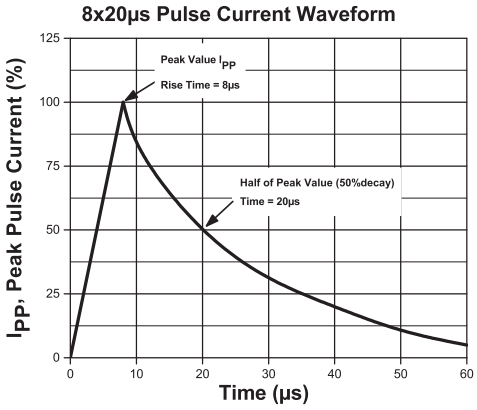


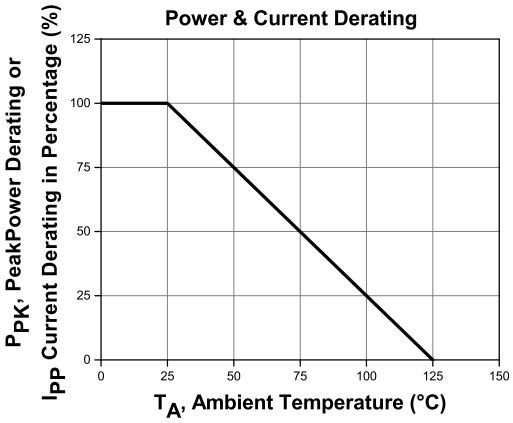
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TYPICAL ELECTRICAL CHARACTERISTICS







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

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www.centralsemi.com/wwreps

Worldwide Distributors:
www.centralsemi.com/wwdistributors

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.centralsemi.com/terms

http://www.centralsemi.com

Product End of Life Notification

PDN ID:	PDN01198
Notification Date:	11/11/21
Last Buy Date:	5/11/22
Last Shipment Date	11/11/22

Summary:The CTLTVS5V0B TVS is discontinued and now classified as End 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.

*** All Plating types (PBFREE,TIN/LEAD) for each item listed are included in this notice.**

Central Part Number	Suggested Replacement
CTLTVS5V0B TR	N/A

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. If you would like assistance, please visit https://my.centralsemi.com/submit-inquiry?type=ER to submit an online inquiry.

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.