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	11	8.0	0.5	3.5
					15	2.0	15	16		

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

R5 (22-June 2015)

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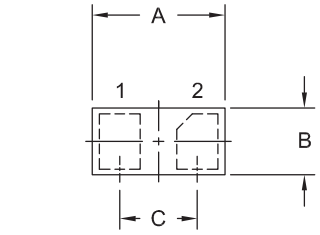
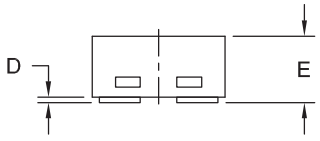
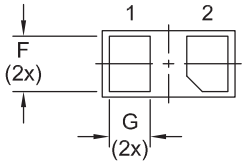
TLM2D3D6 CASE - MECHANICAL OUTLINE



TOP VIEW



SIDE VIEW

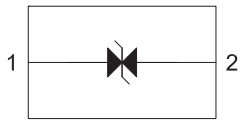


BOTTOM VIEW R2

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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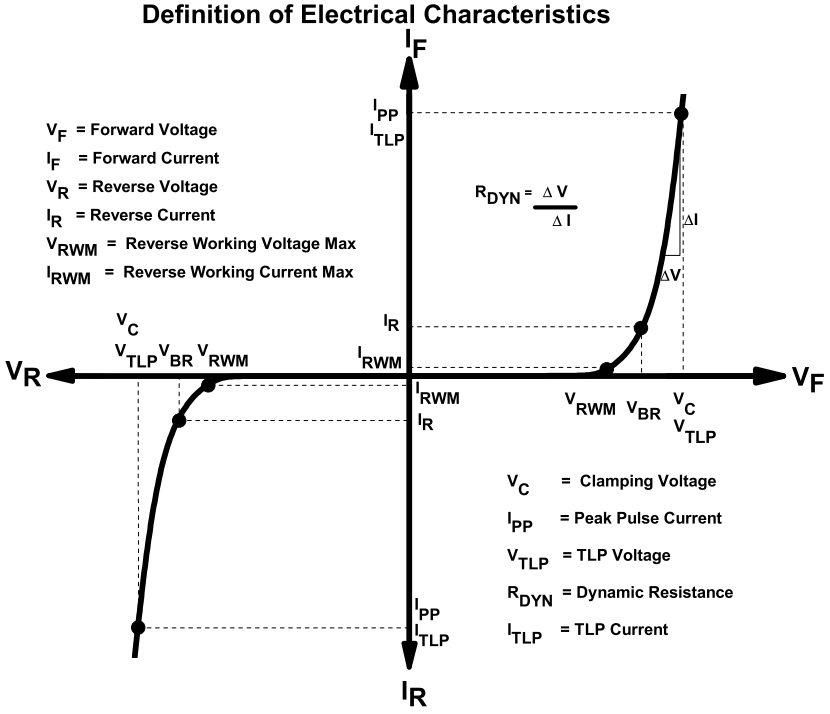
Definition of Electrical Characteristics



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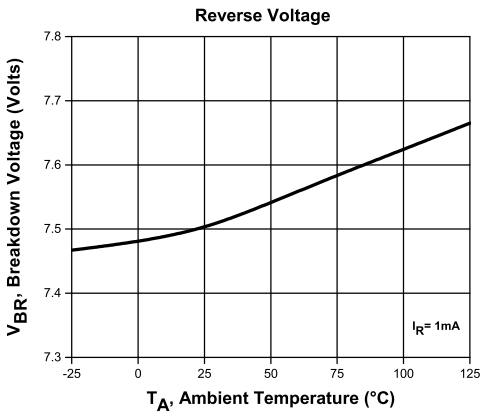
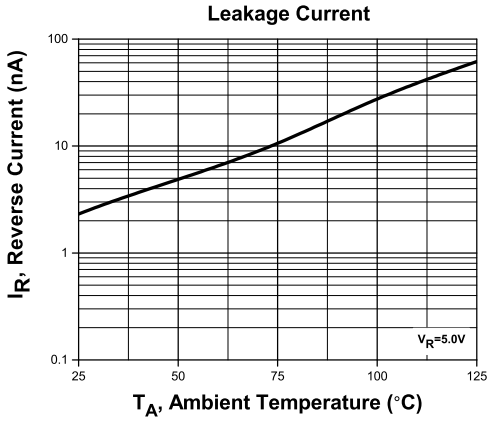
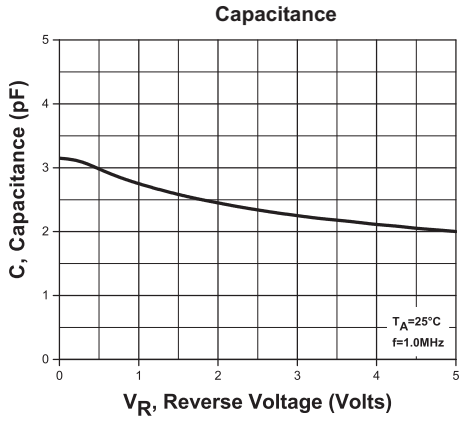
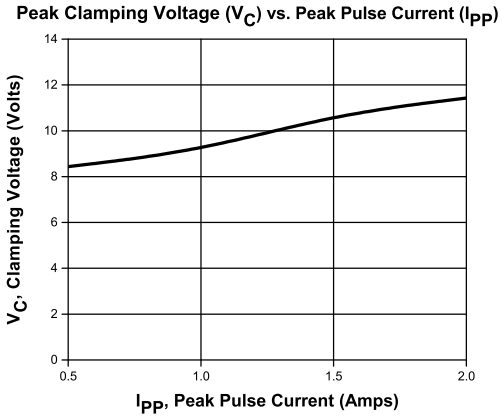
TYPICAL ELECTRICAL CHARACTERISTICS









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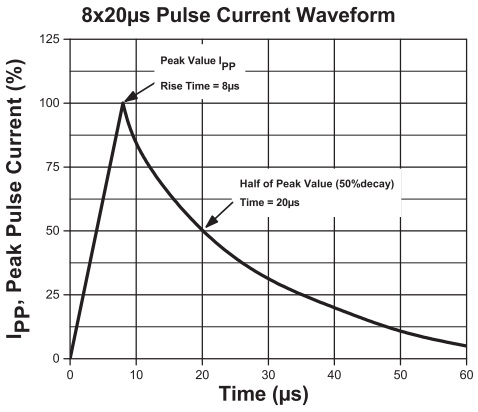

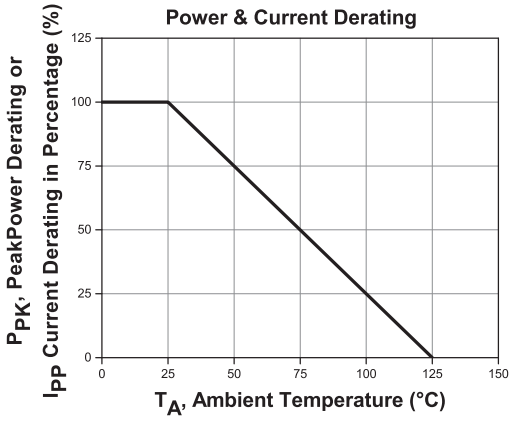

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SERVICES

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R5 (22-June 2015)