

CTLTVS6V2

SURFACE MOUNT SILICON 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

Specified by
BREAKDOWN VOLTAGE



Top View Bottom View
TLM2D3D6 CASE

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)

ESD Voltage (IEC 61000-4-2, Air)

ESD Voltage (IEC 61000-4-2, Contact)

Operating and Storage Junction Temperature

SYMBOL

P_{PK}

V_{ESD}

V_{ESD}

T_J, T_{stg}

35

15

8.0

-55 to +150

UNITS

W

kV

kV

$^{\circ}\text{C}$

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

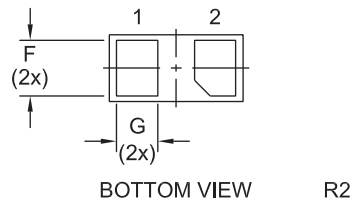
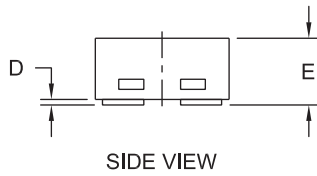
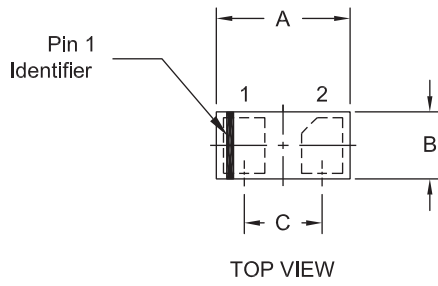
Maximum Reverse Stand-off Voltage V_{RWM}	Breakdown Voltage $V_{BR} @ I_T$			Test Current I_T	Maximum Reverse Leakage Current $I_R @ V_{RWM}$	Maximum Clamping Voltage $V_C @ I_{PP}$	Peak Pulse Current I_{PP}	Typical Junction Capacitance @ 0V Bias C_J
V	MIN V	NOM V	MAX V	mA	μA	V	A	pF
4.0	5.8	6.2	6.6	5.0	1.0	10.7	3.0	25

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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

MARKING CODE: S

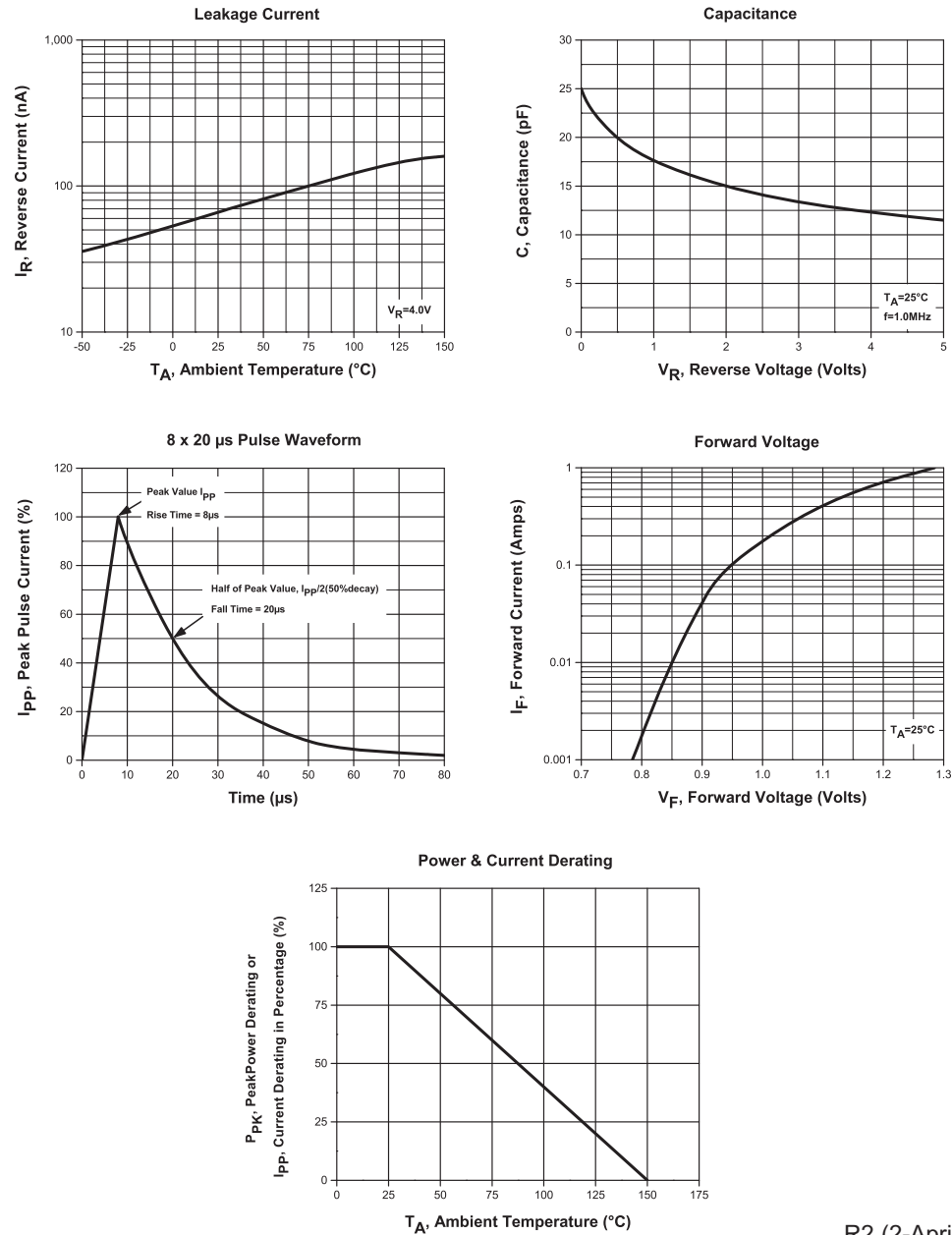
R2 (2-April 2015)

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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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R2 (2-April 2015)