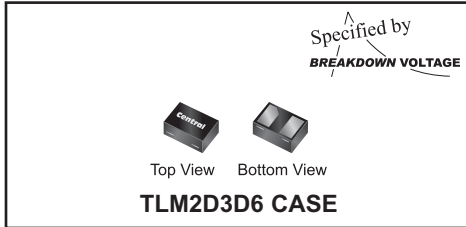


CTLTVS6V2

**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

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}

UNITS

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

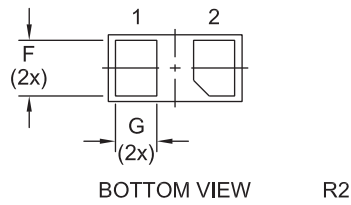
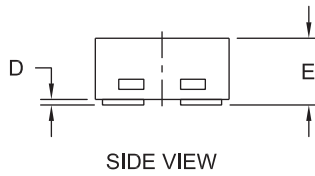
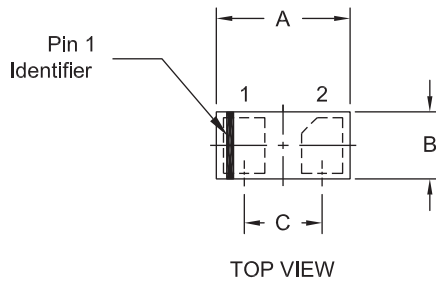
ELECTRICAL CHARACTERISTICS: ($T_A=25^\circ\text{C}$) $V_F=1.0\text{V MAX @ } I_F=10\text{mA}$

| Maximum Reverse Stand-off Voltage V_{RWM} | Breakdown Voltage | | | 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 |
|--|-------------------|-------|-------|-----------------------|--|--|--------------------------------|---|
| | MIN V | NOM V | MAX V | | | | | |
| 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 | 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

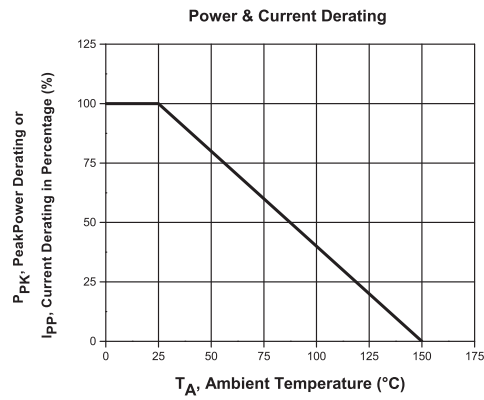
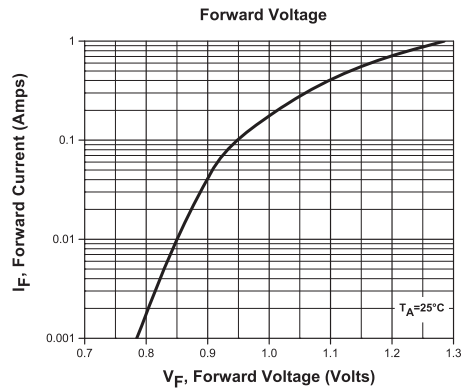
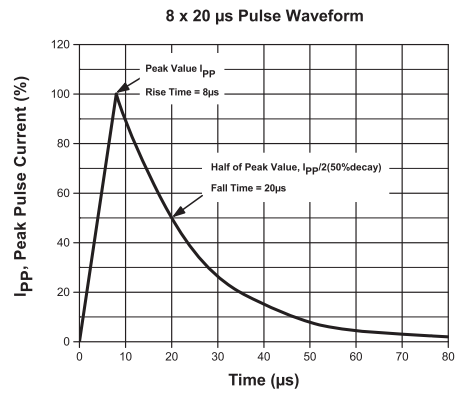
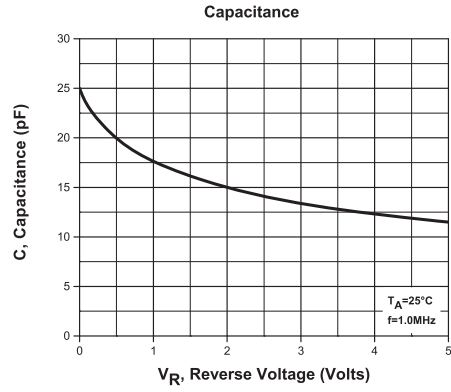
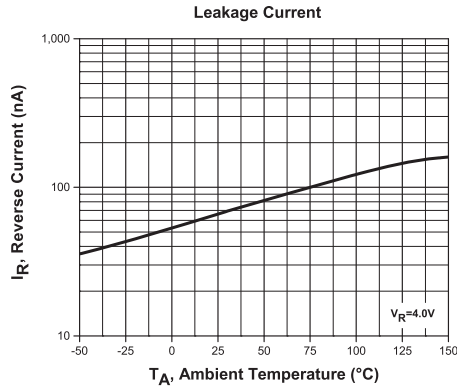
R2

R2 (2-April 2015)

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TYPICAL ELECTRICAL CHARACTERISTICS



R2 (2-April 2015)

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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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In no event shall Central's aggregate liability from any warranty, indemnity, or other obligation arising out of or in connection with a purchase order or contract, or any use of any Central product provided hereunder, exceed the total amount paid to Central for the specific products sold under a purchase order or contract with respect to which losses or damages are claimed. The existence of more than one (1) claim against the specific products sold to Buyer under a purchase order or contract shall not enlarge or extend this limit.

Buyer understands and agrees that the foregoing liability limitations are essential elements of a purchase order or contract and that in the absence of such limitations, the material and economic terms of the purchase order or contract would be substantially different.

R2 (2-April 2015)