

CTLTVS6V2

SURFACE MOUNT SILICON TRANSIENT VOLTAGE SUPPRESSOR



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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 | UNITS |
|----------------|--------------------|
| P_{PK} | W |
| V_{ESD} | kV |
| V_{ESD} | kV |
| T_J, T_{stg} | ${}^\circ\text{C}$ |

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

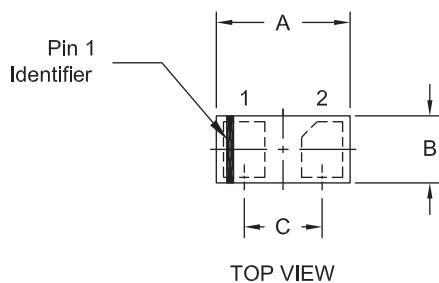
| Maximum Reverse Stand-off Voltage V_{RWM} | Breakdown Voltage | | | Test Current I_T | Maximum Reverse Leakage Current $I_R @ V_{RWM}$ | Maximum Clamping Voltage $V_C @ I_{PP}$ | Peak Pulse Current I_{PP} | Typical Junction Capacitance @ 0V Bias C_J |
|--|-------------------|-------|-------|-----------------------|--|--|--------------------------------|---|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

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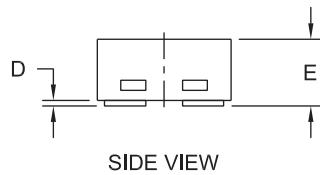
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TRANSIENT VOLTAGE SUPPRESSOR



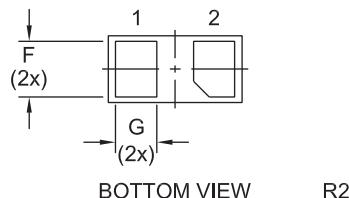
TLM2D3D6 CASE - MECHANICAL OUTLINE



TOP VIEW



SIDE VIEW



BOTTOM VIEW R2

| SYMBOL | DIMENSIONS | | | |
|--------|------------|-------------|------|------|
| | INCHES | MILLIMETERS | 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

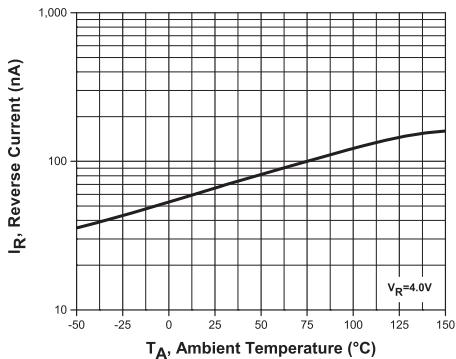
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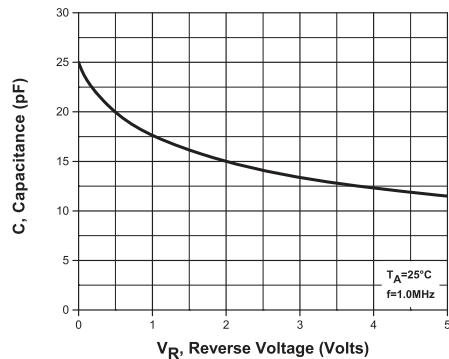


TYPICAL ELECTRICAL CHARACTERISTICS

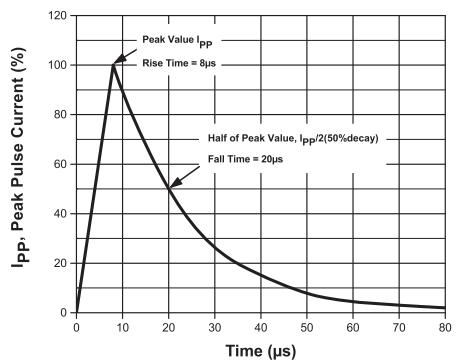
Leakage Current



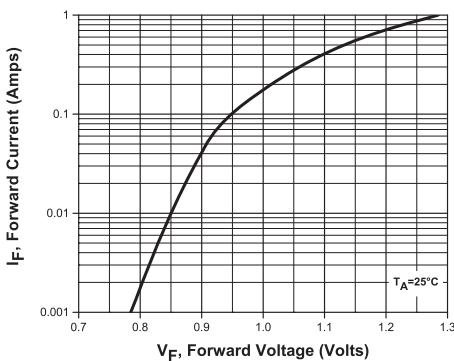
Capacitance



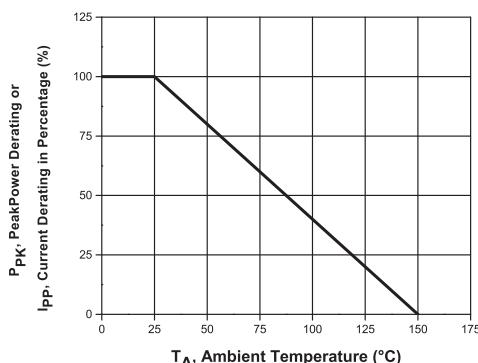
8 x 20 μ s Pulse Waveform



Forward Voltage



Power & Current Derating



R2 (2-April 2015)



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SERVICES

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- 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)

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- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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