

**CTLTVS12**  
**SURFACE MOUNT SILICON**  
**TRANSIENT VOLTAGE SUPPRESSOR**



[www.centrasemi.com](http://www.centrasemi.com)



**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CTLTVS12 is a low leakage, fast response TVS packaged in an ultra small, ultra low profile surface mount package. This device is designed to protect sensitive equipment against ESD damage.

**MARKING CODE: O**

**FEATURES:**

- Ultra Small, Ultra Low Profile 0.3mm x 0.6mm x 0.3mm TLP™ Leadless Surface Mount package
- Low Capacitance
- Low Leakage Current
- ESD Protection IEC 61000-4-2:
  - Air Discharge - 30kV
  - Contact Discharge - 30kV

**APPLICATIONS:**

- PDAs
- Memory Card Ports
- Cellular Phones
- Instrumentation

**MAXIMUM RATINGS:** (T<sub>A</sub>=25°C)

Peak Power Dissipation (8x20µs)

ESD Voltage

Operating and Storage Junction Temperature

**SYMBOL**

P<sub>PK</sub>

V<sub>ESD</sub>

T<sub>J</sub>, T<sub>stg</sub>

**UNITS**

W

kV

°C

35

30

-55 to +150

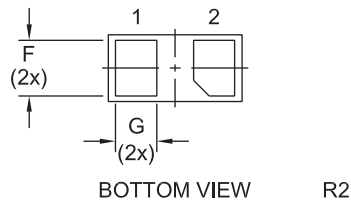
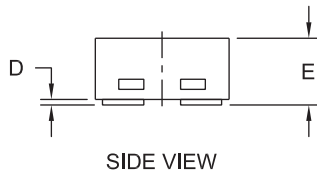
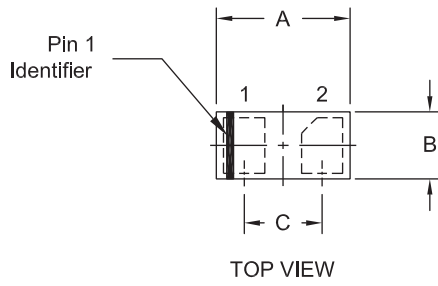
**ELECTRICAL CHARACTERISTICS:** (T<sub>A</sub>=25°C) V<sub>F</sub>=1.0V MAX @ I<sub>F</sub>=10mA

Maximum Reverse Stand-off Voltage V <sub>RWM</sub>	Breakdown Voltage			Test Current I <sub>T</sub>	Maximum Reverse Leakage Current I <sub>R</sub> @ V <sub>RWM</sub>	Maximum Clamping Voltage V <sub>C</sub> @ I <sub>PP</sub>	Peak Pulse Current I <sub>PP</sub>	Typical Capacitance @ 0V Bias	Typical Capacitance @ 9V Bias
	MIN V	NOM V	MAX V						
V	MIN V	NOM V	MAX V	mA	µA	V	A	pF	pF
9.0	10	12	14	5.0	1.0	18	1.8	14	5.0

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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: O**

R2

R1 (26-January 2012)