

CTLZ3V9 THRU CTLZ8V2  
SURFACE MOUNT SILICON  
ZENER DIODES



www.centrasemi.com



TLM2D3D6 CASE

**FEATURES:**

- Ultra small, ultra low profile  
0.3mm x 0.6mm x 0.3mm TLP™ leadless surface mount package.

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CTLZ3V9 thru CTLZ8V2 silicon Zener diodes are high quality voltage regulators, each packaged in the ultra small, ultra low profile TLM2D3D6 leadless surface mount case.

**MARKING CODE: SEE MARKING CODES ON ELECTRICAL CHARACTERISTICS TABLE**

**APPLICATIONS:**

- Reference voltage
- Voltage regulation
- Over-voltage protection
- Medical electronics
- Handheld devices such as mobile phones and MP3 players.

**MAXIMUM RATINGS:** ( $T_A=25^\circ\text{C}$ )

Power Dissipation  
Operating and Storage Junction Temperature

**SYMBOL**

$P_D$   
 $T_J, T_{stg}$

**UNITS**

mW  
 $^\circ\text{C}$

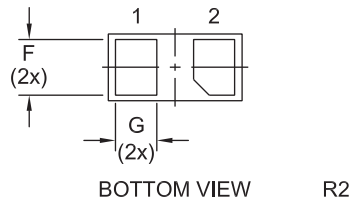
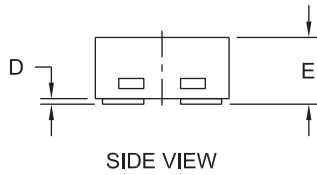
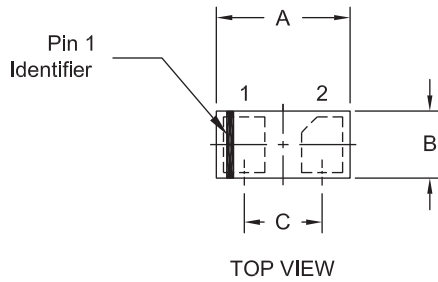
**ELECTRICAL CHARACTERISTICS:** ( $T_A=25^\circ\text{C}$ )  $V_F=0.9\text{V MAX @ } I_F=10\text{mA}$  (for all types)

| TYPE    | ZENER VOLTAGE  |       |       | TEST CURRENT | MAXIMUM REVERSE LEAKAGE CURRENT |               | MARKING CODE |
|---------|----------------|-------|-------|--------------|---------------------------------|---------------|--------------|
|         | $V_Z @ I_{ZT}$ |       |       |              | $I_{ZT}$                        | $I_R$         |              |
|         | MIN V          | NOM V | MAX V | mA           |                                 | $\mu\text{A}$ |              |
| CTLZ3V9 | 3.74           | 3.9   | 4.16  | 5.0          | 5.0                             | 1.0           | F            |
| CTLZ4V7 | 4.42           | 4.7   | 4.90  | 5.0          | 2.0                             | 1.0           | H            |
| CTLZ5V1 | 4.84           | 5.1   | 5.37  | 5.0          | 2.0                             | 1.5           | K            |
| CTLZ5V6 | 5.31           | 5.6   | 5.92  | 5.0          | 1.0                             | 2.5           | L            |
| CTLZ6V2 | 5.86           | 6.2   | 6.53  | 5.0          | 1.0                             | 3.0           | N            |
| CTLZ6V8 | 6.47           | 6.8   | 7.14  | 5.0          | 0.5                             | 3.5           | P            |
| CTLZ7V5 | 7.06           | 7.5   | 7.84  | 5.0          | 0.5                             | 4.0           | T            |
| CTLZ8V2 | 7.76           | 8.2   | 8.64  | 5.0          | 0.5                             | 5.0           | U            |

**CTLZ3V9 THRU CTLZ8V2**  
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**TLM2D3D6 CASE - MECHANICAL OUTLINE**



| DIMENSIONS |        |       |             |      |
|------------|--------|-------|-------------|------|
| 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: SEE MARKING CODES ON ELECTRICAL CHARACTERISTICS TABLE**

R0 (23-October 2012)