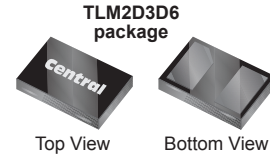


## CTLZ3V9 thru CTLZ8V2 100mW, 3.9V thru 8.2V, Zener Diodes in miniature TLM2D3D6 package



Central Semiconductor's CTLZ3V9 series of silicon Zener diodes is ideal for applications requiring a stable reference voltage over a broad temperature range. Zener voltages range from 3.9V to 8.2V. The ultra small, ultra low profile leadless TLM2D3D6 surface mount package affords designers a space saving alternative, while performing the same functions as larger packaged devices. The energy efficient CTLZ3V9 series exhibits low quiescent power loss.

### Features:

- Ultra small, ultra low profile leadless package
- Logic level compatibility
- 5 percent voltage tolerance
- Low reverse leakage

### Applications:

- Reference voltage
- Shunt regulator
- Over-voltage protection

### Benefits:

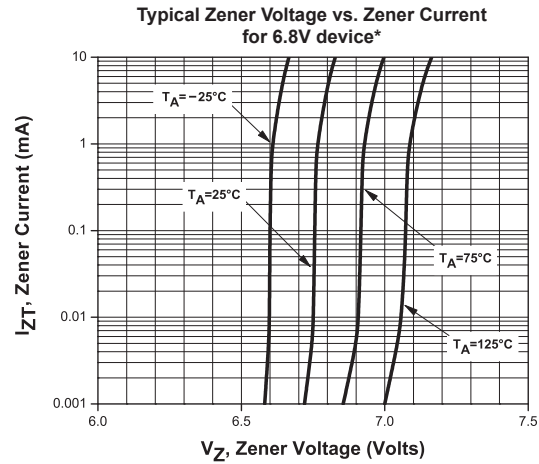
- Space saving
- Low quiescent power loss
- Stable zener voltage over temperature

### Samples



To order samples of this device visit:  
[www.centrasemi.com/info/CTLZ](http://www.centrasemi.com/info/CTLZ)

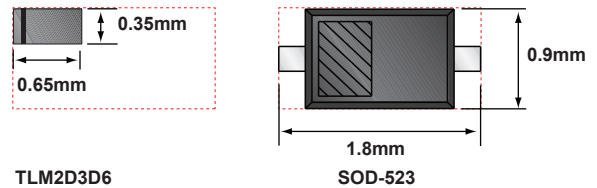
### Typical Electrical Characteristics



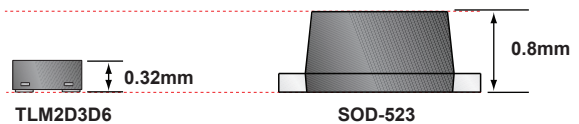
\*For electrical curves for other Zener voltages contact Central Semiconductor

### Package Size and Comparison:

The TLM2D3D6 utilizes **86%** less board space than the SOD-523



The TLM2D3D6 has a **60%** lower profile than the SOD-523



Part Type	Maximum Ratings ( $T_A = 25^\circ\text{C}$ )		Electrical Characteristics: ( $T_A = 25^\circ\text{C}$ )								
	P <sub>D</sub> MAX (mW)	T <sub>J</sub> , T <sub>stg</sub> MAX (°C)	Zener Voltage V <sub>Z</sub> @ I <sub>ZT</sub>			Test Current I <sub>ZT</sub> (mA)	Maximum Reverse Leakage Current I <sub>R</sub> @ V <sub>R</sub>		Maximum Forward Voltage V <sub>F</sub> @ I <sub>F</sub>		Marking Codes
			MIN (V)	NOM (V)	MAX (V)		(μA)	(V)	(V)	(mA)	
CTLZ3V9	100	-55 to +150	3.74	3.9	4.16	5.0	5.0	1.0	0.9	10	F
CTLZ4V7			4.42	4.7	4.90	5.0	2.0	1.0	0.9	10	H
CTLZ5V1			4.84	5.1	5.37	5.0	2.0	1.5	0.9	10	K
CTLZ5V6			5.31	5.6	5.92	5.0	1.0	2.5	0.9	10	L
CTLZ6V2			5.86	6.2	6.53	5.0	1.0	3.0	0.9	10	N
CTLZ6V8			6.47	6.8	7.14	5.0	0.5	3.5	0.9	10	P
CTLZ7V5			7.06	7.5	7.84	5.0	0.5	4.0	0.9	10	T
CTLZ8V2			7.76	8.2	8.64	5.0	0.5	5.0	0.9	10	U

Use QR reader for direct link to product web page.

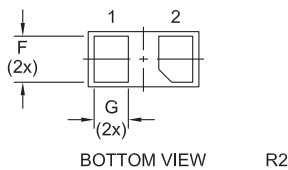
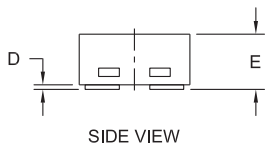
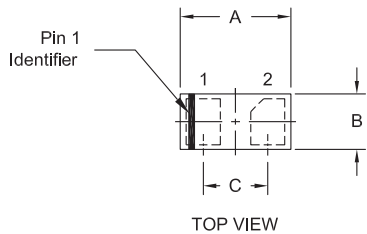
weblink scan



# CTLZ3V9 thru CTLZ8V2

# 100mW, 3.9V thru 8.2V, Zener Diodes in miniature TLM2D3D6 package

## Mechanical Drawing - TLM2D3D6



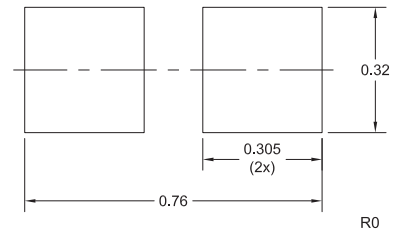
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.022	0.026	0.55	0.65
B	0.010	0.014	0.25	0.35
C	0.014		0.35	
D	0.000	0.002	0.00	0.05
E	0.011	0.013	0.28	0.32
F	0.008	0.012	0.20	0.30
G	0.005	0.009	0.13	0.24

TLM2D3D6 (REV: R2)

### Lead Code:

- 1) Cathode
- 2) Anode

## Mounting Pad Geometry (Dimensions in mm)

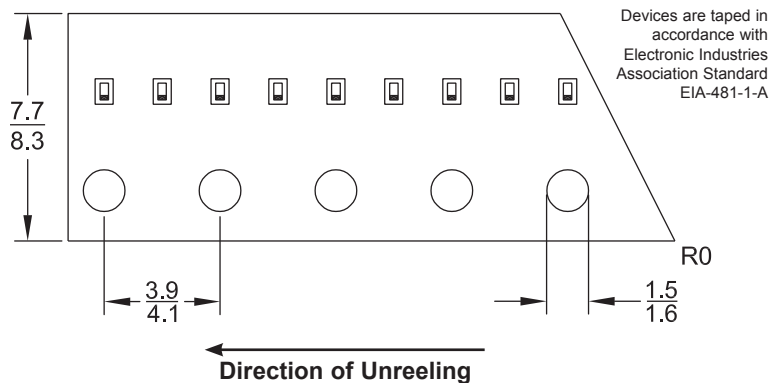


## Packaging Base / Ordering Information

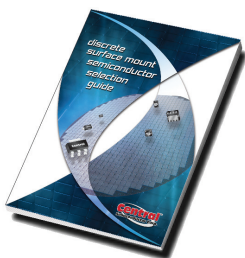
Reel Size	Quantity	Central Item No.
7"	8,000	CTLZ3V9 TR
		CTLZ4V7 TR
		CTLZ5V1 TR
		CTLZ5V6 TR
		CTLZ6V2 TR
		CTLZ6V8 TR
		CTLZ7V5 TR
		CTLZ8V2 TR

## Tape Dimensions and Orientation (Dimensions in mm)

Tape Width: 8mm



## Literature



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## Reel Packing Information

Reel Size	Reels per Box (Maximum)	Parts per Box (Maximum)	Box Dimensions		Shipping Weight (Max.)	
			INCH	CM	LB	KG
7"	9	72,000	9x9x5	23x23x13	3	2
	18	144,000	9x9x9	23x23x23	6	3
	40	320,000	21x9x9	53x23x23	13	6
	108	864,000	27x9x17	69x23x43	34	16

Sample devices available upon request. To order samples of this device visit: [www.centrasemi.com/info/CTLZ](http://www.centrasemi.com/info/CTLZ)



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