

CTLSH01-30L

SURFACE MOUNT SILICON
LOW V_F SCHOTTKY DIODE

TLP
Tiny
Leadless
Package



Top View Bottom View

TLM2D3D6 CASE



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CTLSH01-30L is a high quality Schottky Diode designed for applications where ultra small size and low forward voltage are prime requirements. Packaged in a Tiny Leadless Package™, TLP™, this component provides performance characteristics suitable for the most demanding size constrained applications.

MARKING CODE: D

APPLICATIONS:

- DC - DC Converters
- Voltage Clamping
- Protection Circuits
- Battery powered applications including Cell Phones, Digital Cameras, Pagers, PDAs, Laptop Computers, etc.

FEATURES:

- Current ($I_O=100\text{mA}$)
- Low Forward Voltage Drop ($V_F=0.30\text{V TYP @ }10\text{mA}$)
- Low Reverse Current ($1.3\mu\text{A TYP @ }10\text{V}$)
- Ultra Small, Ultra Low Profile $0.3\text{mm} \times 0.6\text{mm} \times 0.3\text{mm}$ TLP™ Leadless Surface Mount package

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

Peak Repetitive Reverse Voltage
DC Blocking Voltage
Average Forward Current
Peak Forward Surge Current, $t_p=8.3\text{ms}$
Power Dissipation
Operating Junction Temperature
Storage Temperature
Thermal Resistance

SYMBOL

V_{RRM}	30	V
V_R	30	V
I_O	100	mA
I_{FSM}	500	mA
P_D	100	mW
T_J	-65 to +125	$^\circ\text{C}$
T_{stg}	-65 to +150	$^\circ\text{C}$
Θ_{JA}	1000	$^\circ\text{C/W}$

UNITS

ELECTRICAL CHARACTERISTICS: ($T_A=25^\circ\text{C}$ unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I_R	$V_R=3.3\text{V}$		0.8	2.0	μA
I_R	$V_R=10\text{V}$		1.3	7.0	μA
BV_R	$I_R=100\mu\text{A}$	30			V
V_F	$I_F=5.0\mu\text{A}$		70	95	mV
V_F	$I_F=10\text{mA}$		300	370	mV
C_T	$V_R=0, f=1.0\text{MHz}$		7.0		pF

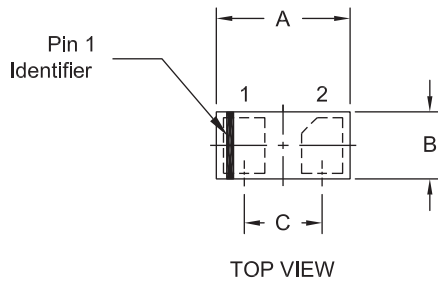
R2 (26-May 2011)

CTLSH01-30L

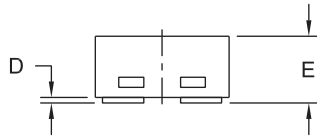
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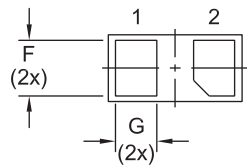
TLM2D3D6 CASE - MECHANICAL OUTLINE



TOP VIEW



SIDE VIEW



BOTTOM VIEW

R2

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

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R2 (26-May 2011)