

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 CTL SH01-30L 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.

#### 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

#### 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

#### SYMBOL

SYMBOL		UNITS
$V_{RRM}$	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	$^\circ\text{C}$
$\Theta_{JA}$	1000	$^\circ\text{C/W}$

#### 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	$\mu\text{A}$
$I_R$	$V_R=10\text{V}$		1.3	7.0	$\mu\text{A}$
$BV_R$	$I_R=100\mu\text{A}$	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

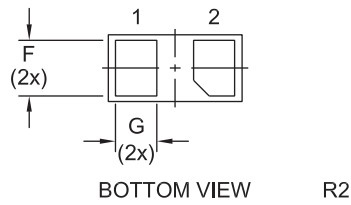
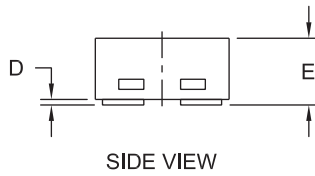
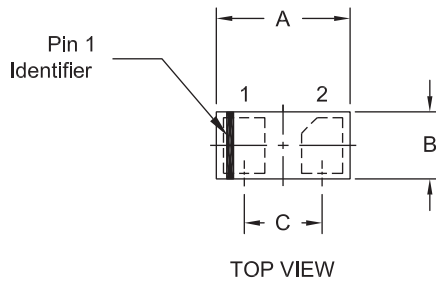
R2 (26-May 2011)

CTLSH01-30L

SURFACE MOUNT SILICON  
LOW  $V_F$  SCHOTTKY DIODE



TLM2D3D6 CASE - MECHANICAL OUTLINE



SYMBOL	DIMENSIONS		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: D

R2 (26-May 2011)