CTLSH01-30

SURFACE MOUNT SILICON SCHOTTKY DIODE



Top View Bottom View

TLM2D3D6 CASE

www.centralsemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CTLSH01-30 is a high quality Schottky Diode designed for applications where ultra small size and power dissipation are prime requirements. Packaged in a TLM2D3D6 package, this component provides performance characteristics suitable for the most demanding size constrained applications.

MARKING CODE: C

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=100mA)
- Low forward voltage drop (V_F=0.41V TYP @ 10mA)
- Low reverse current (30nA TYP @ 10V)
- Ultra small, ultra low profile 0.3mm x 0.6mm x 0.3mm leadless surface mount package

MAXIMUM RATINGS: (T_A=25°C)	**SYMBOL**		**UNITS**
Peak Repetitive Reverse Voltage	V_{RRM}	30	V
Average Forward Current	I_O	100	mA
Peak Forward Surge Current, tp=8.3ms	I_{FSM}	500	mA
Power Dissipation	P_D	100	mW
Operating Junction Temperature	T_J	-65 to +125	°C
Storage Temperature	T_{stg}	-65 to +150	°C
Thermal Resistance	Θ_{JA}	1000	°C/W

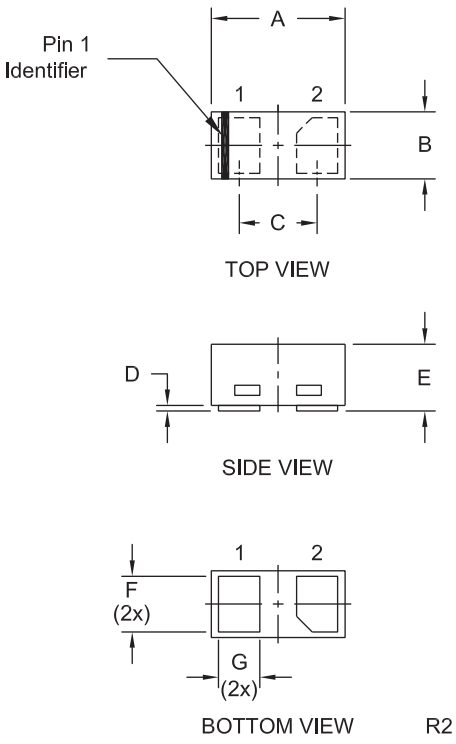
ELECTRICAL CHARACTERISTICS: (T_A=25°C unless otherwise noted)

SYMBOL	**TEST CONDITIONS**	**MIN**	**TYP**	**MAX**	**UNITS**
I_R	V_R=10V		30	300	nA
BV_R	I_R=100μA	30			V
V_F	I_F=10mA		0.41	0.46	V
C_J	V_R=0, f=1.0MHz		7.0		pF

CTLSH01-30

SURFACE MOUNT SILICON SCHOTTKY DIODE

TLM2D3D6 CASE - MECHANICAL OUTLINE



DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	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

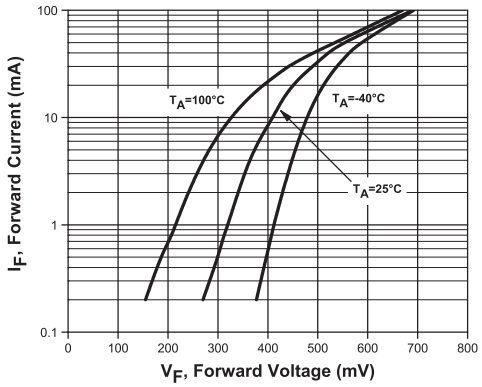
MARKING CODE: C

CTLSH01-30

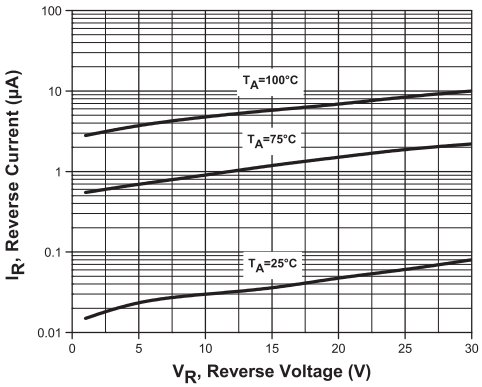
SURFACE MOUNT SILICON SCHOTTKY DIODE

TYPICAL ELECTRICAL CHARACTERISTICS

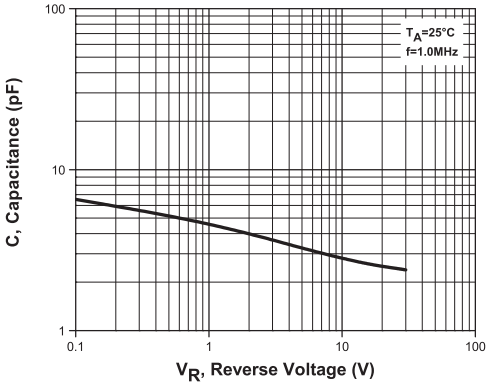
Forward Voltage



Leakage Current



Capacitance

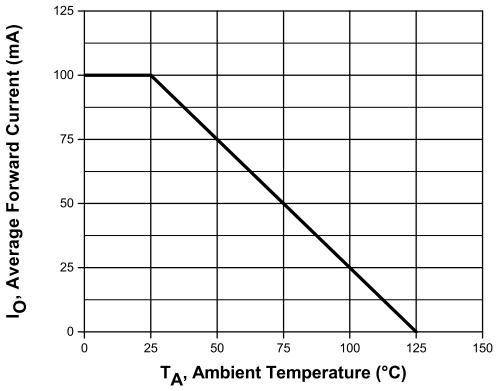


CTLSH01-30

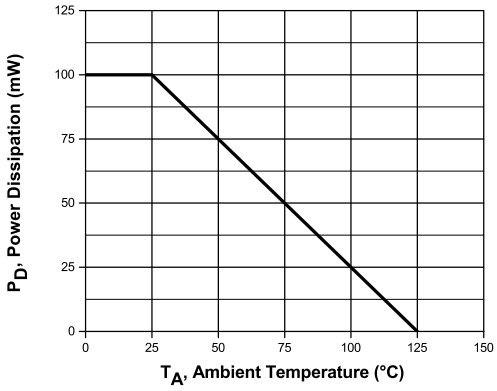
SURFACE MOUNT SILICON SCHOTTKY DIODE

TYPICAL ELECTRICAL CHARACTERISTICS

Current Derating



Power Derating



OUTSTANDING SUPPORT AND SUPERIOR SERVICES

PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options
- Custom bar coding for shipments
- Custom product packing

DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2nd day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities
- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix " TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix " PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

CONTACT US

Corporate Headquarters & Customer Support Team

Central Semiconductor Corp.
145 Adams Avenue
Hauppauge, NY 11788 USA
Main Tel: (631) 435-1110
Main Fax: (631) 435-1824
Support Team Fax: (631) 435-3388
www.centralsemi.com

Worldwide Field Representatives:
www.centralsemi.com/wwreps

Worldwide Distributors:
www.centralsemi.com/wwdistributors

For the latest version of Central Semiconductor's **LIMITATIONS AND DAMAGES DISCLAIMER**, which is part of Central's Standard Terms and Conditions of sale, visit: www.centralsemi.com/terms