

CFSH01-30
SURFACE MOUNT
SILICON SCHOTTKY DIODE



www.centrasemi.com

TLP™
Tiny
Leadless
Package



Top View Bottom View

SOD-882L CASE

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CFSH01-30 is a high quality Schottky Diode designed for applications where ultra small size and low leakage current 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: Z

APPLICATIONS:

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

FEATURES:

- Current ($I_O=100\text{mA}$)
- Very Low Reverse Current (30nA TYP @ 10V)
- Low Forward Voltage Drop ($V_F=0.41\text{V}$ TYP @ 10mA)
- Small, Ultra Low Profile 1.0mm x 0.6mm x 0.4mm TLP™ Leadless Surface Mount package

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

Peak Repetitive Reverse Voltage	V_{RRM}	30	V
Average Forward Current	I_O	100	mA
Peak Forward Surge Current, $t_p=8.3\text{ms}$	I_{FSM}	500	mA
Power Dissipation	P_D	100	mW
Operating Junction Temperature	T_J	-65 to +125	$^\circ\text{C}$
Storage Temperature	T_{stg}	-65 to +150	$^\circ\text{C}$
Thermal Resistance	θ_{JA}	1000	$^\circ\text{C}/\text{W}$

SYMBOL

SYMBOL	MIN	TYP	MAX	UNITS
V_{RRM}		30	300	V
I_O		100	300	mA
I_{FSM}	30	500	500	mA
P_D		100	100	mW
T_J	-65	+125	+125	$^\circ\text{C}$
T_{stg}	-65	+150	+150	$^\circ\text{C}$
θ_{JA}		1000	1000	$^\circ\text{C}/\text{W}$

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

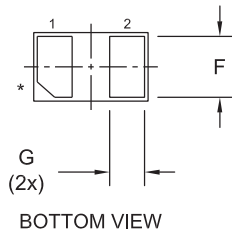
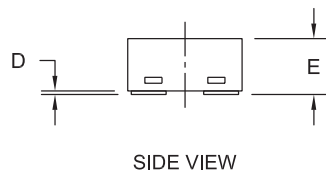
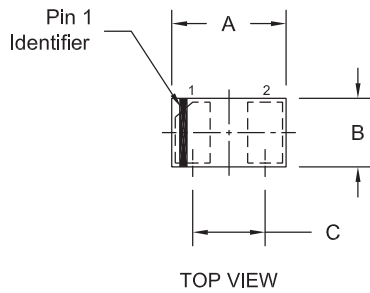
SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I_R	$V_R=10\text{V}$		30	300	nA
BV_R	$I_R=100\mu\text{A}$	30			V
V_F	$I_F=10\text{mA}$		0.41	0.46	V
C_T	$V_R=0, f=1.0\text{MHz}$		7.0		pF

R0 (9-May 2011)

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SOD-882L CASE - MECHANICAL OUTLINE



* Pin 1 chamfer may appear on any corner.

SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.037	0.041	0.95	1.05
B	0.022	0.026	0.55	0.65
C	0.026		0.65	
D	0.000	0.002	0.00	0.05
E	0.012	0.016	0.30	0.40
F	0.018	0.022	0.45	0.55
G	0.008	0.012	0.20	0.30

SOD-882L (REV:R2)

LEAD CODE:

- 1) Cathode
- 2) Anode

MARKING CODE: Z

R2

R0 (9-May 2011)