

CFSH-4
SURFACE MOUNT
SILICON SCHOTTKY DIODE



www.centrasemi.com



DESCRIPTION:

The CENTRAL SEMICONDUCTOR CFSH-4 is a high quality Schottky Diode designed for applications where ultra small size and power dissipation 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: L

FEATURES:

- Device is **Halogen Free** by design
- Current ($I_O=200\text{mA}$)
- Low Forward Voltage Drop ($V_F=0.35\text{V TYP @ } 1.0\text{mA}$)
- Low Reverse Current ($25\text{nA TYP @ } 30\text{V}$)
- Extremely Fast Switching (5ns Max)
- Small TLP™, 1mm x 0.6mm x 0.4mm, SOD-882L, ultra low profile, Leadless Surface Mount package.

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
Average Forward Current
Peak Forward Surge Current, $t_p=8.3\text{ms}$
Power Dissipation
Operating and Storage Junction Temperature
Thermal Resistance

SYMBOL

SYMBOL		UNITS
V_{RRM}	40	V
I_O	200	mA
I_{FSM}	600	mA
P_D	100	mW
T_J, T_{stg}	-65 to +125	$^\circ\text{C}$
θ_{JA}	1000	$^\circ\text{C/W}$

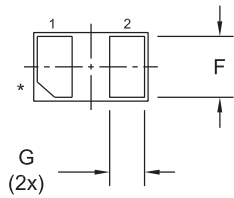
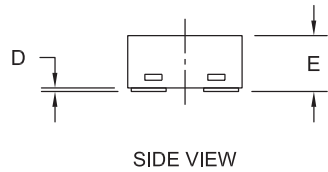
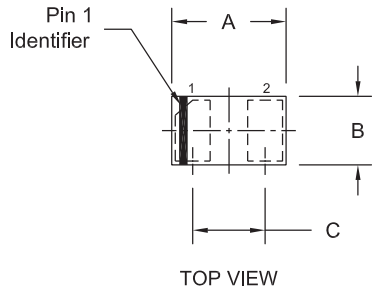
ELECTRICAL CHARACTERISTICS: ($T_A=25^\circ\text{C}$ unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I_R	$V_R=30\text{V}$		25	200	nA
BV_R	$I_R=10\mu\text{A}$	40			V
V_F	$I_F=1.0\text{mA}$		0.35	0.38	V
V_F	$I_F=15\text{mA}$		0.55	0.65	V
V_F	$I_F=40\text{mA}$		0.77	1.00	V
C_T	$V_R=0, f=1.0\text{MHz}$			5.0	pF
t_{rr}	$I_F=I_R=10\text{mA}, I_{rr}=1.0\text{mA}, R_L=100\Omega$			5.0	ns

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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: L

R2

R4 (26-April 2011)