

CFSH-4

SURFACE MOUNT SILICON SCHOTTKY DIODE



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Top View Bottom View

SOD-882L CASE

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

Power Dissipation

Storage Temperature

Storage Temperature

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 the space saving SOD-882L surface mount package, 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 ($V_F=0.35\text{V TYP @ 1.0mA}$)
- Low reverse current (25nA TYP @ 30V)
- Extremely fast switching (5.0ns MAX)
- Small 1mm x 0.6mm x 0.4mm, SOD-882L,
ultra low profile, leadless surface mount package.

SYMBOL

V_{RRM}	40	V
I_O	200	mA
I_{FSM}	600	mA
P_D	100	mW
T_J	-65 to +125	°C
T_{stg}	-65 to +150	°C
Θ_{JA}	1000	°C/W

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

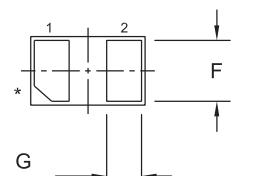
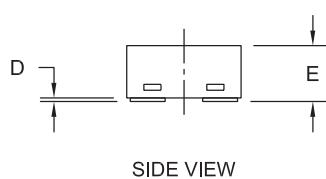
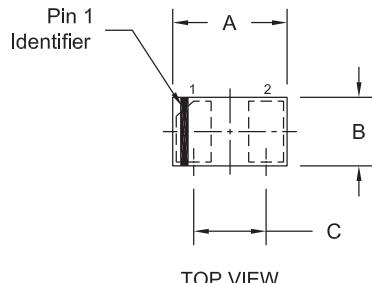
SYMBOL	TEST CONDITIONS	MIN	Typ	MAX	UNITS
I_R	$V_R=30V$		25	200	nA
BV_R	$I_R=10\mu A$	40			V
V_F	$I_F=1.0mA$		0.35	0.38	V
V_F	$I_F=15mA$		0.55	0.65	V
V_F	$I_F=40mA$		0.77	1.00	V
C_J	$V_R=0, f=1.0MHz$			5.0	pF
t_{rr}	$I_F=I_R=10mA, I_{rr}=1.0mA, R_L=100\Omega$			5.0	ns

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SOD-882L CASE - MECHANICAL OUTLINE



* Pin 1 chamfer may appear on any corner.

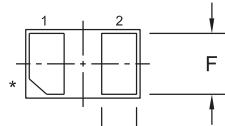
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.037	0.041	0.95	1.05
B	0.022	0.026	0.55	0.65
C		0.026		0.65
D	0.000	0.002	0.00	0.05
E	0.012	0.016	0.30	0.40
F	0.018	0.022	0.45	0.55
G	0.008	0.012	0.20	0.30

SOD-882L (REV:R2)

LEAD CODE:

- 1) Cathode
- 2) Anode

MARKING CODE: L



R2

R5 (3-August 2015)

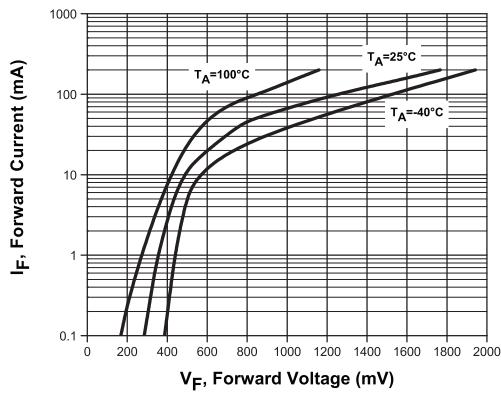
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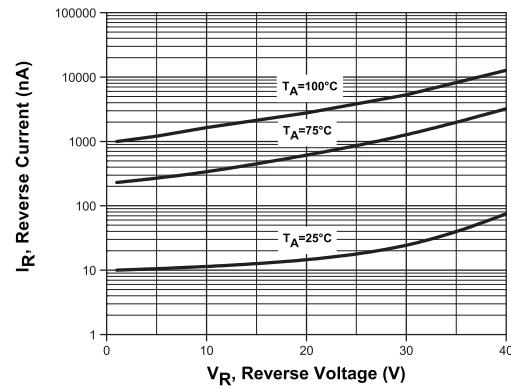


TYPICAL ELECTRICAL CHARACTERISTICS

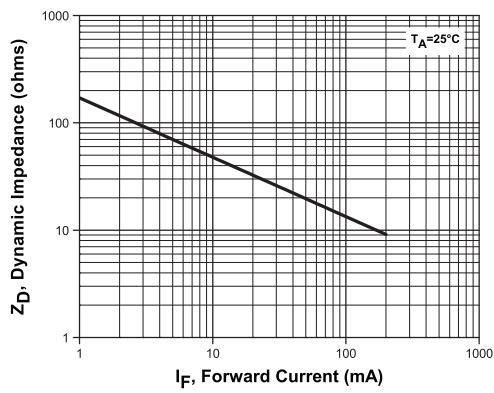
Forward Voltage



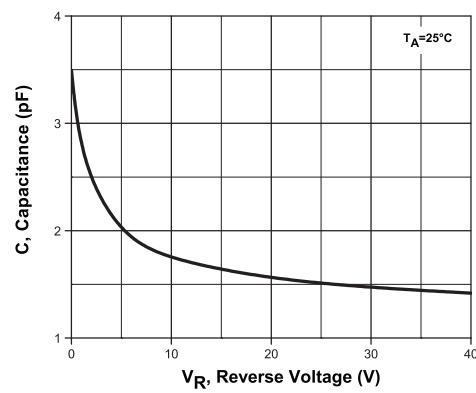
Leakage Current



Forward Dynamic Impedance



Capacitance



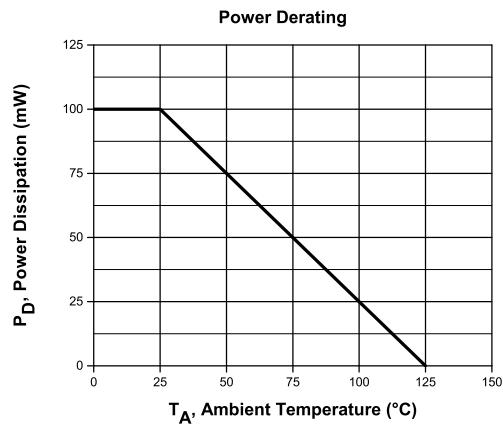
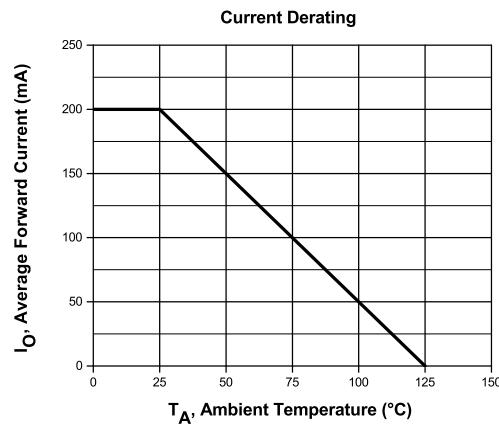
R5 (3-August 2015)

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TYPICAL ELECTRICAL CHARACTERISTICS



R5 (3-August 2015)

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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

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