

**CFSH-4****SURFACE MOUNT SILICON  
SCHOTTKY DIODE**
[www.centrasemi.com](http://www.centrasemi.com)


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
Operating Junction Temperature
Storage Temperature
Thermal Resistance

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

**SYMBOL**

SYMBOL		UNITS
$V_{RRM}$	40	V
$I_O$	200	mA
$I_{FSM}$	600	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)

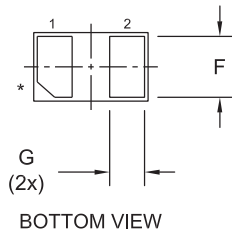
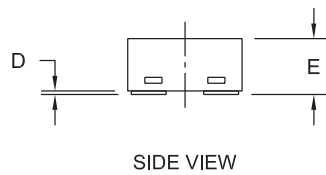
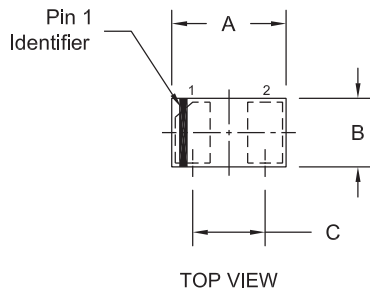
SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
$I_R$	$V_R=30\text{V}$		25	200	nA
$BV_R$	$I_R=10\mu\text{A}$	40			V
$V_F$	$I_F=1.0\text{mA}$		0.35	0.38	V
$V_F$	$I_F=15\text{mA}$		0.55	0.65	V
$V_F$	$I_F=40\text{mA}$		0.77	1.00	V
$C_J$	$V_R=0, f=1.0\text{MHz}$			5.0	pF
$t_{rr}$	$I_F=I_R=10\text{mA}, I_{rr}=1.0\text{mA},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

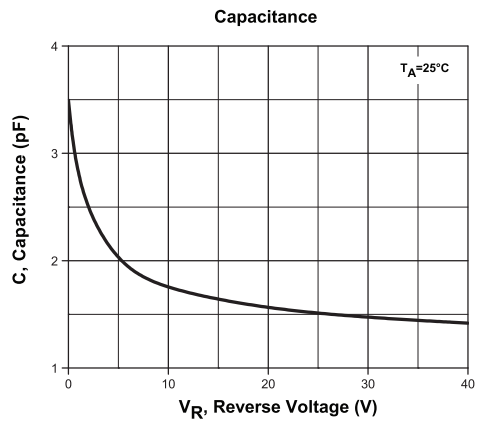
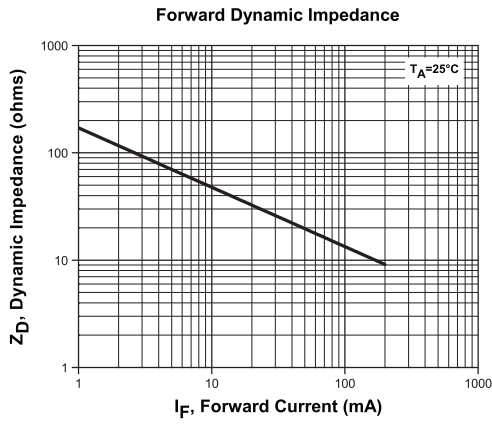
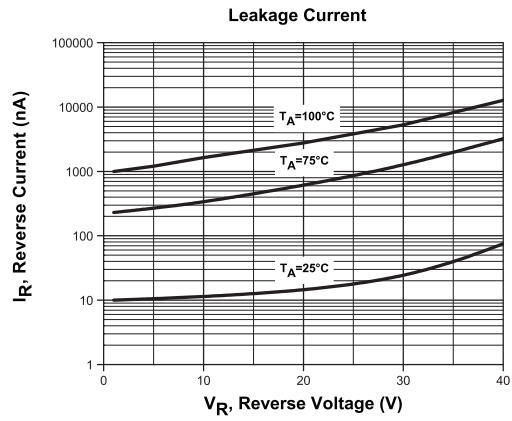
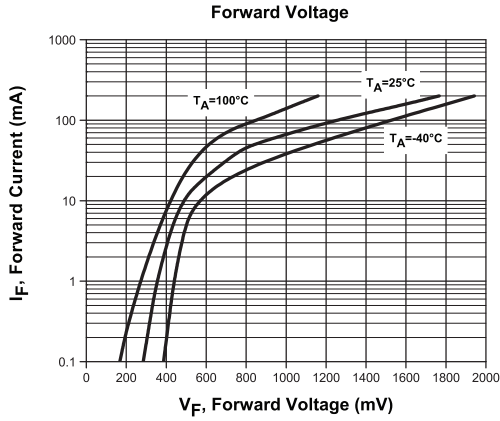
R2

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**TYPICAL ELECTRICAL CHARACTERISTICS**

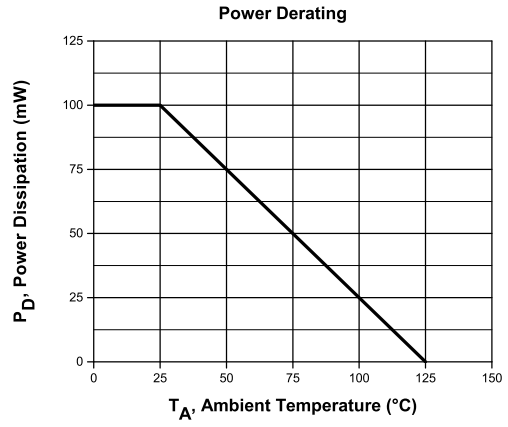
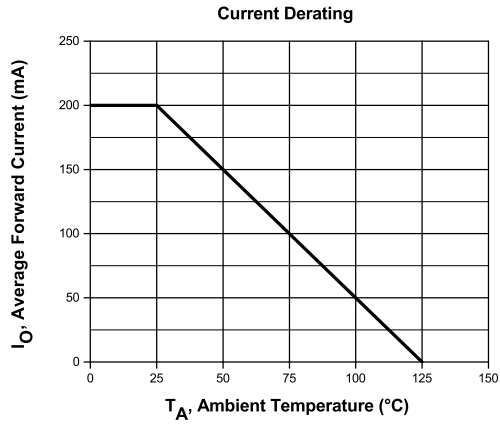


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**TYPICAL ELECTRICAL CHARACTERISTICS**



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## OUTSTANDING SUPPORT AND SUPERIOR SERVICES



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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

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### DESIGNER SUPPORT/SERVICES

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

- Free quick ship samples (2<sup>nd</sup> 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

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