

CFSH01-30L

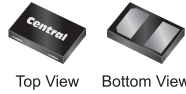
**SURFACE MOUNT SILICON  
LOW  $V_F$  SCHOTTKY DIODE**



[www.centrasemi.com](http://www.centrasemi.com)

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CFSH01-30L is a high quality Schottky Diode designed for applications where ultra small size and low forward voltage are prime requirements. This component provides performance characteristics suitable for the most demanding size constrained applications.



**SOD-882L CASE**

**MARKING CODE: Y**

**APPLICATIONS:**

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

**FEATURES:**

- Current ( $I_O=100\text{mA}$ )
- Low Forward Voltage Drop ( $V_F=300\text{mV TYP @ } 10\text{mA}$ )
- Low Reverse Current ( $1.3\mu\text{A TYP @ } 10\text{V}$ )
- Small, Ultra Low Profile 1.0mm x 0.6mm x 0.4mm Leadless Surface Mount package

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

Peak Repetitive Reverse Voltage
DC Blocking Voltage
Average Forward Current
Peak Forward Surge Current, $t_p=8.3\text{ms}$
Power Dissipation
Operating Junction Temperature
Storage Temperature
Thermal Resistance

**SYMBOL**

$V_{RRM}$	30	V
$V_R$	30	V
$I_O$	100	mA
$I_{FSM}$	500	mA
$P_D$	100	mW
$T_J$	-65 to +125	$^\circ\text{C}$
$T_{stg}$	-65 to +150	$^\circ\text{C}$
$\Theta_{JA}$	1000	$^\circ\text{C/W}$

**UNITS**

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

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
$I_R$	$V_R=3.3\text{V}$		0.8	2.0	$\mu\text{A}$
$I_R$	$V_R=10\text{V}$		1.3	7.0	$\mu\text{A}$
$BV_R$	$I_R=100\mu\text{A}$	30			V
$V_F$	$I_F=5.0\mu\text{A}$		70	95	mV
$V_F$	$I_F=10\text{mA}$		300	370	mV
$C_J$	$V_R=0, f=1.0\text{MHz}$		4.0		pF

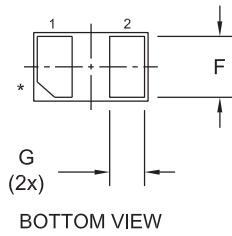
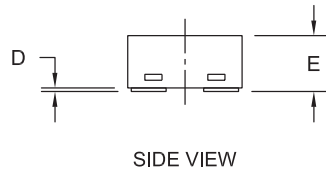
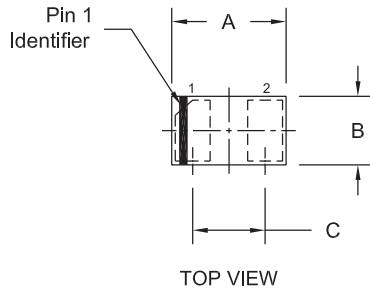
R4 (5-January 2015)

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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: Y

R2

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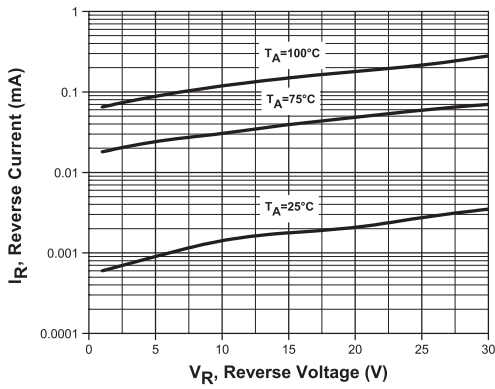
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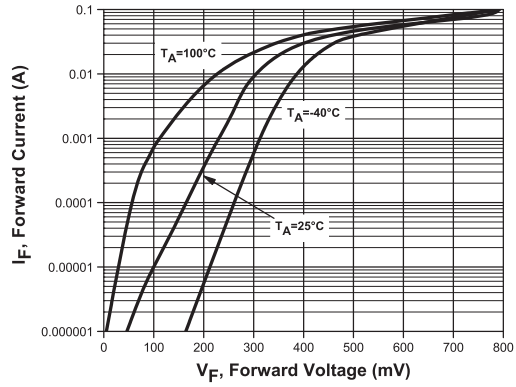


TYPICAL ELECTRICAL CHARACTERISTICS

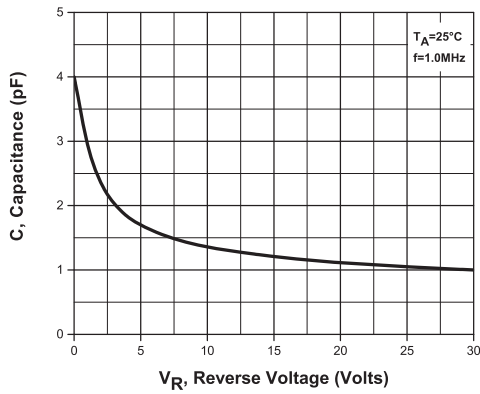
Leakage Current



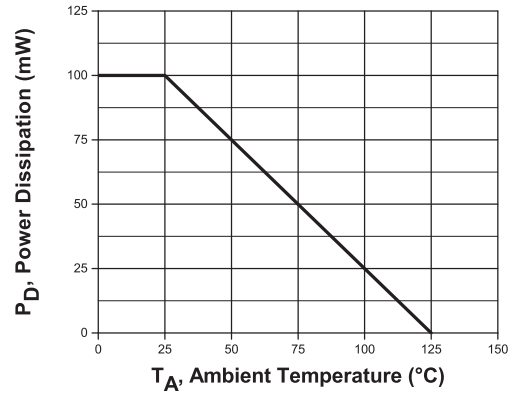
Forward Voltage



Capacitance



Power Derating



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#### **SERVICES**

- Bonded Inventory
- Custom Electrical Screening
- Custom Electrical Characteristic Curves
- SPICE Models
- Custom Packaging
- Package Base Options
- Custom Device Development/ Multi Discrete Modules (MDM™)
- Bare Die Available for Hybrid Applications

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R4 (5-January 2015)