

CFSH01-30L

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



**SOD-882L CASE**



[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.

**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

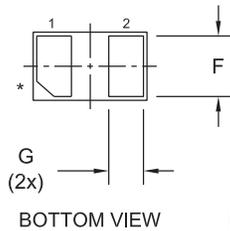
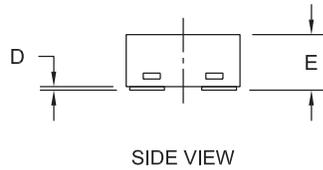
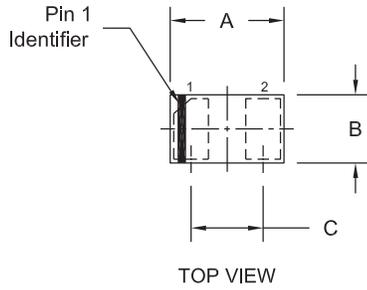
R4 (5-January 2015)

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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

R4 (5-January 2015)

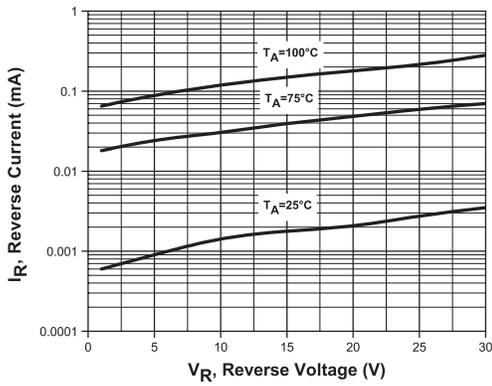
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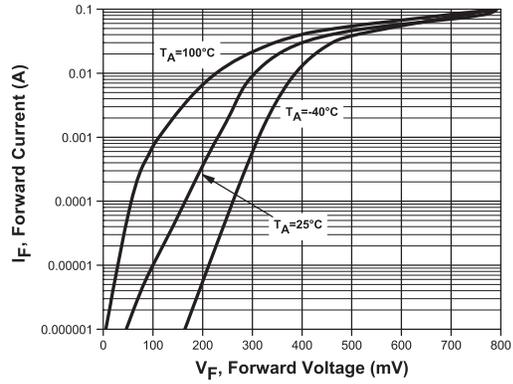


TYPICAL ELECTRICAL CHARACTERISTICS

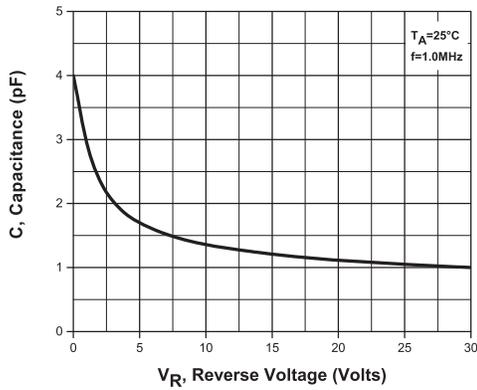
Leakage Current



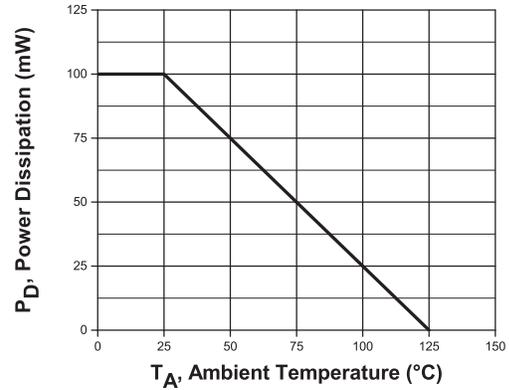
Forward Voltage



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)



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- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

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- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

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