

CFSH01-30L

SURFACE MOUNT SILICON  
LOW  $V_F$  SCHOTTKY DIODE



SOD-882L CASE



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  $1.0\text{mm} \times 0.6\text{mm} \times 0.4\text{mm}$  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          |
| $V_R$         | 30          |
| $I_O$         | 100         |
| $I_{FSM}$     | 500         |
| $P_D$         | 100         |
| $T_J$         | -65 to +125 |
| $T_{stg}$     | -65 to +150 |
| $\Theta_{JA}$ | 1000        |

#### UNITS

|                    |
|--------------------|
| V                  |
| V                  |
| mA                 |
| mA                 |
| mW                 |
| $^\circ\text{C}$   |
| $^\circ\text{C}$   |
| $^\circ\text{C/W}$ |

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

| SYMBOL | TEST CONDITIONS          | MIN | TYP | MAX | UNITS         |
|--------|--------------------------|-----|-----|-----|---------------|
| $I_R$  | $V_R=3.3\text{V}$        |     | 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            |

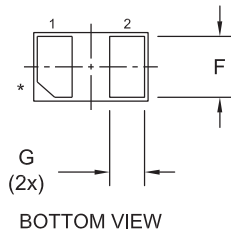
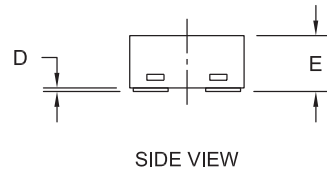
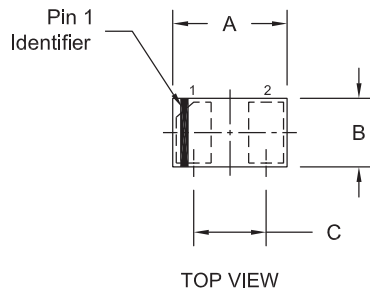
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### SOD-882L CASE - MECHANICAL OUTLINE



\* Pin 1 chamfer may  
appear on any corner.

| DIMENSIONS |        |       |             |      |
|------------|--------|-------|-------------|------|
| 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

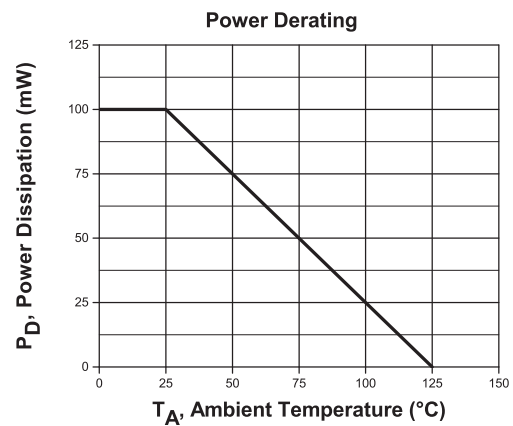
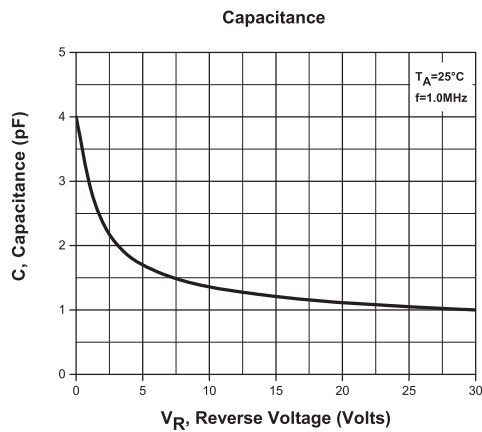
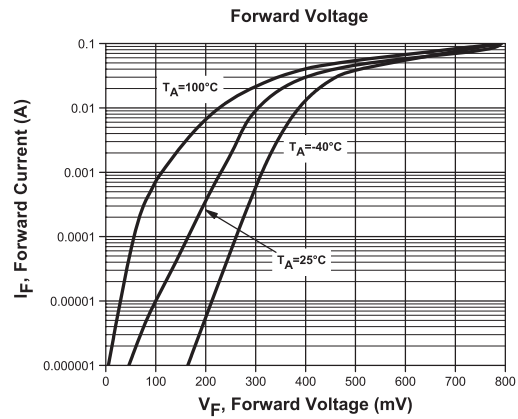
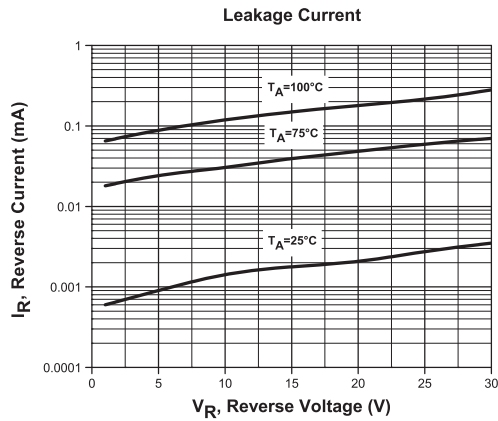
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## TYPICAL ELECTRICAL CHARACTERISTICS



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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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Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

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