

CFSH2-3L

**SURFACE MOUNT
SILICON SCHOTTKY DIODE**


www.centralsemi.com
DESCRIPTION:

The CENTRAL SEMICONDUCTOR CFSH2-3L is a high quality Schottky Diode designed for applications where ultra small size and operational efficiency are prime requirements. Packaged in a Tiny Leadless Package™ (TLP™), this component provides performance characteristics suitable for the most demanding size constrained applications.

TLPTM


Top View Bottom View

SOD-882L CASE
APPLICATIONS:

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

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

| | | | |
|--|----------------|-------------|------|
| Peak Repetitive Reverse Voltage | V_{RRM} | 30 | V |
| Average Forward Current | I_O | 200 | mA |
| Peak Forward Surge Current, $t_p=8.3\text{ms}$ | I_{FSM} | 3.0 | A |
| Power Dissipation | P_D | 100 | mW |
| Operating and Storage Junction Temperature | T_J, T_{stg} | -65 to +150 | °C |
| Thermal Resistance | Θ_{JA} | 1,250 | °C/W |

FEATURES:

- $V_R=30\text{V}$
- $I_O=200\text{mA}$
- Very Low Forward Voltage Drop ($V_F=0.42\text{V TYP @ }200\text{mA}$)
- Reverse Current ($2.5\mu\text{A TYP @ }10\text{V}$)
- Small TLP™, $1\text{mm} \times 0.6\text{mm} \times 0.4\text{mm}$, ultra low profile, Leadless Surface Mount package.

| SYMBOL | | UNITS |
|----------------|-------------|-------|
| V_{RRM} | 30 | V |
| I_O | 200 | mA |
| I_{FSM} | 3.0 | A |
| P_D | 100 | mW |
| T_J, T_{stg} | -65 to +150 | °C |
| Θ_{JA} | 1,250 | °C/W |

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

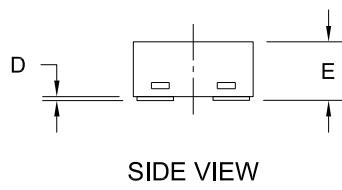
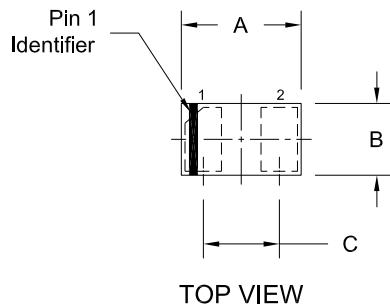
| SYMBOL | TEST CONDITIONS | MIN | TYP | MAX | UNITS |
|--------|------------------------------------|-----|-------|------|---------------|
| I_R | $V_R=10\text{V}$ | | 4.0 | 10 | μA |
| I_R | $V_R=30\text{V}$ | | 10 | 50 | μA |
| BV_R | $I_R=500\mu\text{A}$ | 30 | | | V |
| V_F | $I_F=0.1\text{mA}$ | | 0.115 | 0.19 | V |
| V_F | $I_F=1.0\text{mA}$ | | 0.175 | 0.25 | V |
| V_F | $I_F=10\text{mA}$ | | 0.24 | 0.30 | V |
| V_F | $I_F=100\text{mA}$ | | 0.35 | 0.40 | V |
| V_F | $I_F=200\text{mA}$ | | 0.42 | 0.48 | V |
| C_T | $V_R=4.0\text{V}, f=1.0\text{MHz}$ | 11 | 25 | | pF |

CFSH2-3L

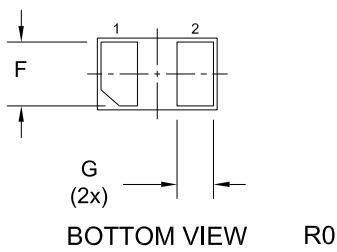
SURFACE MOUNT
SILICON SCHOTTKY DIODE



SOD-882L CASE - MECHANICAL OUTLINE



SIDE VIEW



BOTTOM VIEW R0

| 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:R0)

LEAD CODE:

- 1) Cathode
- 2) Anode

MARKING CODE: T

R2 (10-February 2011)