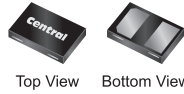


CFSH01-30

**SURFACE MOUNT SILICON
SCHOTTKY DIODE**



SOD-882L CASE



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CFSH01-30 is a high quality Schottky diode designed for applications where ultra small size and low leakage current are prime requirements. Packaged in a SOD-882L package, this component provides performance characteristics suitable for the most demanding size constrained applications.

MARKING CODE: Z

APPLICATIONS:

- DC-DC converters
- Voltage clamping
- Protection circuits
- Battery powered applications including cell phones, digital cameras, pagers, PDAs, laptop computers, etc.

FEATURES:

- Current ($I_O=100\text{mA}$)
- Very low reverse current (30nA TYP @ 10V)
- Low forward voltage drop ($V_F=0.41\text{V}$ TYP @ 10mA)
- 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 |
| 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 |
| 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 | $^\circ\text{C}$ |
| θ_{JA} | 1000 | $^\circ\text{C}/\text{W}$ |

UNITS

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

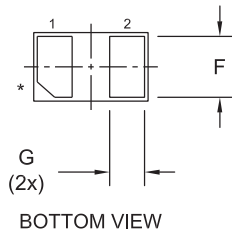
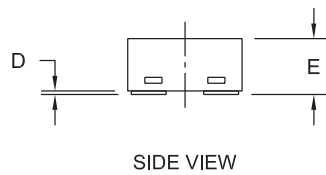
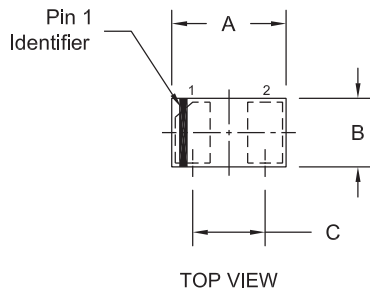
| SYMBOL | TEST CONDITIONS | MIN | TYP | MAX | UNITS |
|--------|--------------------------|-----|------|------|-------|
| I_R | $V_R=10\text{V}$ | | 30 | 300 | nA |
| BV_R | $I_R=100\mu\text{A}$ | 30 | | | V |
| V_F | $I_F=10\text{mA}$ | | 0.41 | 0.46 | V |
| C_J | $V_R=0, f=1.0\text{MHz}$ | | 7.0 | | pF |

R1 (29-September 2015)

CFSH01-30
SURFACE MOUNT SILICON
SCHOTTKY DIODE



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: Z

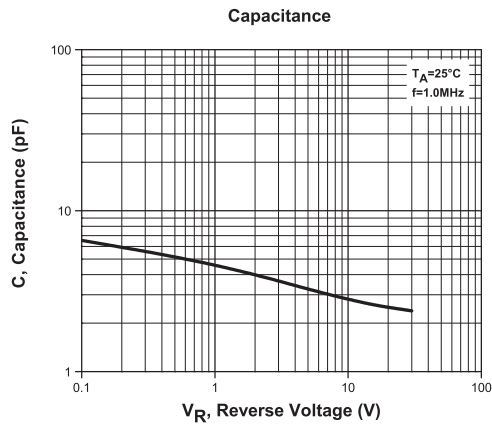
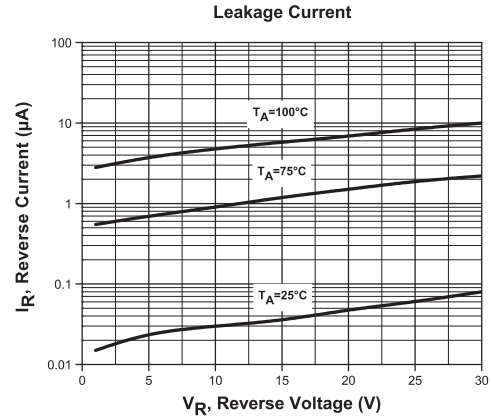
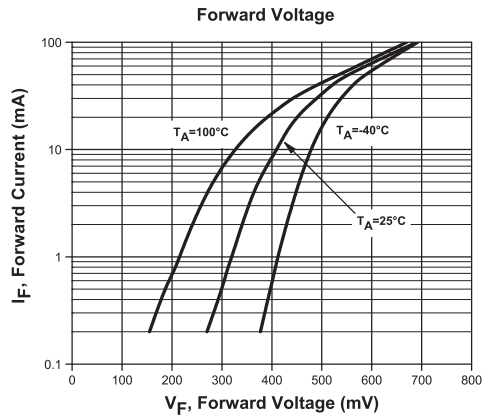
R2

R1 (29-September 2015)

CFSH01-30
SURFACE MOUNT SILICON
SCHOTTKY DIODE



TYPICAL ELECTRICAL CHARACTERISTICS

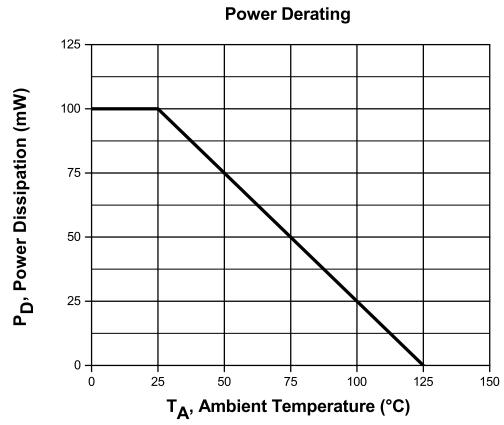
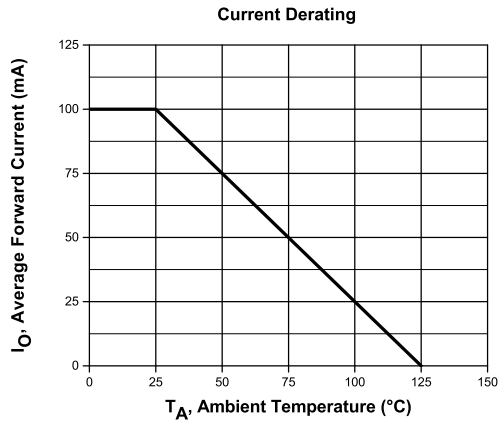


R1 (29-September 2015)

CFSH01-30
SURFACE MOUNT SILICON
SCHOTTKY DIODE



TYPICAL ELECTRICAL CHARACTERISTICS



R1 (29-September 2015)

OUTSTANDING SUPPORT AND SUPERIOR SERVICES



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

DESIGNER SUPPORT/SERVICES

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

- Free quick ship samples (2nd 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

REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix " TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix " PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

CONTACT US

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