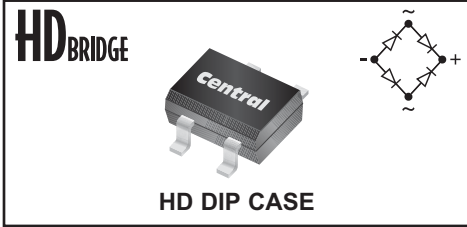


CBRHDSH1-100
SURFACE MOUNT
HIGH DENSITY
1 AMP SILICON
SCHOTTKY BRIDGE RECTIFIER



www.centrasemi.com



DESCRIPTION:

The CENTRAL SEMICONDUCTOR CBRHDSH1-100 is a full wave bridge rectifier in a durable epoxy surface mount molded case, designed for low voltage full wave rectification applications. The molding compound used in this device has UL flammability classification 94V-O.

MARKING CODE: CSH110

FEATURES:

- Low Leakage Current (40nA TYP @ V_{RRM})
- Low Forward Voltage Drop Schottky Diodes
- High 1.0A Current Rating

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

| | SYMBOL | | UNITS |
|---------------------------------|---------------|-------------|--------------------|
| Peak Repetitive Reverse Voltage | V_{RRM} | 100 | V |
| DC Blocking Voltage | V_R | 100 | V |
| RMS Reverse Voltage | $V_{R(RMS)}$ | 71 | V |
| Average Forward Current | I_O | 1.0 | A |
| Peak Forward Surge Current | I_{FSM} | 20 | A |
| Power Dissipation | P_D | 1.2 | W |
| Operating Junction Temperature | T_J | -50 to +125 | $^\circ\text{C}$ |
| Storage Temperature | T_{stg} | -55 to +150 | $^\circ\text{C}$ |
| Thermal Resistance | Θ_{JA} | 85 | $^\circ\text{C/W}$ |

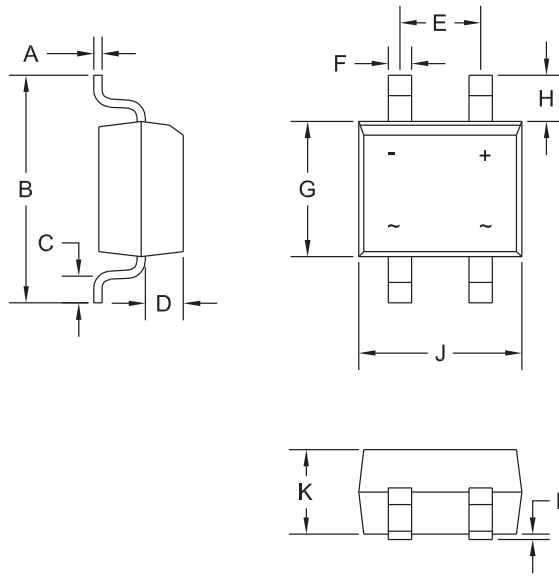
ELECTRICAL CHARACTERISTICS PER DIODE: ($T_A=25^\circ\text{C}$ unless otherwise noted)

| SYMBOL | TEST CONDITIONS | MIN | TYP | MAX | UNITS |
|---------------|--|------------|------------|------------|---------------|
| I_R | $V_R=100\text{V}$ | | 0.04 | 10 | μA |
| I_R | $V_R=100\text{V}, T_A=50^\circ\text{C}$ | | | 1.0 | mA |
| I_R | $V_R=100\text{V}, T_A=100^\circ\text{C}$ | | | 20 | mA |
| BV_R | $I_R=150\mu\text{A}$ | 100 | | | V |
| V_F | $I_F=500\text{mA}$ | | 615 | 700 | mV |
| V_F | $I_F=1.0\text{A}$ | | 690 | 750 | mV |
| C_J | $V_R=4.0\text{V}, f=1.0\text{MHz}$ | | 230 | | pF |

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HD DIP CASE - MECHANICAL OUTLINE



R2

| DIMENSIONS | | | | |
|-------------------|--------|-------|-------------|------|
| SYMBOL | INCHES | | MILLIMETERS | |
| | MIN | MAX | MIN | MAX |
| A | 0.006 | 0.014 | 0.15 | 0.35 |
| B | - | 0.275 | - | 7.00 |
| C | 0.027 | 0.043 | 0.70 | 1.10 |
| D | 0.035 | 0.051 | 0.90 | 1.30 |
| E | 0.090 | 0.106 | 2.30 | 2.70 |
| F | 0.019 | 0.031 | 0.50 | 0.80 |
| G | 0.150 | 0.165 | 3.80 | 4.20 |
| H | 0.051 | 0.067 | 1.30 | 1.70 |
| J | 0.177 | 0.193 | 4.50 | 4.90 |
| K | 0.090 | 0.106 | 2.30 | 2.70 |
| L | 0.000 | 0.008 | 0.00 | 0.20 |

HD DIP (REV: R2)

MARKING CODE: CSH110

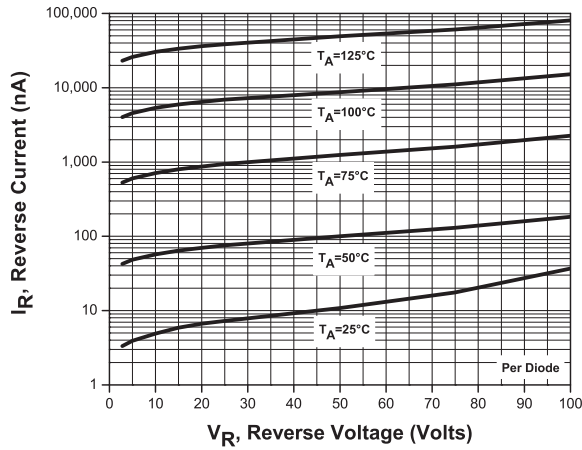
R6 (22-May 2012)

CBRHDSH1-100
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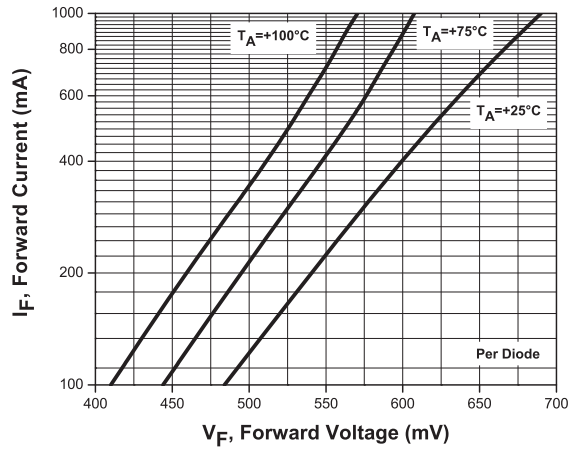


TYPICAL ELECTRICAL CHARACTERISTICS

Typical Leakage Current



Typical Forward Voltage



R6 (22-May 2012)

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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