

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



[www.centrasemi.com](http://www.centrasemi.com)

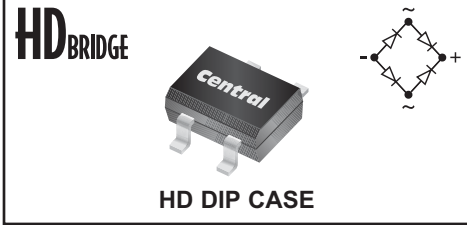
**DESCRIPTION:**

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              | $\Theta_{JA}$ | 85          | $^\circ\text{C/W}$ |

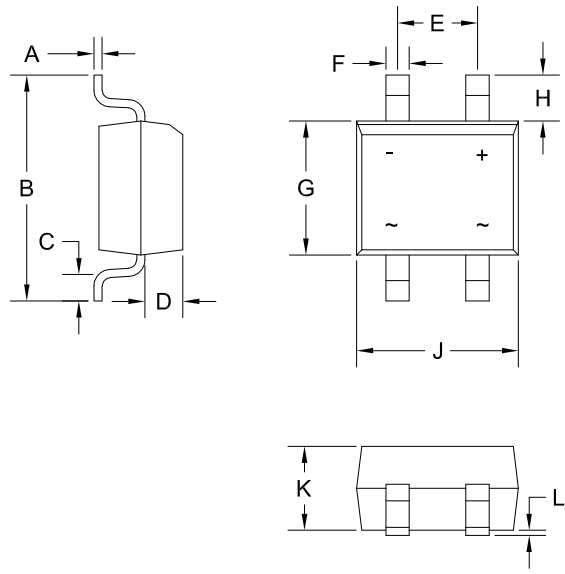
**ELECTRICAL CHARACTERISTICS PER DIODE:** ( $T_A=25^\circ\text{C}$  unless otherwise noted)

| SYMBOL | TEST CONDITIONS                          | MIN | TYP  | MAX | UNITS         |
|--------|--|-----|------|-----|---------------|
| $I_R$  | $V_R=100\text{V}$                        |     | 0.04 | 10  | $\mu\text{A}$ |
| $I_R$  | $V_R=100\text{V}, T_A=50^\circ\text{C}$  |     |      | 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**



R3

| 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      | 0.146  | 0.165 | 3.70        | 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: R3)

**MARKING CODE: CSH110**

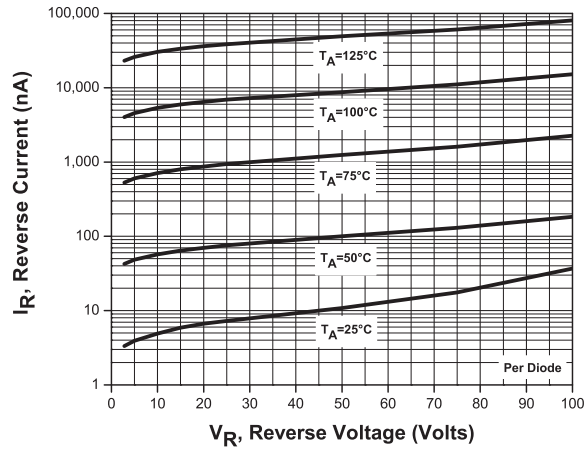
R7 (19-August 2020)

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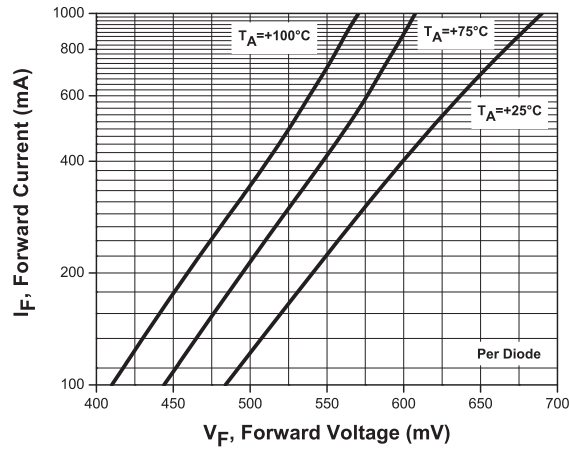


**TYPICAL ELECTRICAL CHARACTERISTICS**

**Typical Leakage Current**



**Typical Forward Voltage**



R7 (19-August 2020)

## OUTSTANDING SUPPORT AND SUPERIOR SERVICES



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### 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

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### DESIGNER SUPPORT/SERVICES

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

- Free quick ship samples (2<sup>nd</sup> 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

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### 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).

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### CONTACT US

#### Corporate Headquarters & Customer Support Team

Central Semiconductor Corp.  
145 Adams Avenue  
Hauppauge, NY 11788 USA  
Main Tel: (631) 435-1110  
Main Fax: (631) 435-1824  
Support Team Fax: (631) 435-3388  
[www.centrasemi.com](http://www.centrasemi.com)

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