

CBRHD SERIES
SURFACE MOUNT SILICON
HIGH DENSITY
0.5 AMP
BRIDGE RECTIFIER



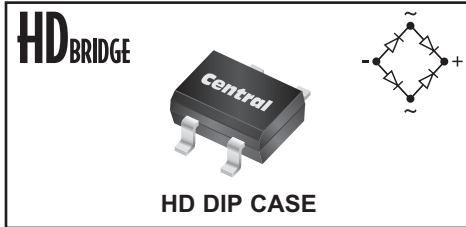
www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CBRHD series devices are silicon full wave bridge rectifiers mounted in a durable epoxy surface mount molded case, utilizing glass passivated chips.

MARKING CODES:

CBRHD-02: CBD2 CBRHD-04: CBD4
CBRHD-06: CBD6 CBRHD-10: CBD10



FEATURES:

- Efficient use of board space: requires only 42mm² of board space vs. 120mm² of board space needed for industry standard 1.0 Amp surface mount bridge rectifier.
- 50% higher density (Amps/mm²) than the industry standard 1.0 Amp surface mount bridge rectifier.
- Glass passivated chips for high reliability.

MAXIMUM RATINGS: (T_A=25°C unless otherwise noted)

| | SYMBOL | CBRHD | | | | UNITS |
|---|-----------------------------------|-------|-----|-------------|------|-------|
| | | -02 | -04 | -06 | -10* | |
| Peak Repetitive Reverse Voltage | V _{RRM} | 200 | 400 | 600 | 1000 | V |
| DC Blocking Voltage | V _R | 200 | 400 | 600 | 1000 | V |
| RMS Reverse Voltage | V _{R(RMS)} | 140 | 280 | 420 | 700 | V |
| Average Forward Current (T _A =40°C) (Note 1) | I _O | | | 0.5 | | A |
| Average Forward Current (T _A =40°C) (Note 2) | I _O | | | 0.8 | | A |
| Peak Forward Surge Current | I _{FSM} | | | 30 | | A |
| Operating & Storage Junction Temperature | T _J , T _{stg} | | | -65 to +150 | | °C |

ELECTRICAL CHARACTERISTICS PER DIODE: (T_A=25°C unless otherwise noted)

| SYMBOL | TEST CONDITIONS | TYP | MAX | UNITS |
|----------------|--|-----|-----|-------|
| I _R | V _R =Rated V _{RRM} | | 5.0 | μA |
| I _R | V _R =Rated V _{RRM} , T _A =125°C | | 500 | μA |
| V _F | I _F =400mA | | 1.0 | V |
| C _J | V _R =4.0V, f=1.0MHz | 20 | | pF |

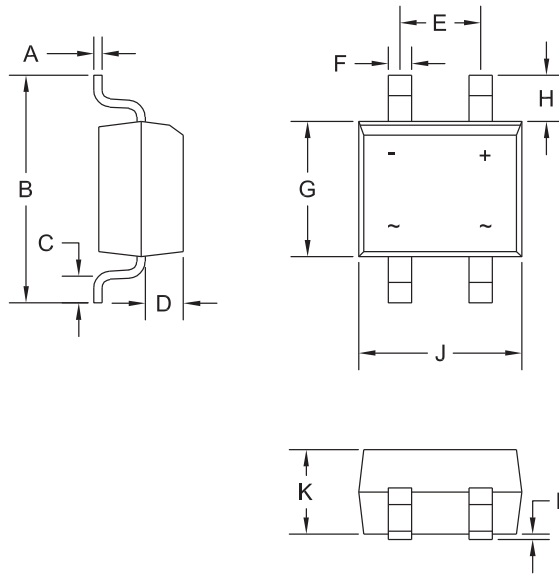
Notes: (1) Mounted on Glass-Epoxy PCB.
(2) Mounted on Ceramic PCB.

* Available on special order, please consult factory.

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HD DIP CASE - MECHANICAL OUTLINE



R2

MARKING CODES:
CBRHD-02: CBD2
CBRHD-04: CBD4
CBRHD-06: CBD6
CBRHD-10: CBD10

| SYMBOL | DIMENSIONS | | | |
|--------|------------|-------|-------------|------|
| | 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)

R5 (18-February 2016)

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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