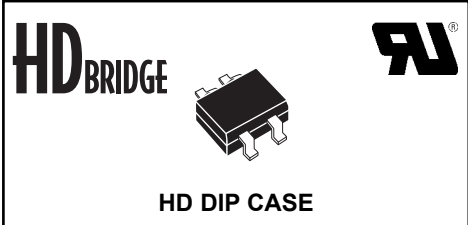


CBRHD-01
HIGH DENSITY
0.8 AMP DUAL IN LINE
BRIDGE RECTIFIER



• This series is UL listed, UL file number E130224

CentralTM Semiconductor Corp.

FEATURES:

- Truly efficient use of board space, requires only 42mm² of board space vs. 120mm² of board space 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.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CBRHD-01 is a silicon full wave bridge rectifier mounted in a durable epoxy surface mount molded case, utilizing glass passivated chips.

MARKING CODE: CBRHD-01: CBD1

MAXIMUM RATINGS: (T_A=25°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)} | 70 | V |
| Average Forward Current (T _A =40°C)(1) | I _O | 0.5 | A |
| Average Forward Current (T _A =40°C)(2) | I _O | 0.8 | A |
| Peak Forward Surge Current | I _{FSM} | 30 | A |
| Operating and Storage | | | |
| Junction Temperature | T _J , T _{stg} | -65 to +150 | °C |
| Thermal Resistance (3) | θ _{JA} | 85 | °C/W |

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

| SYMBOL | TEST CONDITIONS | MIN | TYP | MAX | UNITS |
|----------------|--|-----|-----|-----|-------|
| I _R | V _R = 100V | | | 5.0 | μA |
| I _R | V _R = 100V, T _A =125°C | | | 500 | μA |
| V _F | I _F =400mA | | | 1.0 | V |
| C _J | V _R =4.0V, f=1.0MHz | | 9.0 | | pF |

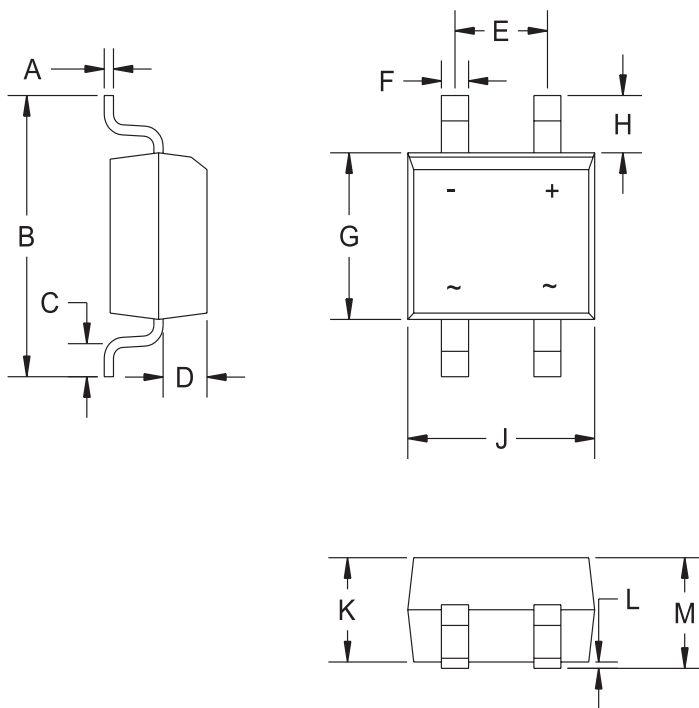
(1) Mounted on a Glass-Epoxy P.C.B.

(2) Mounted on a Ceramic P.C.B.

(3) Mounted on P.C.B. with 0.5" x 0.5" copper pads.

R0 (11-February 2005)

HD DIP CASE - MECHANICAL OUTLINE



R1

MARKING CODE:
CBRHD01: CBD1

| SYMBOL | DIMENSIONS | | | |
|--------|------------|-------|-------------|------|
| | INCHES | | MILLIMETERS | |
| | MIN | MAX | MIN | MAX |
| A | 0.006 | 0.014 | 0.15 | 0.35 |
| B | - | 0.276 | - | 7.00 |
| C | 0.028 | 0.043 | 0.70 | 1.10 |
| D | 0.035 | 0.051 | 0.90 | 1.30 |
| E | 0.091 | 0.106 | 2.30 | 2.70 |
| F | 0.020 | 0.031 | 0.50 | 0.80 |
| G | 0.142 | 0.157 | 3.60 | 4.00 |
| H | 0.051 | 0.067 | 1.30 | 1.70 |
| J | 0.177 | 0.193 | 4.50 | 4.90 |
| K | 0.091 | 0.106 | 2.30 | 2.70 |
| L | - | 0.008 | - | 0.20 |
| M | - | 0.118 | - | 3.00 |

HD DIP (REV: R1)