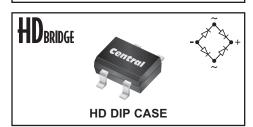
## CBRHD-01

# SURFACE MOUNT SILICON HIGH DENSITY 0.8 AMP BRIDGE RECTIFIER





www.centralsemi.com

## **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: CBD1

## **FEATURES:**

- Efficient use of board space: requires only 42mm<sup>2</sup> of board space vs. 120mm<sup>2</sup> 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 <sub>A</sub> =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 <sub>R(RMS)</sub>	70	V
Average Forward Current (T <sub>A</sub> =40°C) (Note1)	IO	0.5	Α
Average Forward Current (T <sub>A</sub> =40°C) (Note 2)	IO	0.8	Α
Peak Forward Surge Current	IFSM	30	Α
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>	-65 to +150	°C
Thermal Resistance (Note 3)	$\Theta_{\sf JA}$	85	°C/W

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

SYMBOL	TEST CONDITIONS	TYP	MAX	UNITS
$I_{R}$	V <sub>R</sub> = 100V		5.0	μΑ
$I_{R}$	V <sub>R</sub> = 100V, T <sub>A</sub> =125°C		500	μΑ
$V_{F}$	I <sub>F</sub> =400mA		1.0	V
$C_{,J}$	V <sub>R</sub> =4.0V, f=1.0MHz	9.0		pF

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

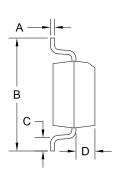
- (2) Mounted on Ceramic PCB.
- (3) Mounted on PCB with 0.5" x 0.5" copper pads.

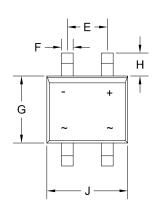
# CBRHD-01

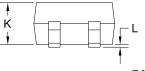
# SURFACE MOUNT SILICON HIGH DENSITY 0.8 AMP BRIDGE RECTIFIER



# **HD DIP CASE - MECHANICAL OUTLINE**







R3

DIMENSIONS							
	INCHES		MILLIMETERS				
SYMBOL	MIN	MAX	MIN	MAX			
Α	0.006	0.014	0.15	0.35			
В	1	0.275	1	7.00			
С	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			
Н	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: CBD1

R4 (19-August 2020)

## **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 guick 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

## 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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