#### **CBRHD SERIES**

### SURFACE MOUNT SILICON HIGH DENSITY 0.5 AMP BRIDGE RECTIFIER





www.centralsemi.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-10: CBD10

#### **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.

<b>MAXIMUM RATINGS</b> : (T <sub>A</sub> =25°C unless otherwise noted)		CBRHD				
	SYMBOL	- <u>02</u>	<u>-04</u>	<u>-06</u>	<u>-10*</u>	UNITS
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 <sub>R(RMS)</sub>	140	280	420	700	V
Average Forward Current (T <sub>A</sub> =40°C) (Note 1)	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 & Storage Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>		-65 t	o +150		°C

ELECTRICAL CHARACTERISTICS PER DIODE: (T<sub>A</sub>=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	TYP	MAX	UNITS
$I_{R}$	V <sub>R</sub> =Rated V <sub>RRM</sub>		5.0	μΑ
$I_{R}$	V <sub>R</sub> =Rated V <sub>RRM</sub> , T <sub>A</sub> =125°C		500	μΑ
$V_{F}$	I <sub>F</sub> =400mA		1.0	V
СЈ	V <sub>R</sub> =4.0V, f=1.0MHz	20		pF

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

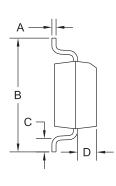
<sup>\*</sup> Available on special order, please consult factory.

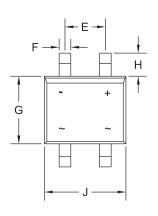
#### **CBRHD SERIES**

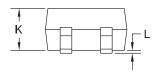
## SURFACE MOUNT SILICON HIGH DENSITY 0.5 AMP BRIDGE RECTIFIER



# **HD DIP CASE - MECHANICAL OUTLINE**







R2

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

DIMENSIONS							
	INCHES		MILLIMETERS				
SYMBOL	MIN	MAX	MIN	MAX			
Α	0.006	0.014	0.15	0.35			
В	-	0.275	-	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	0.150	0.165	3.80	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			
Ĺ	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 (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**

#### 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.centralsemi.com

Worldwide Field Representatives: www.centralsemi.com/wwreps

**Worldwide Distributors:** 

www.centralsemi.com/wwdistributors

For the latest version of Central Semiconductor's **LIMITATIONS AND DAMAGES DISCLAIMER**, which is part of Central's Standard Terms and Conditions of sale, visit: <a href="https://www.centralsemi.com/terms">www.centralsemi.com/terms</a>

www.centralsemi.com (001)

# **X-ON Electronics**

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Bridge Rectifiers category:

Click to view products by Central Semiconductor manufacturer:

Other Similar products are found below:

MB2510 MB252 MB356G MB358G 90MT160KPBF GBJ1504-BP GBU15J-BP GBU15K-BP GBU4A-BP GBU4D-BP GBU6B-E3/45
GSIB680-E3/45 DB101-BP DF01 DF10SA-E345 KBPC50-10S RS405GL-BP G5SBA60-E3/51 GBU10J-BP GBU6M GBU8D-BP
GBU8J-BP GSIB1520-E3/45 2KBB10 36MB140A TB102M MB1510 MB258 MB6M-G MB86 TL401G MDA920A2 TU602 TU810
BR1005-BP BR101-BP BR84DTP204 BU2008-E3/51 36MB100A KBPC10/15/2501WP KBPC25-02 VS-2KBB60 DF06SA-E345
DF1510S VS-40MT160PAPBF W02M GBL02-E3/45 GBU4G-BP GBJ2506-BP GBU6B-E3/51