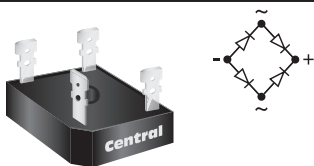


**CBR50-020P SERIES****SILICON BRIDGE RECTIFIERS  
50 AMP, 200 THRU 1000 VOLT**[www.centralemi.com](http://www.centralemi.com)**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CBR50-020P series devices are silicon, single phase, full wave bridge rectifiers designed for general purpose applications. The molded epoxy case has a built-in metal baseplate for heat sink mounting. The device utilizes standard 0.25" FASTON terminals.

**MARKING: FULL PART NUMBER****CASE FP****MAXIMUM RATINGS:** ( $T_A=25^\circ\text{C}$  unless otherwise noted)

	<b>SYMBOL</b>	<b>-020P</b>	<b>-040P</b>	<b>CBR50 -060P</b>	<b>-080P</b>	<b>-100P</b>	<b>UNITS</b>
Peak Repetitive Reverse Voltage	$V_{RRM}$	200	400	600	800	1000	V
DC Blocking Voltage	$V_R$	200	400	600	800	1000	V
RMS Reverse Voltage	$V_{R(RMS)}$	140	280	420	560	700	V
Average Forward Current ( $T_C=55^\circ\text{C}$ )	$I_O$			50			A
Peak Forward Surge Current	$I_{FSM}$			400			A
RMS Isolation Voltage (case to lead)	$V_{iso}$			2500			Vac
Operating and Storage							
Junction Temperature	$T_J, T_{stg}$			-65 to +150			$^\circ\text{C}$
Thermal Resistance	$\theta_{JC}$			1.5			$^\circ\text{C/W}$

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

<b>SYMBOL</b>	<b>TEST CONDITIONS</b>	<b>TYP</b>	<b>MAX</b>	<b>UNITS</b>
$I_R$	$V_R=\text{Rated } V_{RRM}, T_C=25^\circ\text{C}$		5.0	$\mu\text{A}$
$I_R$	$V_R=\text{Rated } V_{RRM}, T_C=125^\circ\text{C}$		500	$\mu\text{A}$
$V_F$	$I_F=25\text{A}$		1.1	V
$C_J$	$V_R=4.0\text{V}, f=1.0\text{MHz}$	300		pF

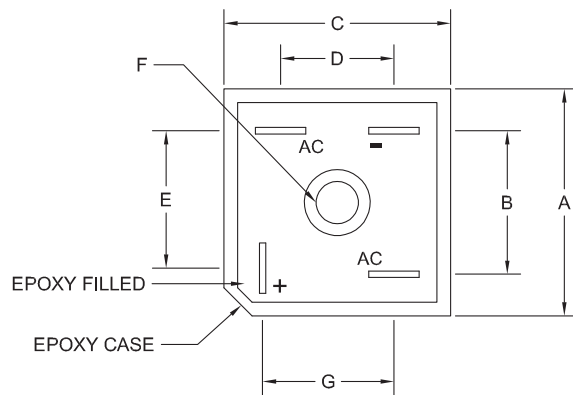
R1 (24-June 2013)

**CBR50-020P SERIES**

**SILICON BRIDGE RECTIFIERS  
50 AMP, 200 THRU 1000 VOLT**



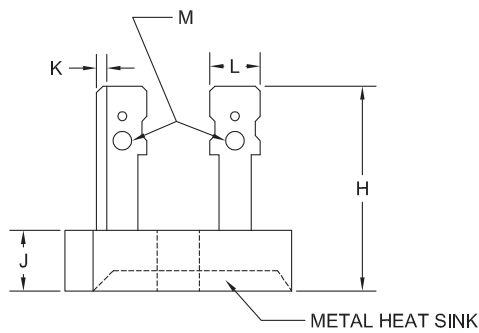
**CASE FP - MECHANICAL OUTLINE**



DIMENSIONS				
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	1.115	1.135	28.32	28.83
B	0.688	0.732	17.50	18.59
C	1.115	1.135	28.32	28.83
D	0.542	0.582	13.77	14.78
E	0.618	0.672	15.70	17.07
F (DIA.)	0.200	0.220	5.08	5.59
G	0.632	0.672	16.05	17.07
H	0.740	0.849	18.80	21.58
J	0.290	0.334	7.37	8.50
K	0.027	0.035	0.71	0.91
L	0.250		6.35	
M (DIA.)	0.940		2.39	

CASE FP (REV:R2)

**MARKING: FULL PART NUMBER**



R2

R1 (24-June 2013)

## 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.centalsemi.com](http://www.centalsemi.com)

**Worldwide Field Representatives:**  
[www.centalsemi.com/wwreps](http://www.centalsemi.com/wwreps)

**Worldwide Distributors:**  
[www.centalsemi.com/wwdistributors](http://www.centalsemi.com/wwdistributors)

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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: [www.centalsemi.com/terms](http://www.centalsemi.com/terms)

# Product End of Life Notification

<b>PDN ID:</b>	PDN01007
<b>Notification Date:</b>	11/02/15
<b>Last Buy Date:</b>	5/02/16
<b>Last Shipment Date</b>	11/02/16

Summary: All bridge rectifiers manufactured in the CASE FP package with the exception of part # CBR35-060P are discontinued and now classified as End of Life (EOL).

Although Central Semiconductor Corp. makes every effort to continue to produce devices that have been proclaimed EOL (End of Life) by various manufacturers, it is an accepted industry practice to discontinue certain devices when customer demand falls below a minimum level of sustainability. Accordingly, the following product(s) have been transitioned to End of Life status as part of Central's Product Management Process. Any replacement product will be noted below. The effective date for placing the last purchase order will be six(6) months from the date of this notice and twelve(12) months from the notice date for final shipments; this may be extended if inventory is available.

<b>Central Part Number</b>	<b>Replacement</b>
CBR10-010P	CBR35-060P
CBR10-020P	CBR35-060P
CBR10-040P	CBR35-060P
CBR10-060P	CBR35-060P
CBR10-080P	CBR35-060P
CBR10-100P	CBR35-060P
CBR10A-080P	N/A
CBR10F-010P	N/A
CBR10F-020P	N/A
CBR10F-040P	N/A
CBR10F-060P	N/A
CBR25-010P	CBR35-060P
CBR25-020P	CBR35-060P
CBR25-040P	CBR35-060P
CBR25-060P	CBR35-060P
CBR25-080P	CBR35-060P
CBR25-100P	CBR35-060P
CBR25F-010P	N/A
CBR25F-020P	N/A
CBR25F-040P	N/A
CBR25F-060P	N/A
CBR35-010P	CBR35-060P
CBR35-020P	CBR35-060P
CBR35-040P	CBR35-060P
CBR35-080P	CBR35-060P
CBR35-100P	CBR35-060P
CBR35A-020P	N/A
CBR35F-010P	N/A
CBR35F-020	N/A
CBR35F-020P	N/A
CBR35F-040P	N/A
CBR35F-060P	N/A
CBR50-020P	N/A
CBR50-060P	N/A
CEN1135	N/A

\*\*\* CONTINUED \*\*\*

DISCLAIMER: This End of Life (EOL) notification is in accordance with JEDEC standard JESD48 - Product Discontinuance. Central Semiconductor Corp. will make every effort to offer life-time buy (LTB) opportunities and/or offer replacement devices to existing customers for discontinued devices, however, one or both may not be possible for all devices. Please contact your local Central Semiconductor sales representative for LTB opportunities/additional information.



<http://www.centrasemi.com>

## Product End of Life Notification

<b>PDN ID:</b>	PDN01007
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\*\*\* CONTINUED FROM PRIOR PAGE \*\*\*

<u>Central Part Number</u>	<u>Replacement</u>
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Central would be happy to assist you by providing additional information or technical data to help locate an alternate source if we have no replacement available. Please email your requests to [engineering@centrasemi.com](mailto:engineering@centrasemi.com).

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