

**CBR1F-D020S SERIES**

**SURFACE MOUNT  
1 AMP FAST RECOVERY  
SILICON BRIDGE RECTIFIER**

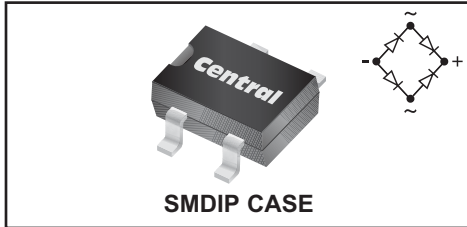


[www.centrasemi.com](http://www.centrasemi.com)

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CBR1F-D020S Series types are fast recovery, full wave bridge rectifiers mounted in a durable epoxy surface mount molded case, utilizing glass passivated chips.

**MARKING: FULL PART NUMBER**



**MAXIMUM RATINGS:**

( $T_A=25^\circ\text{C}$  unless otherwise specified)

	SYMBOL	CBR1F-D020S	CBR1F-D040S	CBR1F-D060S	CBR1F-D080S	CBR1F-D100S	UNITS
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 ( $T_A=40^\circ\text{C}$ )	$I_O$			1.0			A
Peak Forward Surge Current	$I_{FSM}$			50			A
Rating for Fusing ( $t<8.35\text{ms}$ )	$I^2t$			3.74			A <sup>2</sup> s
Operating and Storage Junction Temperature	$T_J, T_{stg}$			-65 to +150			$^\circ\text{C}$

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

SYMBOL	TEST CONDITIONS	TYP	MAX	UNITS
$I_R$	$V_R$ =Rated $V_{RRM}$		5.0	$\mu\text{A}$
$I_R$	$V_R$ =Rated $V_{RRM}$ , $T_A=125^\circ\text{C}$		0.5	mA
$V_F$	$I_F=1.0\text{A}$		1.3	V
$t_{rr}$	$I_F=0.5\text{A}$ , $I_R=1.0\text{A}$ , Rec. to 0.25A (200V, 300V, 400V)		200	ns
$t_{rr}$	$I_F=0.5\text{A}$ , $I_R=1.0\text{A}$ , Rec. to 0.25A (600V)		300	ns
$t_{rr}$	$I_F=0.5\text{A}$ , $I_R=1.0\text{A}$ , Rec. to 0.25A (800V, 1000V)		500	ns
$C_J$	$V_R=4.0\text{V}$ , $f=1.0\text{MHz}$	25		pF

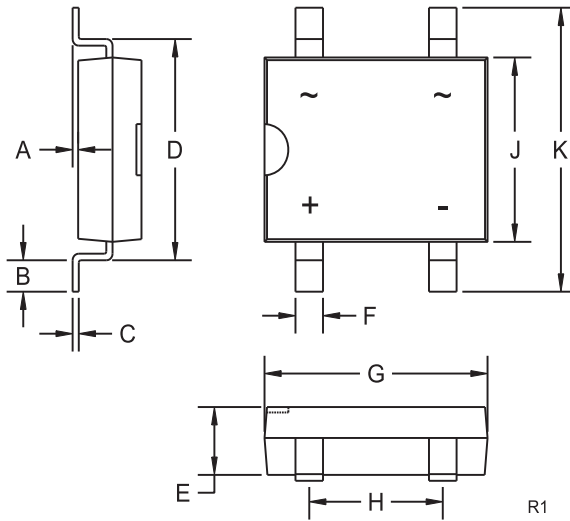
R1 (4-January 2010)

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**SMDIP CASE - MECHANICAL OUTLINE**



SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.004	0.008	0.10	0.20
B	0.040	0.060	1.02	1.52
C	0.009		0.23	
D	0.290	0.310	7.37	7.87
E	0.086	0.098	2.18	2.49
F	0.038	0.042	0.97	1.07
G	0.316	0.335	8.03	8.51
H	0.195	0.205	4.95	5.21
J	0.245	0.255	6.22	6.48
K	0.360	0.410	9.14	10.41

SMDIP (REV: R1)

**MARKING: FULL PART NUMBER**

R1 (4-January 2010)

## 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  
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[www.centrasemi.com](http://www.centrasemi.com)

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

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



<http://www.centrasemi.com>

## Product End of Life Notification

PDN ID:	PDN01093
Notification Date:	6/06/18
Last Buy Date:	N/A
Last Shipment Date	N/A

Please be advised that Central Semiconductor must immediately discontinue the product(s) listed in the attached PDN notice. We are unable to accept any further orders for these products **unless** we have available inventory on hand.

You may have purchased one or more of the products listed. Please do not hesitate to contact your local Central Semiconductor sales representative with any questions or needs you may have. Central regrets any inconvenience this may cause.

Sincerely,

Central Semiconductor Corp.

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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>	PDN01093
<b>Notification Date:</b>	6/06/18
<b>Last Buy Date:</b>	N/A
<b>Last Shipment Date</b>	N/A

Summary: All 1.0 Amp Fast Recovery Bridge Rectifiers in the DIP and SMDIP packages 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 other 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 ongoing Product Management Process. Any replacement products are noted below. The effective date for placing last purchase orders will be six (6) months from the date of this notice and twelve (12) months from the notice date for final shipments, and minimum order quantities may apply. The last purchase and shipment dates may be extended if inventory is available.

<u>Central Part Number</u>	<u>Replacement</u>
CBR1F-D010	N/A
CBR1F-D020	N/A
CBR1F-D020S	N/A
CBR1F-D020S TR13	N/A
CBR1F-D040	N/A
CBR1F-D040S	N/A
CBR1F-D060	N/A
CBR1F-D060S	N/A
CBR1F-D060S TR13	N/A
CBR1F-D080	N/A
CBR1F-D100	N/A

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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