#### **CBR1F-D020S SERIES**

# SURFACE MOUNT 1 AMP FAST RECOVERY SILICON BRIDGE RECTIFIER

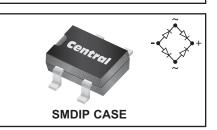


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# **DESCRIPTION:**

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 <sub>A</sub> =25°C unless otherwise specified)	SYMBOL	CBR1F- <u>D020S</u>	CBR1F- <u>D040S</u>	CBR1F- <u>D060S</u>	CBR1F- <u>D080S</u>	CBR1F- D100S	<u>UNITS</u>
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 <sub>R</sub> (RMS)	140	280	420	560	700	V
Average Forward Current (T <sub>A</sub> =40°C)	IO			1.0			Α
Peak Forward Surge Current	I <sub>FSM</sub>			50			Α
Rating for Fusing (t<8.35ms)	I <sup>2</sup> t			3.74			$A^2s$
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>			-65 to +150	0		°C

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

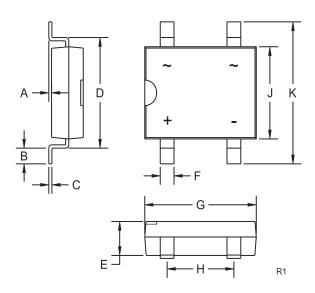
SYMBOL	TEST CONDITIONS	TYP	MAX	UNITS
$I_{R}$	V <sub>R</sub> =Rated V <sub>RRM</sub>		5.0	μΑ
$I_{R}$	V <sub>R</sub> =Rated V <sub>RRM</sub> , T <sub>A</sub> =125°C		0.5	mA
$V_{F}$	I <sub>F</sub> =1.0A		1.3	V
t <sub>rr</sub>	I <sub>F</sub> =0.5A, I <sub>R</sub> =1.0A, Rec. to 0.25A (200V, 300V, 400V)		200	ns
t <sub>rr</sub>	I <sub>F</sub> =0.5A, I <sub>R</sub> =1.0A, Rec. to 0.25A (600V)		300	ns
t <sub>rr</sub>	I <sub>F</sub> =0.5A, I <sub>R</sub> =1.0A, Rec. to 0.25A (800V, 1000V)		500	ns
CJ	V <sub>R</sub> =4.0V, f=1.0MHz	25		pF

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# **SMDIP CASE - MECHANICAL OUTLINE**



DIMENSIONS							
	INC	HES	MILLIMETERS				
SYMBOL	MIN	MAX	MIN	MAX			
Α	0.004	0.008	0.10	0.20			
В	0.040	0.060	1.02	1.52			
С	0.009		0.23				
D	0.290	0.310	7.37	7.87			
Е	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			
Н	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**



#### 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

#### **CONTACT US**

#### Corporate Headquarters & Customer Support Team

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