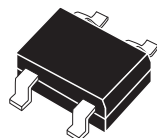


**CBR1F-D020S SERIES**

**1.0 AMP DUAL IN LINE  
FAST RECOVERY  
SILICON BRIDGE RECTIFIER**



**SMDIP CASE**

**Central**<sup>TM</sup>  
**Semiconductor Corp.**

**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. To order devices on tape and reel (1,000/13" reel) add TR13 suffix.

**MARKING CODE: FULL PART NUMBER**

**MAXIMUM RATINGS:** (T<sub>A</sub>=25°C unless otherwise specified)

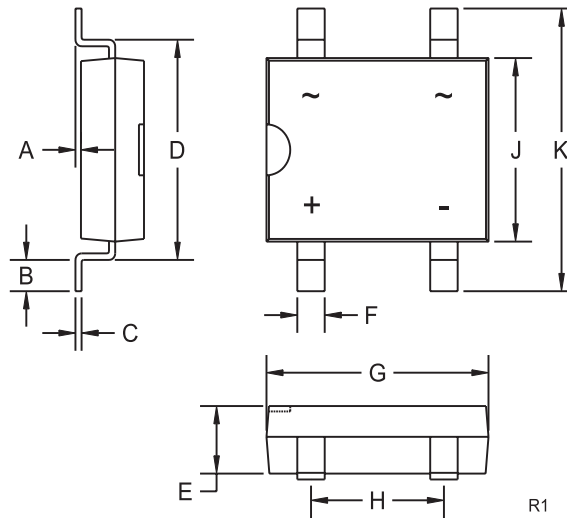
	<u>SYMBOL</u>	<u>CBR1F- D020S</u>	<u>CBR1F- D040S</u>	<u>CBR1F- D060S</u>	<u>CBR1F- D080S</u>	<u>CBR1F- D100S</u>	<u>UNITS</u>
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	200	400	600	800	1000	V
DC Blocking Voltage	V <sub>R</sub>	200	400	600	800	1000	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	140	280	420	560	700	V
Average Forward Current (T <sub>A</sub> =40°C)	I <sub>O</sub>			1.0			A
Peak Forward Surge Current	I <sub>FSM</sub>			50			A
Rating for Fusing (t<8.35ms)	I <sup>2</sup> t			3.74			A <sup>2</sup> s
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>			-65 to +150			°C

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

<u>SYMBOL</u>	<u>TEST CONDITIONS</u>	<u>MIN</u>	<u>TYP</u>	<u>MAX</u>	<u>UNITS</u>
I <sub>R</sub>	V <sub>R</sub> =Rated V <sub>RRM</sub>			5.0	μA
I <sub>R</sub>	V <sub>R</sub> =Rated V <sub>RRM</sub> ; T <sub>A</sub> =125°C			0.5	mA
V <sub>F</sub>	I <sub>F</sub> =1.0A			1.3	V
t <sub>rr</sub> (200V thru 400V)	I <sub>F</sub> =0.5A, I <sub>R</sub> =1.0A, Recov. to 0.25A			200	ns
t <sub>rr</sub> (600V)	I <sub>F</sub> =0.5A, I <sub>R</sub> =1.0A, Recov. to 0.25A			300	ns
t <sub>rr</sub> (800V, 1000V)	I <sub>F</sub> =0.5A, I <sub>R</sub> =1.0A, Recov. to 0.25A			500	ns
C <sub>J</sub>	V <sub>R</sub> =4.0V, f=1.0MHz		25		pF

R0 (14-January 2003)

**SMDIP CASE - MECHANICAL OUTLINE**



DIMENSIONS				
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 CODE: FULL PART NUMBER**

R0 (14-January 2003)