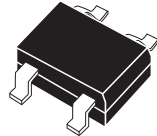


**CBR1F-D020S SERIES**  
**1.0 AMP DUAL IN LINE**  
**FAST RECOVERY**  
**SILICON BRIDGE RECTIFIER**



**SMDIP CASE**

# Central™

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

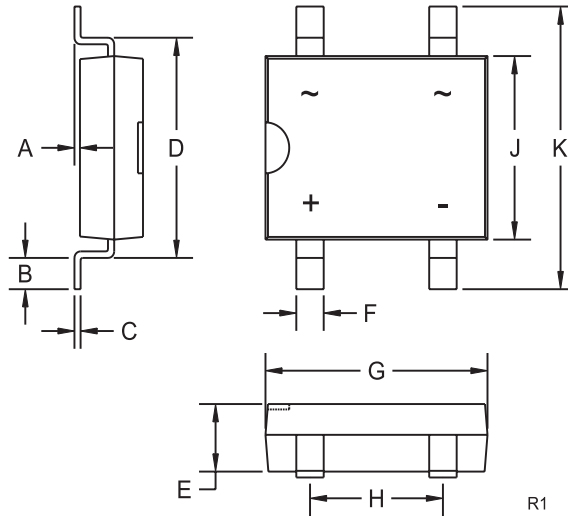
	<u>SYMBOL</u>	<u>CBR1F-D020S</u>	<u>CBR1F-D040S</u>	<u>CBR1F-D060S</u>	<u>CBR1F-D080S</u>	<u>CBR1F-D100S</u>	<u>UNITS</u>
Peak Repetitive Reverse Voltage	$V_{RRM}$	200	400	600	800	1000	V
DC Blocking Voltage	$V_R$	200	400	600	800	1000	V
RMS Reverse Voltage	$V_{R(RMS)}$	140	280	420	560	700	V
Average Forward 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			$\text{A}^2\text{s}$
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)

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

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)