



**THE DATASHEET OF  
CBR1-D040S TR13**



**CBR1-D020S SERIES**

**SURFACE MOUNT  
1 AMP  
SILICON BRIDGE RECTIFIER**



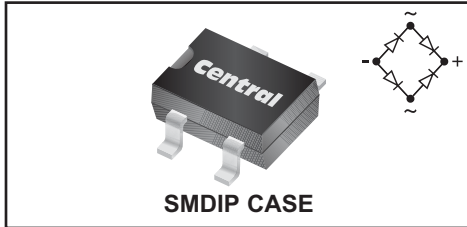
[www.centrasemi.com](http://www.centrasemi.com)

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CBR1-D020S series types are silicon full wave bridge rectifiers mounted in a durable epoxy surface mount molded case, utilizing glass passivated chips.

NOTE: Also available in Fast Recovery, please contact factory for details.

**MARKING: FULL PART NUMBER**



**MAXIMUM RATINGS:**

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

	SYMBOL	CBR1-D020S	CBR1-D040S	CBR1-D060S	CBR1-D080S	CBR1-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 ( $T_A=50^\circ\text{C}$ )	$I_O$			1.0			A
Peak Forward Surge Current	$I_{FSM}$			50			A
Rating for Fusing ( $t<8.35\text{ms}$ )	$I^2t$			10			A <sup>2</sup> s
Operating and Storage Junction Temperature	$T_J, T_{stg}$			-65 to +150			$^\circ\text{C}$

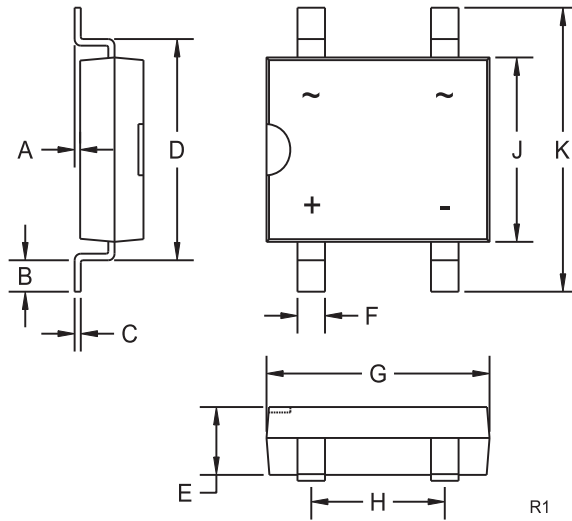
**ELECTRICAL CHARACTERISTICS PER DIODE: ( $T_A=25^\circ\text{C}$  unless otherwise noted)**

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
$I_R$	$V_R=\text{Rated } V_{RRM}$			10	$\mu\text{A}$
$I_R$	$V_R=\text{Rated } V_{RRM}, T_A=125^\circ\text{C}$			0.5	mA
$V_F$	$I_F=1.0\text{A}$			1.1	V
$C_J$	$V_R=4.0\text{V}, f=1.0\text{MHz}$		25		pF

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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**

R3 (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

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**Worldwide Field Representatives:**  
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- [Central Semiconductor Corp Information](#)

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- ✓ Global Sourcing Solution
- ✓ Obsolete Management
- ✓ Cost Control Management
- ✓ Shortage Management
- ✓ Alternative Solution
- ✓ Excess Inventory Management