

CBR1U-D010S  
CBR1U-D020S

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

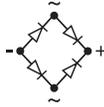


[www.centrasemi.com](http://www.centrasemi.com)

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CBR1U-D010S, CBR1U-D020S types are silicon full wave ultra fast bridge rectifiers mounted in a durable epoxy surface mount molded case, utilizing glass passivated chips.

**MARKING: FULL PART NUMBER**



**SMDIP CASE**

**MAXIMUM RATINGS:**

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

	SYMBOL	CBR1U-D010S	CBR1U-D020S	UNITS
Peak Repetitive Reverse Voltage	$V_{RRM}$	100	200	V
DC Blocking Voltage	$V_R$	100	200	V
RMS Reverse Voltage	$V_{R(RMS)}$	70	140	V
Average Forward Current ( $T_A=40^\circ\text{C}$ )	$I_O$		1.0	A
Peak Forward Surge Current	$I_{FSM}$		50	A
Operating and Storage				
Junction Temperature	$T_J, T_{stg}$	-65 to +150		$^\circ\text{C}$
Thermal Resistance	$\theta_{JA}$	40		$^\circ\text{C/W}$

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

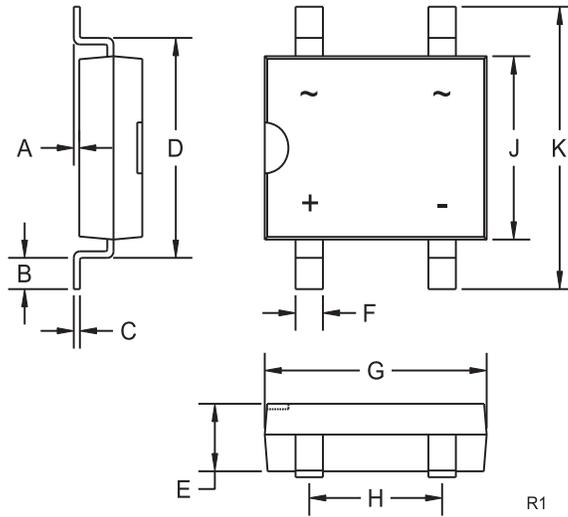
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
$I_R$	$V_R=\text{Rated } V_{RRM}$		5.0	$\mu\text{A}$
$I_R$	$V_R=\text{Rated } V_{RRM}, T_A=125^\circ\text{C}$		1.0	mA
$V_F$	$I_F=1.0\text{A}$		1.05	V
$t_{rr}$	$I_F=500\text{mA}, I_R=1.0\text{A}, I_{rr}=250\text{mA}$		50	ns

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SMDIP CASE - MECHANICAL OUTLINE



SYMBOL	DIMENSIONS			
	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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### 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  
Support Team Fax: (631) 435-3388  
[www.centalsemi.com](http://www.centalsemi.com)

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[www.centalsemi.com/wwreps](http://www.centalsemi.com/wwreps)

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