

CBR1U-D010S  
CBR1U-D020S

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

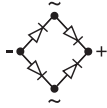
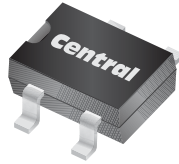


[www.centrasemi.com](http://www.centrasemi.com)

**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)**

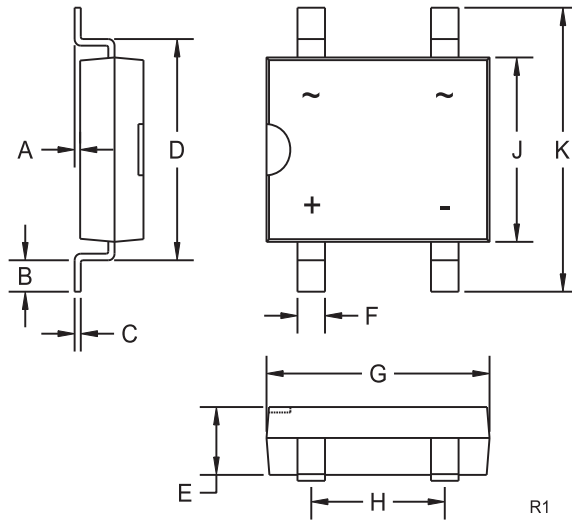
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
$I_R$	$V_R$ =Rated $V_{RRM}$		5.0	$\mu\text{A}$
$I_R$	$V_R$ =Rated $V_{RRM}$ , $T_A=125^{\circ}\text{C}$		1.0	mA
$V_F$	$I_F=1.0\text{A}$		1.05	V
$t_{rr}$	$I_F=500\text{mA}$ , $I_R=1.0\text{A}$ , $I_{rr}=250\text{mA}$		50	ns

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SMDIP CASE - MECHANICAL OUTLINE



SYMBOL	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)