

# Silicon Bridge Rectifier

## **CBR1U-D020S**

200V / 1A

ultrafast

# DATASHEET

OEM – Central Semiconductor Corp.

Source: Central Databook 2004

CBR1U-D010S  
 CBR1U-D020S  
 SURFACE MOUNT  
 1.0 AMP ULTRA FAST  
 SILICON BRIDGE RECTIFIER



# Central™

## Semiconductor Corp.

**DESCRIPTION:**

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

**MARKING CODE: FULL PART NUMBER**

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

	SYMBOL	CBR1U-D010S	CBR1U-D020S	UNITS
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	100	200	V
DC Blocking Voltage	V <sub>R</sub>	100	200	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	70	140	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
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>		-65 to +150	°C
Thermal Resistance	θ <sub>JA</sub>		40	°C/W

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
V <sub>F</sub>	I <sub>F</sub> =1.0A (Per Diode)		1.05	V
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		1.0	mA
t <sub>rr</sub>	I <sub>F</sub> =500mA, I <sub>R</sub> =1.0A, I <sub>rr</sub> =250mA		50	ns

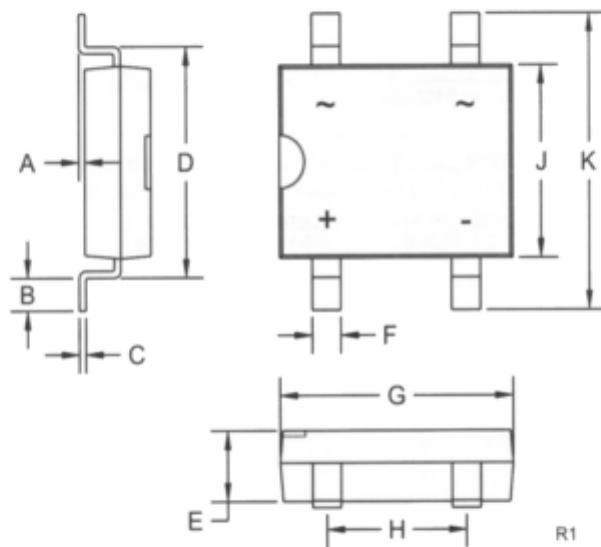
For Typical Electrical Characteristic Data for this device, please see Process CPD16 on page 877.



CBR1U-D010S  
CBR1U-D020S

SURFACE MOUNT  
1.0 AMP ULTRA FAST  
SILICON BRIDGE RECTIFIER

SMDIP CASE - MECHANICAL OUTLINE



DATA SHEETS

MARKING CODE:  
FULL PART NUMBER

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)

R2 (13-November 2002)