Silicon Bridge Rectifier

CBR1U-D010S

100V / 1A

ultrafast

DATASHEET

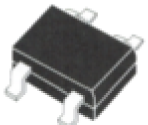
OEM – Central Semiconductor Corp.

Source: Central Databook 2004

Datasheet Rev. 1.3 – 12/19 – data without warranty / liability

CBR1U-D010S
CBR1U-D020S

SURFACE MOUNT
1.0 AMP ULTRA FAST
SILICON BRIDGE RECTIFIER



SMDIP CASE

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_A=25°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°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		°C
Thermal Resistance	Θ_{JA}	40		°C/W

ELECTRICAL CHARACTERISTICS: (T_A=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
V_F	I_F=1.0A (Per Diode)		1.05	V
I_R	V_R=Rated V_{RRM}		5.0	µA
I_R	V_R=Rated V_{RRM}, T_A=125°C		1.0	mA
t_{rr}	I_F=500mA, I_R=1.0A, I_{rr}=250mA		50	ns

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

R2 (13-November 2002)

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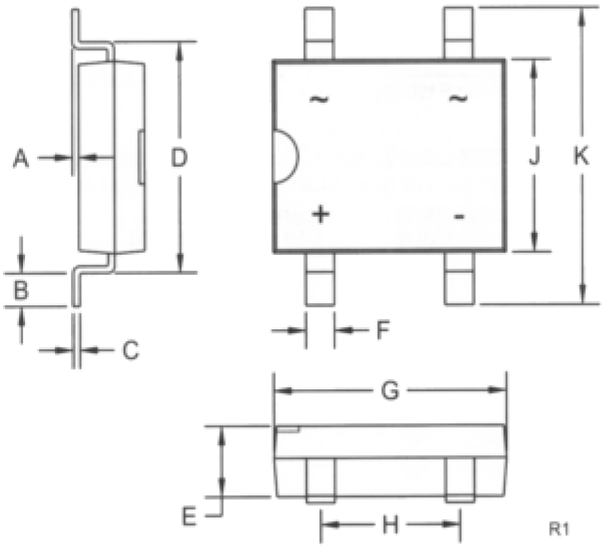
CBR1U-D010S
CBR1U-D020S

SURFACE MOUNT
1.0 AMP ULTRA FAST
SILICON BRIDGE RECTIFIER

SMDIP CASE - MECHANICAL OUTLINE



MARKING CODE:
FULL PART NUMBER

DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	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)