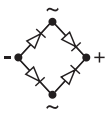
CBR2-D020S SERIES

SURFACE MOUNT SILICON
2.0 AMP
BRIDGE RECTIFIERS





SMDIP CASE

Central Semiconductor Corp.

www.centralsemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CBR2-D020S series types are silicon full wave bridge rectifiers mounted in a durable epoxy surface mount molded case, utilizing glass passivated chips.

MARKING: FULL PART NUMBER

MAXIMUM RATINGS: (T_A=25°C unless otherwise noted)

	SYMBOL	CBR2-D020S	CBR2-D040S	CBR2-D060S	CBR2-D080S	CBR2-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=40°C)	I_O			2.0			A
Peak Forward Surge Current (t=8.3ms)	I_{FSM}			50			A
Peak Forward Surge Current (t=1.0ms)	I_{FSM}			65			A
Rating for Fusing (t=8.3ms)	I^2t			10			A^2s
Operating and Storage Junction Temperature	T_J, T_{stg}			-65 to +150			°C
Typical Thermal Resistance (Note 1)	Θ_{JA}			40			°C/W
Typical Thermal Resistance	Θ_{JL}			15			°C/W

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

SYMBOL	TEST CONDITIONS	TYP	MAX	UNITS
I_R	V_R=Rated V_{RRM}		5.0	μA
I_R	V_R=Rated V_{RRM}, T_A=125°C		0.5	mA
V_F	I_F=2.0A		1.1	V
C_J	V_R=4.0V, f=1.0MHz	25		pF

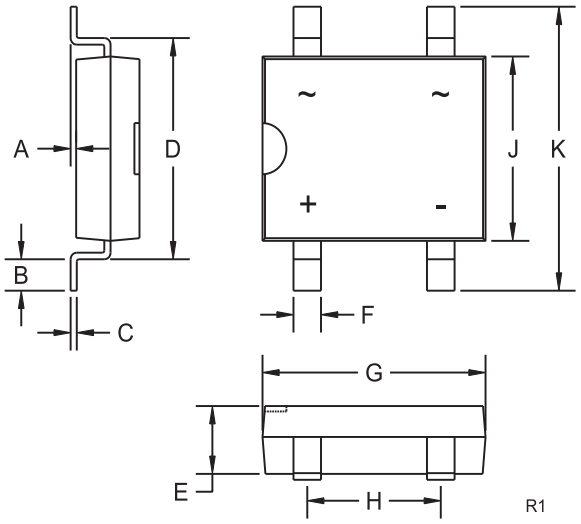
Notes: (1) Device mounted on PCB with 13mm x 13mm copper pads.

R1 (23-June 2015)

CBR2-D020S SERIES

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SMDIP CASE - MECHANICAL OUTLINE



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)

MARKING: FULL PART NUMBER

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SURFACE MOUNT SILICON
2.0 AMP
BRIDGE RECTIFIERS

SERVICES

- Bonded Inventory
- Custom Electrical Screening
- Custom Electrical Characteristic Curves
- SPICE Models
- Custom Packaging
- Package Base Options
- Custom Device Development / Multi Discrete Modules (MDM™)
- Bare Die Available for Hybrid Applications

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R1 (23-June 2015)