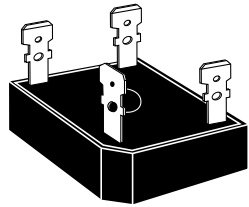


**CBR50-020P SERIES**  
**50 AMP**  
**SILICON BRIDGE RECTIFIER**  
**200 thru 1000 VOLTS**



**CASE FP**

# Central<sup>TM</sup>

**Semiconductor Corp.**

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CBR50-020P series types are silicon single phase full wave bridge rectifiers designed for general purpose applications. The molded epoxy case has a built in metal baseplate for heat sink mounting.

**MARKING CODE: FULL PART NUMBER**

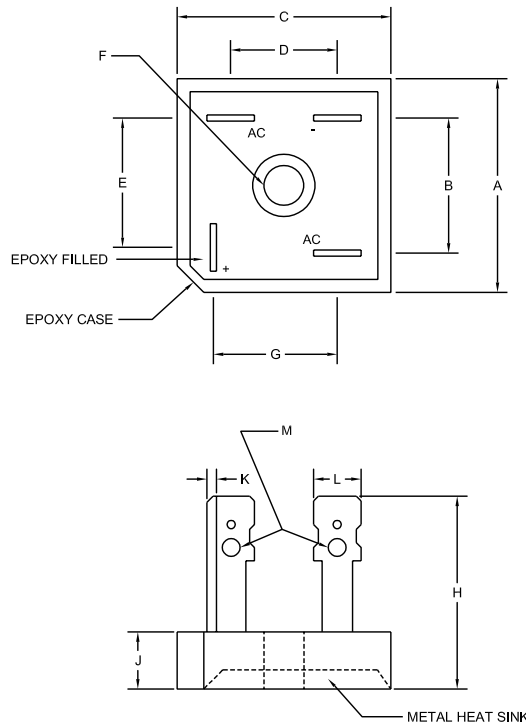
**MAXIMUM RATINGS** ( $T_A=25^\circ\text{C}$ )

	SYMBOL	CBR50-020P	CBR50-040P	CBR50-060P	CBR50-080P	CBR50-100P	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 ( $T_C=55^\circ\text{C}$ )	$I_O$			50			A
Peak Forward Surge Current	$I_{FSM}$			400			A
Operating and Storage Junction Temperature	$T_J, T_{stg}$			-65 to +150			$^\circ\text{C}$
Thermal Resistance	$\theta_{JC}$			1.5			$^\circ\text{C/W}$
RMS Isolation Voltage (case to lead)	$V_{iso}$			2500			$V_{ac}$

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

SYMBOL	TEST CONDITIONS	TYP	MAX	UNITS
$I_R$	$V_R=\text{Rated } V_{RRM}, T_C=25^\circ\text{C}$		5.0	$\mu\text{A}$
$I_R$	$V_R=\text{Rated } V_{RRM}, T_C=125^\circ\text{C}$		500	$\mu\text{A}$
$V_F$	$I_F=25\text{A}$		1.1	V
$C_J$	$V_R=4.0\text{V}, f=1.0\text{MHz}$	300		pF

CASE FP - MECHANICAL OUTLINE



R1

MARKING CODE:  
FULL PART NUMBER

SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	1.115	1.135	28.32	28.83
B	0.692	0.732	17.58	18.59
C	1.115	1.135	28.32	28.83
D	0.542	0.582	13.77	14.78
E	0.632	0.672	16.05	17.07
F (DIA.)	0.200	0.220	5.08	5.59
G	0.632	0.672	16.05	17.07
H	0.740	0.840	18.80	21.34
J	0.290	0.310	7.37	7.87
K	0.030	0.034	0.76	0.86
L	0.250		6.35	
M (DIA.)	0.940		2.39	

CASE FP (REV:R1)

R0 (31-August 2004)