

# Central<sup>TM</sup> Semiconductor Corp.

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Manufacturers of World Class Discrete Semiconductors

CBR10-010P SERIES  
CBR25-010P SERIES  
CBR35-010P SERIES

SILICON BRIDGE RECTIFIER

10 THRU 35A, 100 THRU 1000V

## DESCRIPTION

The CENTRAL SEMICONDUCTOR CBR10, CBR25, CBR35 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. The plastic material is covered by UL flammability classification 94V-0. "P" Suffix device utilizes standard 0.25" fast on connectors. Wire leaded devices available by adding "W" to part number (Ex: CBR35-060PW). All Devices are UL recognized ( File No. E130224 ).

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

	SYMBOL	-010P	-020P	-040P	-060P	-080P	-100P	UNITS
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	100	200	400	600	800	1000	V
DC Blocking Voltage	V <sub>R</sub>	100	200	400	600	800	1000	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	70	140	280	420	560	700	V
Average Forward Current (T <sub>C</sub> =60°C)	I <sub>O</sub>							
	CBR10-010P SERIES				10			A
	CBR25-010P SERIES				25			A
	CBR35-010P SERIES				35			A
Peak Forward Surge Current (JEDEC)	I <sub>FSM</sub>							
	CBR10-010P SERIES				200			A
	CBR25-010P SERIES				350			A
	CBR35-010P SERIES				400			A
I <sup>2</sup> t Rating for Fusing (1ms<t<8.3ms)	I <sup>2</sup> t							
	CBR10-010P SERIES				160			A <sup>2</sup> sec
	CBR25-010P SERIES				375			A <sup>2</sup> sec
	CBR35-010P SERIES				660			A <sup>2</sup> sec
Typical Thermal Resistance	θ <sub>JC</sub>							
	CBR10-010P SERIES				1.9			°C/W
	CBR25-010P SERIES				1.9			°C/W
	CBR35-010P SERIES				1.4			°C/W
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>				-65 to +150			°C
RMS Isolation Voltage (case to leads)	V <sub>iso</sub>				2500			V <sub>ac</sub>

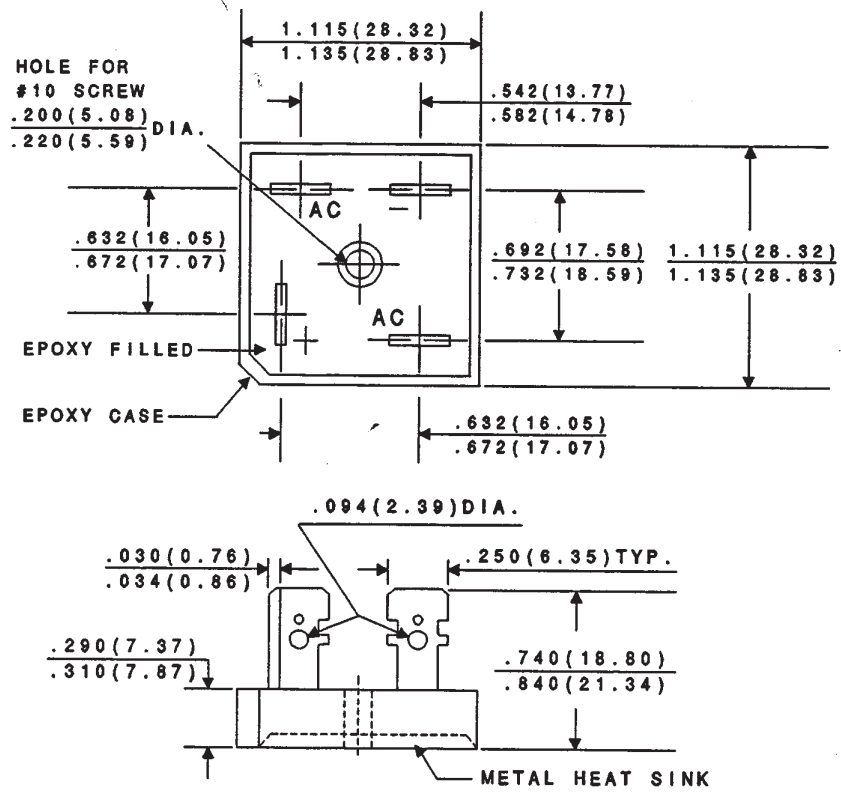
## ELECTRICAL CHARACTERISTICS Per Diode (T<sub>A</sub>=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	TYP	MAX	UNITS
V <sub>F</sub>	I <sub>F</sub> =1/2 Rated I <sub>O</sub>		1.2	V
I <sub>R</sub>	V <sub>R</sub> =Rated V <sub>RRM</sub>		10	μA
I <sub>R</sub>	V <sub>R</sub> =Rated V <sub>RRM</sub> , T <sub>A</sub> =125°C		500	μA
C <sub>J</sub>	V <sub>R</sub> =4.0V, f=1.0MHz	300		pF

SEE REVERSE FOR OUTLINE DRAWINGS

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### CASE FP - MECHANICAL OUTLINE



### CASE FPW - MECHANICAL OUTLINE

