Central™
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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_A=25°C unless otherwise noted)

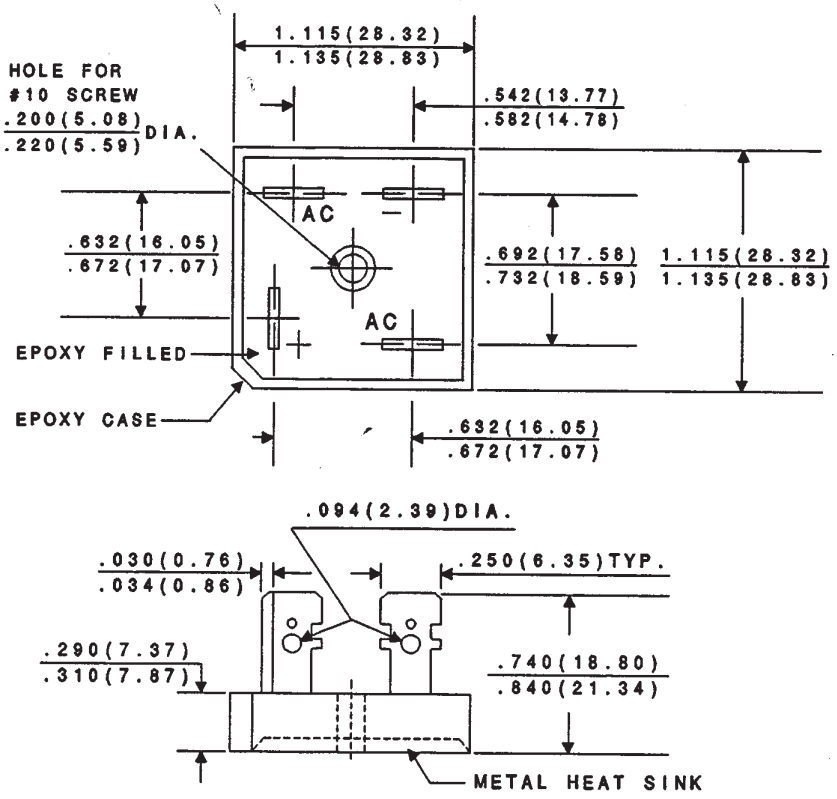
	SYMBOL	-010P	-020P	-040P	-060P	-080P	-100P	UNITS
Peak Repetitive Reverse Voltage	V_{RRM}	100	200	400	600	800	1000	V
DC Blocking Voltage	V_R	100	200	400	600	800	1000	V
RMS Reverse Voltage	$V_{R(RMS)}$	70	140	280	420	560	700	V
Average Forward Current (T_C=60°C)	I_O							
	CBR10-010P SERIES				10			A
	CBR25-010P SERIES				25			A
	CBR35-010P SERIES				35			A
Peak Forward Surge Current (JEDEC)	I_{FSM}							
	CBR10-010P SERIES				200			A
	CBR25-010P SERIES				350			A
	CBR35-010P SERIES				400			A
I^2t Rating for Fusing (1ms<t<8.3ms)	I^2t							
	CBR10-010P SERIES				160			A^2sec
	CBR25-010P SERIES				375			A^2sec
	CBR35-010P SERIES				660			A^2sec
Typical Thermal Resistance	Θ_{JC}							
	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_J,T_{stg}				-65 to +150			°C
RMS Isolation Voltage (case to leads)	V_{iso}				2500			V_{ac}

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

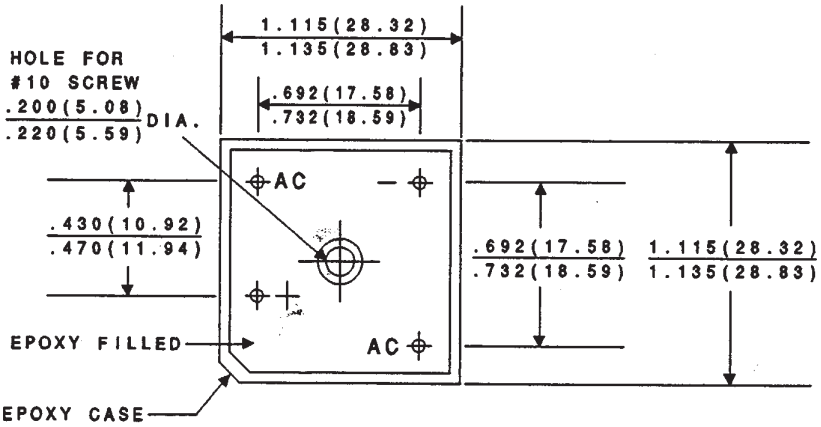
SYMBOL	TEST CONDITIONS	TYP	MAX	UNITS
V_F	I_F=1/2 Rated I_O		1.2	V
I_R	V_R=Rated V_{RRM}		10	μA
I_R	V_R=Rated V_{RRM}, T_A=125°C		500	μA
C_J	V_R=4.0V, f=1.0MHz	300		pF

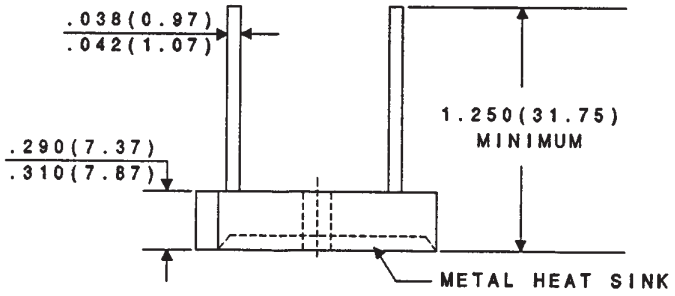
SEE REVERSE FOR OUTLINE DRAWINGS

CASE FP - MECHANICAL OUTLINE



CASE FPW - MECHANICAL OUTLINE





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ALL DIMENSIONS IN INCHES (mm).