

Manufacturers of World Class Discrete Semiconductors

SILICON BRIDGE RECTIFIER
10 AMPS, 100 THRU 1000 VOLTS

CASE CM

The CENTRAL SEMICONDUCTOR CBR10-J010 Series types are Silicon Single Phase Full Wave Bridge Rectifiers designed for general purpose applications.

	SYMBOL	CBR10 -J010	CBR10 -J020	CBR10 -J040	CBR10 -J060	CBR10 -J080	CBR10 -J100	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 *								
$T_C = 80^{\circ}\text{C}$	I_O				10			A
$T_A = 30^{\circ}\text{C}$	I_O				5.0			A
Peak Forward Surge Current	I_{FSM}				150			A
Operating and Storage								
Junction Temperature	T_J, T_{stg}				-65 to +150			$^{\circ}\text{C}$
Thermal Resistance	θ_{JC}				3.0			$^{\circ}\text{C/W}$

<u>SYMBOL</u>	<u>TEST CONDITIONS</u>	<u>MIN</u>	<u>MAX</u>	<u>UNITS</u>
V_F	$I_F = 5.0A$		1.2	V
I_R	$V_R = \text{Rated } V_{RRM}$		10	μA

Technical drawing of a rectangular plate with dimensions in inches and millimeters. The drawing includes a side view on the left and a top view on the right.

Side View Dimensions:

- Top thickness: .230 (5.84)
- Bottom thickness: .270 (6.86)
- Length: .75 (19.1) MIN
- Width: .04 (1.0) DIA TYP

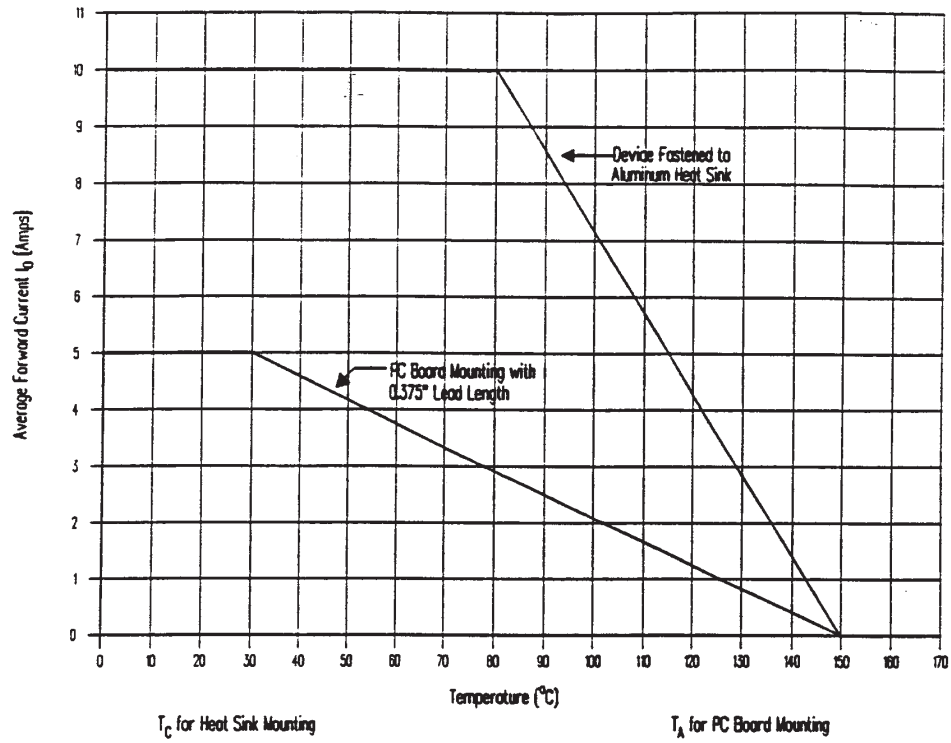
Top View Dimensions:

- Overall width: .580 (14.73)
- Overall height: .620 (15.75)
- Top-left corner chamfer: 45°
- Top-left corner chamfer dimensions: .405 (10.3) and .445 (11.3)
- Hole for #6 screw: .142 (3.6)
- Distance from top edge to hole center: .158 (4.0)
- Distance from left edge to hole center: .067 (1.7)
- Distance from bottom edge to hole center: .107 (2.7)

R2

Derating Curve for Average Forward Current

(60 Hz Resistive or Inductive Load)



Typical Instantaneous Forward Characteristics Per Bridge Element

