

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

145 Adams Avenue, Hauppauge, NY 11788 USA  
Tel: (631) 435-1110 • Fax: (631) 435-1824

Manufacturers of World Class Discrete Semiconductors

## CBR6-010 SERIES

SILICON BRIDGE RECTIFIER  
6.0 AMPS, 100 THRU 1000 VOLTS

CASE CM

### DESCRIPTION

The CENTRAL SEMICONDUCTOR CBR6-010 Series types are Silicon Single Phase Full Wave Bridge Rectifiers designed for general purpose applications.

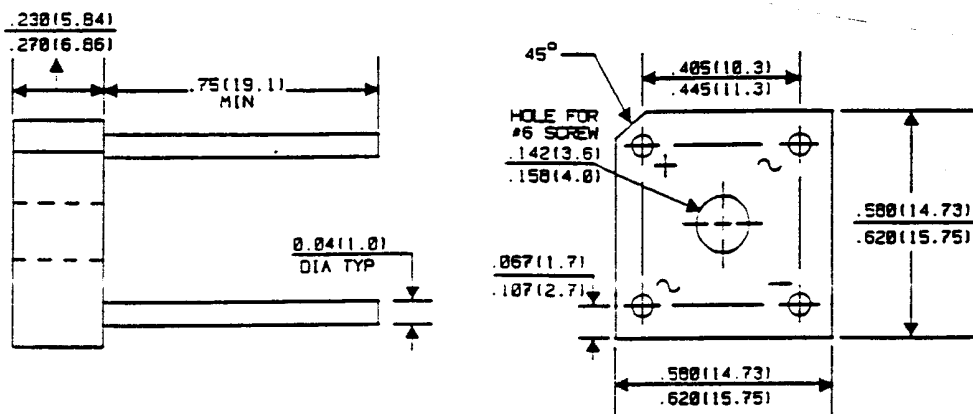
### MAXIMUM RATINGS (T<sub>A</sub>=25°C unless otherwise noted)

	SYMBOL	CBR6 -010	CBR6 -020	CBR6 -040	CBR6 -060	CBR6 -080	CBR6 -100	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> =80°C	I <sub>O</sub>				6.0			A
T <sub>A</sub> =30°C	I <sub>O</sub>				3.0			A
Peak Forward Surge Current	I <sub>FSM</sub>				125			A
Operating and Storage								
Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>				-65 to +150			°C
Thermal Resistance	θ <sub>JC</sub>				5.0			°C/W

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
V <sub>F</sub>	I <sub>F</sub> =3.0A		1.1	V
I <sub>R</sub>	V <sub>R</sub> =Rated V <sub>RRM</sub>		10	μA

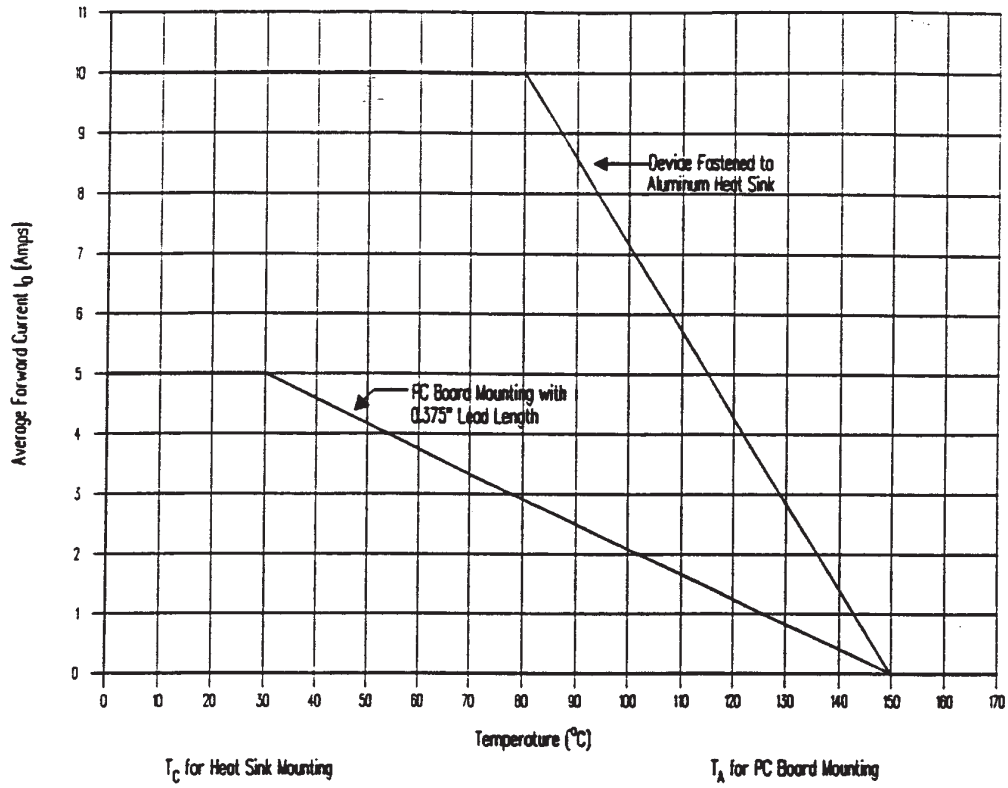
\* SEE REVERSE FOR CURVE.



DIMENSIONS IN INCHES (mm).

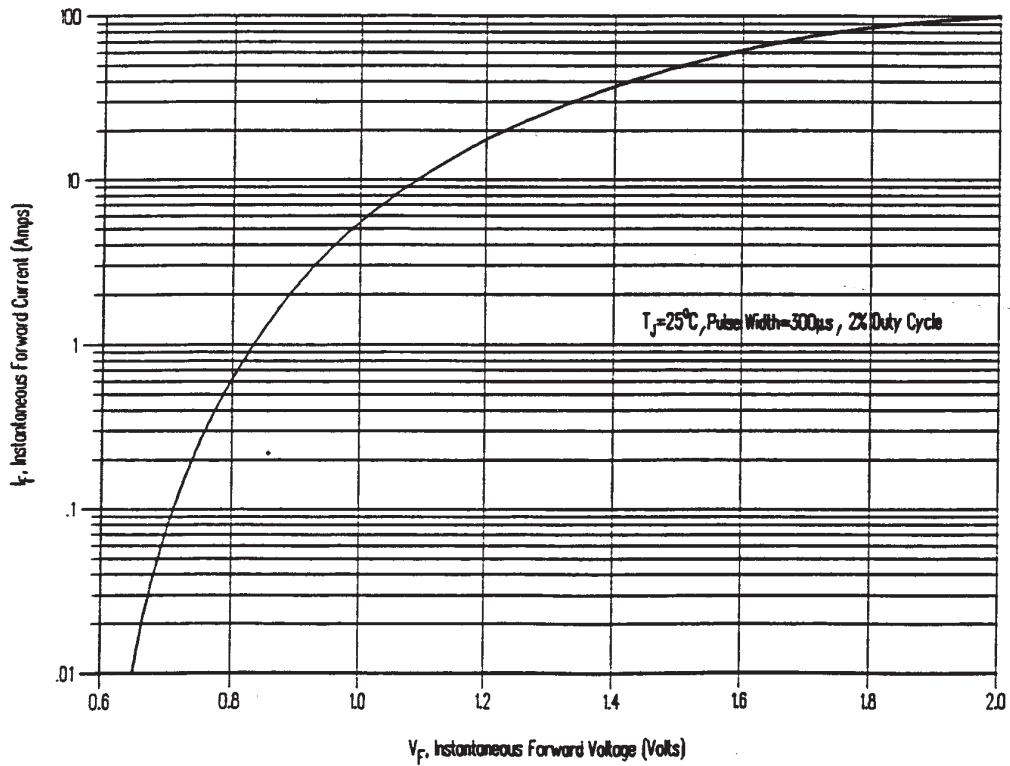
# Derating Curve for Average Forward Current

( 60 Hz Resistive or Inductive Load )



## Typical Instantaneous Forward

Characteristics Per Bridge Element



## OUTSTANDING SUPPORT AND SUPERIOR SERVICES



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### PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options
- Custom bar coding for shipments
- Custom product packing

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### DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2<sup>nd</sup> day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities
- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

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### REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix "TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix "PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

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### CONTACT US

#### Corporate Headquarters & Customer Support Team

Central Semiconductor Corp.  
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Main Tel: (631) 435-1110  
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**Worldwide Field Representatives:**  
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**Worldwide Distributors:**  
[www.centrasemi.com/wwdistributors](http://www.centrasemi.com/wwdistributors)

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For the latest version of Central Semiconductor's **LIMITATIONS AND DAMAGES DISCLAIMER**, which is part of Central's Standard Terms and Conditions of sale, visit: [www.centrasemi.com/terms](http://www.centrasemi.com/terms)

## Summary: Case CM Bridge Rectifiers

Although Central Semiconductor Corp. makes every effort to continue to produce devices that have been proclaimed EOL (End of Life) by various manufacturers, it is an accepted industry practice to discontinue certain devices when customer demand falls below a minimum level of sustainability. Accordingly, the following product(s) have been transitioned to End of Life status as part of Central's Product Management Process. Any replacement product will be noted below. The effective date for placing the last purchase order will be six(6) months from the date of this notice and twelve(12) months from the notice date for final shipments; this may be extended if inventory is available.

<b>Central Part Number</b>	<b>Replacement</b>
CBR10-J010	CBR10-J100
CBR10-J020	CBR10-J100
CBR10-J040	CBR10-J100
CBR10-J060	CBR10-J100
CBR10-J080	CBR10-J100
CBR10A-J010	CBR10-J100
CBR10A-J020	CBR10-J100
CBR10A-J040	CBR10-J100
CBR10A-J060	CBR10-J100
CBR10A-J080	CBR10-J100
CBR10F-J010	CBR10-J100
CBR10F-J020	CBR10-J100
CBR10F-J040	CBR10-J100
CBR10F-J060	CBR10-J100
CBR10F-J080	CBR10-J100
CBR10F-J100	CBR10-J100
CBR6-010	CBR10-J100
CBR6-020	CBR10-J100
CBR6-040	CBR10-J100
CBR6-060	CBR10-J100
CBR6-080	CBR10-J100
CBR6-100	CBR10-J100
CBR6A-020	CBR10-J100
CBR6A-040	CBR10-J100
CBR6A-060	CBR10-J100
CBR6A-080	CBR10-J100
CBR6F-010	CBR10-J100
CBR6F-020	CBR10-J100
CBR6F-040	CBR10-J100
CBR6F-060	CBR10-J100
CBR6F-080	CBR10-J100
CBR6F-100	CBR10-J100
CEN931	N/A

Central would be happy to assist you by providing additional information or technical data to help locate an alternate source if we  
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<http://www.centrasemi.com>

PDN01002

9/01/15

3/01/16

9/01/16

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<u>Central Part Number</u>	<u>Replacement</u>
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