

# CHB200W SERIES

## 132 TO 200 WATT 4:1 INPUT DC-DC CONVERTERS SINGLE OUTPUT

### FEATURE

- \* 132 - 200W Isolated Output
- \* Efficiency to 89%
- \* Fixed Switching Frequency
- \* Monotonic start-up
- \* Input under-voltage Protection
- \* Over Temperature Protection
- \* Over Voltage/Current Protection
- \* Remote ON/OFF
- \* Industry Standard Half-Brick Package
- \* Fully Isolated 1500VDC



MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT		INPUT CURRENT		EFF. (%)	CASE
			MIN.	MAX.	NO LOAD	FULL LOAD		
☆CHB200W-24S3V3	10-36VDC	3.3VDC	0mA	50 A	150mA	7.90A	87	HB
☆CHB200W-24S05	10-36VDC	5.0VDC	0mA	40 A	150mA	9.58A	87	HB
☆CHB200W-24S12	10-36VDC	12 VDC	0mA	16.7 A	100mA	9.71A	86	HB
☆CHB200W-24S15	10-36VDC	15 VDC	0mA	13.3 A	100mA	9.67A	86	HB
☆CHB200W-24S24	10-36VDC	24 VDC	0mA	8.3 A	100mA	9.54A	87	HB
CHB200W-48S3V3	18-75VDC	3.3VDC	0mA	40 A	80mA	3125mA	88	HB
CHB200W-48S05	18-75VDC	5.0VDC	0mA	40 A	80mA	4682mA	89	HB
CHB200W-48S12	18-75VDC	12 VDC	0mA	16.7 A	60mA	4744mA	88	HB
CHB200W-48S15	18-75VDC	15 VDC	0mA	13.3 A	60mA	4723mA	88	HB
CHB200W-48S24	18-75VDC	24 VDC	0mA	8.3 A	60mA	4716mA	88	HB

NOTE: 1. Nominal Input Voltage 24, 48 VDC, Prefix "☆" to Model number are New Products

#### Distribution:

RSG Electronic Components GmbH ▪ Spremlinger Landstr. 115 ▪ D-63069 Offenbach/Germany  
 Tel. +49 69 984047-0 ▪ Fax +49 69 984047-77 ▪ info@rsg-electronic.de ▪ [www.rsg-electronic.de](http://www.rsg-electronic.de)  
 Änderungen vorbehalten / subject to change without notice

# SPECIFICATIONS

All Specifications Typical At Nominal Line, Full Load, and 25°C Unless Otherwise Noted

## INPUT SPECIFICATIONS:

Input Voltage Range	24V	10-36V
	48V	18-75V
Under voltage lockout	24Vin power up	9.5V
	24Vin power down	8.5V
	48Vin power up	17V
	48Vin power down	16V
Positive Logic Remote ON/OFF ( see note 4 & 5 )		
Input Filter		PI Type

## OUTPUT SPECIFICATIONS:

Voltage Accuracy:	±1.5% max.
Transient Response:25% Step Load Change	<500u sec.
External Trim Adj. Range, Note6	±10%
Ripple & Noise, 20MHz BW	
3.3V & 5V	40mV RMS, max. 100mV pk-pk, max.
12V & 15V	60mV RMS, max. 150mV pk-pk, max.
24V	100mV RMS, max. 240mV pk-pk, max.
Temperature Coefficient	±0.03%/°C
Short Circuit Protection	Continuous
Line Regulation(1)	±0.2% max.
Load Regulation(2)	±0.2% max.
Over Voltage Protection trip Range, % Vo nom.	115-140%
Current Limit	110% ~150% Nominal Output

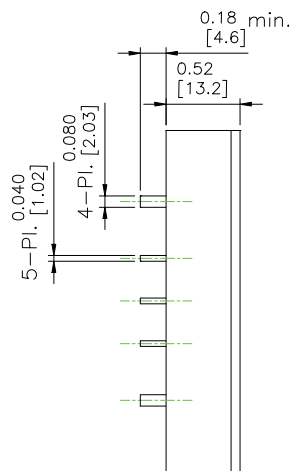
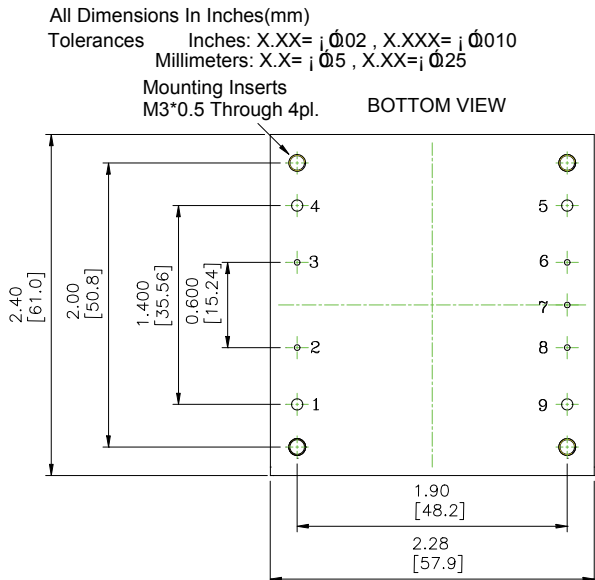
## GENERAL SPECIFICATIONS:

Efficiency.....	See Table
Isolation Voltage	Input/Output ..... 1500VDC min. Input/Case ..... 1500VDC min. Output/Case ..... 1500VDC min.
Isolation Resistance	10 <sup>7</sup> ohm min.
Switching Frequency	250KHz, Typ.
Operating Case Temperature	-40°C to 100°C
Storage Temperature	-55°C to +105°C
Thermal Shutdown, Case Temp.	110°C Typ.
Dimensions	2.28x2.40x0.52 inches (57.9x61.0x13.2 mm)
Case Material	Aluminum Baseplate with Plastic Case

## NOTE :

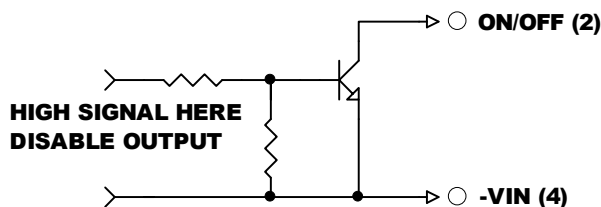
- Measured From High Line to Low Line
- Measured From Full Load to Zero Load
- Output Ripple and Noise measured with 10uF tantalum and 1uF Ceramic capacitor across output
- Logic Compatibility ..... Open Collector ref to -Input  
Module ON ..... >3.5Vdc to 75Vdc or Open Circuit  
Module OFF ..... < 1.2Vdc
- Suffix "N" to the Model Number with Negative Logic Remote ON/OFF  
Module ON ..... < 1.2Vdc  
Module OFF ..... >3.5Vdc to 75Vdc or Open Circuit
- Trim-up ..... connect a resistor between the trim pin and +Sense  
Trim-down ..... connect a resistor between the trim pin and -Sense

## CASE HB



Pin	Function
1	+Vin
2	ON/OFF
3	CASE
4	-Vin
5	-Vout
6	-Sense
7	Trim
8	+Sense
9	+Vout

## REMOTE ON/OFF CONTROL



## EXTERNAL OUTPUT TRIM

