

CHB200W

S E R I E S

132-200 WATT

4:1 INPUT RANGE

DC-DC CONVERTERS



- Features
- 132-200W Isolated Output
 - Half Brick Package
 - 4 : 1 Input Range
 - Regulated Outputs
 - Efficiency to 89%
 - Input Under Voltage Protection

- Monotonic Start Up
 - Over Current / Voltage Protection
 - Over Temperature Protection
 - Remote On/Off Control
 - 1500VDC Isolation
 - Continuous Short Circuit Protection

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT		INPUT CURRENT		% EFF.	SIZE
			MIN.	MAX.	NO LOAD	FULL LOAD		
CHB200W-48S3V3	18-75 VDC	3.3 VDC	0mA	40 A	80mA	3125mA	88	Half-Brick
CHB200W-48S05	18-75 VDC	5.0 VDC	0mA	40 A	80mA	4682mA	89	Half-Brick
CHB200W-48S12	18-75 VDC	12 VDC	0mA	16.7 A	60mA	4744mA	88	Half-Brick
CHB200W-48S15	18-75 VDC	15 VDC	0mA	13.3 A	60mA	4723mA	88	Half-Brick
CHB200W-48S24	18-75 VDC	24 VDC	0mA	8.3 A	60mA	4716mA	88	Half-Brick

NOTE : 1. Nominal Input Voltage 48 VDC

Specifications

INPUT SPECIFICATIONS:

Input Voltage Range..... 48Vin 18-75V
Under Voltage Lockout.....48Vin power up.....17 typ.
48Vin Power down.....16 typ.
Postive 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.....±10%
Ripple & Noise³, 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 Regulation¹±0.2% max.
Load Regulation².....±0.2% max.
Over Voltage Protection Trip Range, % Vo nom.....115-140%
Current Limit.....110-150% Nominal Output

GENERAL SPECIFICATIONS:

Efficiency..... See Table
Isolation VoltageInput/Output.....1500VDC min.
Input/Case.....1500VDC min.
Output/Case.....1500VDC min.
Isolation Resistance10⁷ Ohms
Switching Frequency250KHz typ.
Operating Case Temperature.....-40°C to +100°C
Storage Temperature-55°C to +105°C
Thermal Shutdown, Case Temp.....110°C Typ.
Dimensions2.28x2.4x0.52inches
(57.9x61.0x13.2 mm)
Case Material.....Aluminum Baseplate with Plastic Case

Remote On/Off Control

External Output Trim

NOTE:

1. Measured From High Line to low Line

2. Measured From Full Load to Zero Load

3. Output Ripple and Noise measured with 10uF tantalum and 1uF Ceramic capacitor across output

4. Logic Compatibility.....Open Collector ref to-Input
Module ON>3.5Vdc to 75Vdc or Open Circuit
Module OFF<1.2Vdc

5. 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

6. Trim-up.....Connect a Resistor Between the Trim Pin and+Sense
Trim-Down.....Connect a Resistor Between the Trim Pin and-Sense

PIN CONNECTION

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

CASE HB

All Dimensions In Inches(mm)
Tolerance Inches: x.xx= ±0.02, x.xxx= ±0.010
Millimeters: x.x= ±0.5, x.xx= ±0.25

MOUNTING INSERTS
M3x0.5 Through 4pl.

BOTTOM VIEW

CHB200W