

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.
 Positive Logic Remote on/off (See Note 4 & 5)
 Input Filter.....PI type.

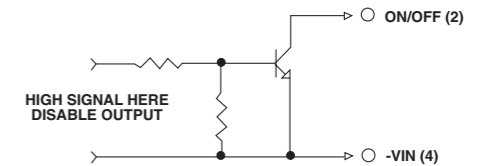
OUTPUT SPECIFICATIONS:

Voltage Accuracy.....±1.5% max
 Transient Response: 25% Step Load Change.....<500u sec.
 External Trim Adj. Range.....±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

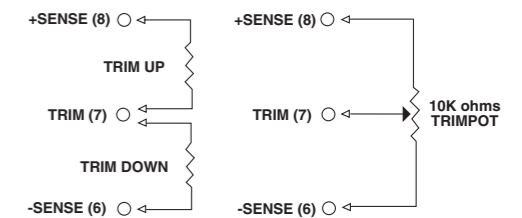
GENERAL SPECIFICATIONS:

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:

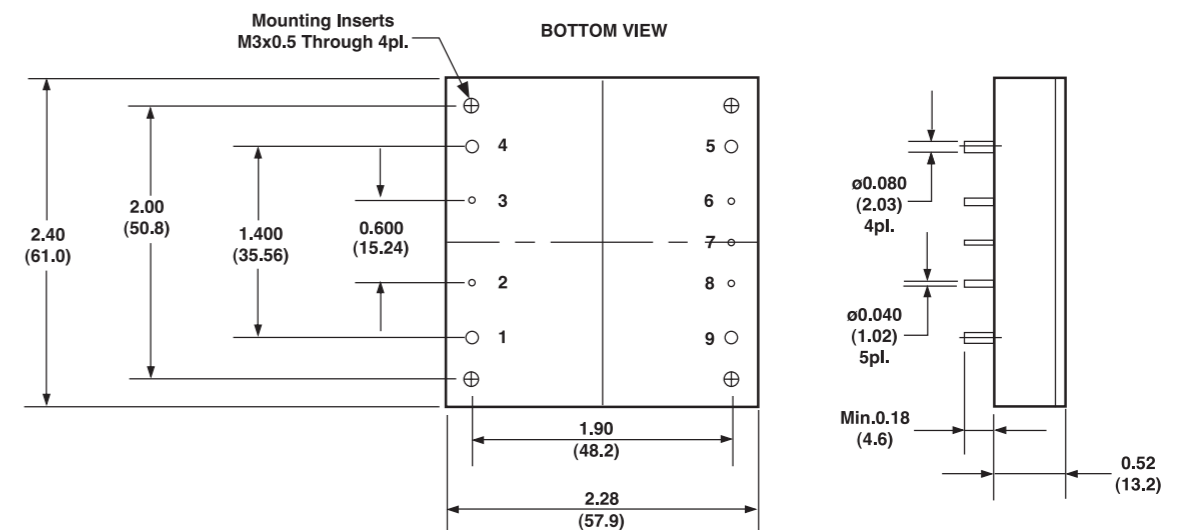
1. Measured From High Line to low Line
2. Measured From Full Load to Zero Load
3. Output Ripple and Noise measured with 10uF tantalum and 1uF Ceramic capacitor across output
4. Logic Compatibility.....Open Collector ref to-Input
 Module ON>3.5Vdc to 75Vdc or Open Circuit
 Module OFF<1.2Vdc
5. Suffix "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



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