

# CHB150W

S E R I E S

NEW



**99 TO 150 WATT  
 4:1 INPUT RANGE  
 DC-DC CONVERTERS**



### Features

- 99-150W Isolated Output
- 4 : 1 Input Wide Range
- Half-Brick Package
- Efficiency to 90%
- Regulated Outputs
- Remote ON/OFF
- OTP/OVP/OC
- Continuous Short Circuit Protection

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT		INPUT CURRENT		% EFF.	SIZE
			MIN.	MAX.	NO LOAD	FULL LOAD		
CHB150W-24S3V3	9-36 VDC	3.3VDC	0mA	30 A	200mA	4741mA	85	Half-Brick
CHB150W-24S05	9-36 VDC	5.0VDC	0mA	30 A	200mA	7022mA	87	Half-Brick
CHB150W-24S12	9-36 VDC	12 VDC	0mA	12.5 A	100mA	6944mA	88	Half-Brick
CHB150W-24S15	9-36 VDC	15 VDC	0mA	10 A	100mA	6944mA	88	Half-Brick
CHB150W-24S24	9-36 VDC	24 VDC	0mA	6.5 A	100mA	7022mA	88	Half-Brick
CHB150W-48S3V3	18-75VDC	3.3VDC	0mA	30 A	100mA	2371mA	87	Half-Brick
CHB150W-48S05	18-75VDC	5.0VDC	0mA	30 A	100mA	3511mA	89	Half-Brick
CHB150W-48S12	18-75VDC	12 VDC	0mA	12.5 A	50mA	3472mA	90	Half-Brick
CHB150W-48S15	18-75VDC	15 VDC	0mA	10 A	50mA	3472mA	90	Half-Brick
CHB150W-48S24	18-75VDC	24 VDC	0mA	6.5 A	50mA	3511mA	89	Half-Brick

NOTE : 1. Nominal Input Voltage 24, 48 VDC

### Specifications

**INPUT SPECIFICATIONS:**

Input Voltage Range.....24V.....9-36V  
 48V.....18-75V  
 Undervoltage lockout .....24Vin power up.....8.8V  
 24Vin power down .....8.0V  
 48Vin power up.....17V  
 48Vin power down .....16V

Positive Logic Remote ON/OFF<sup>4,5</sup>  
 Input Filter .....PI Type

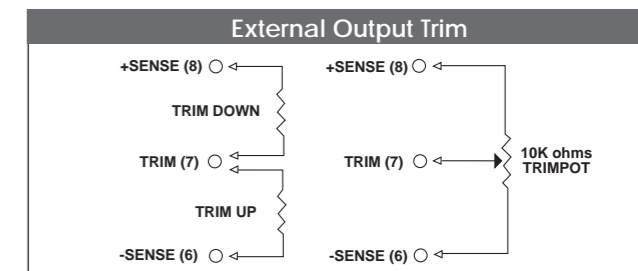
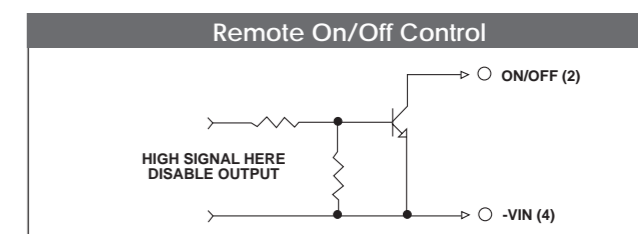
**OUTPUT SPECIFICATIONS:**

Voltage Accuracy : .....±1.5% max.  
 Transient Response :25% Step Load Change.....<500µ sec.  
 External Trim Adj. Range .....±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<sup>1</sup> .....±0.2% max.  
 Load Regulation<sup>2</sup> .....±0.2% max.  
 Over Voltage Protection trip Range, % Vo nom.....115-140%  
 Current Limit .....110% -140% 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 Base Plate with Pastic Case

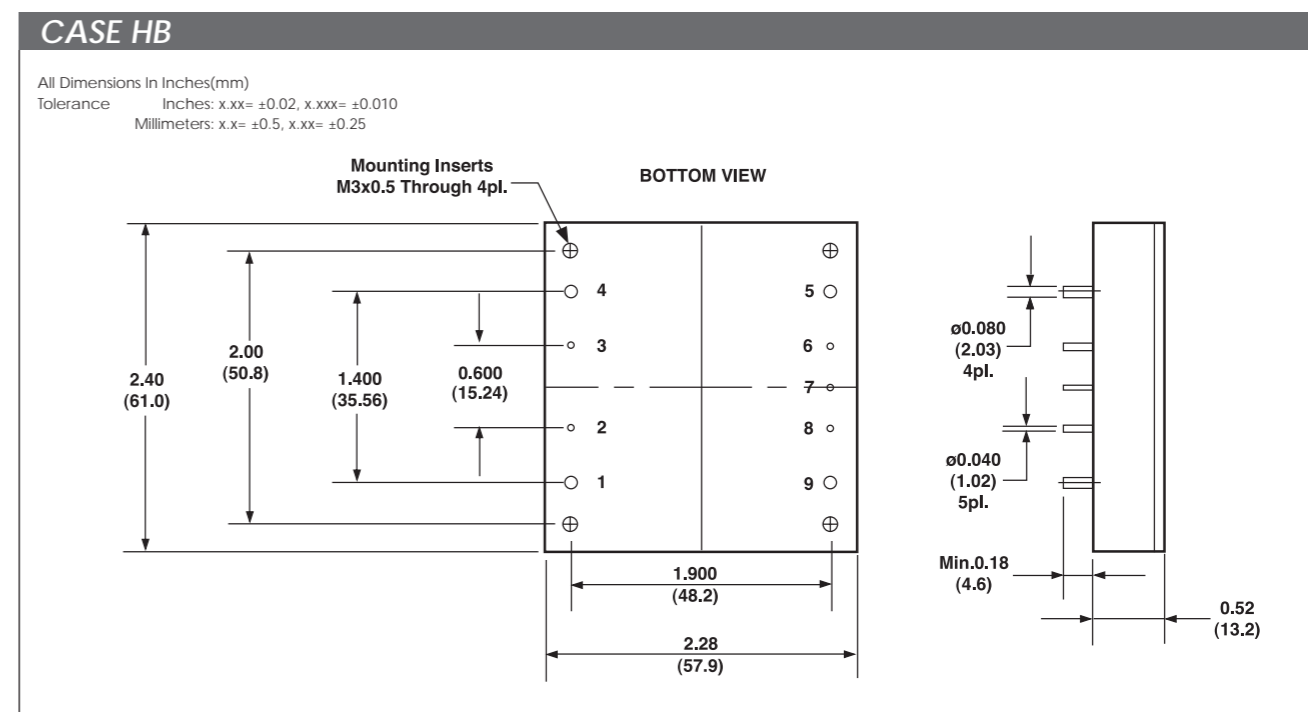


### PIN CONNECTION

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

### NOTE:

1. Measured From High Line to Low Line
2. Measured From Full Load to Zero Load
3. Output Ripple and Noise measured with 10µf tantalum and 1µf Ceramic capacitor across output
4. Logic Compatibility ..... Open Collector ref to -Input  
 Module ON ..... > 3.5Vdc or Open Circuit  
 Module OFF ..... < 1.8Vdc
5. Suffix "N" to the Model Number with Negative Logic Remote ON/OFF  
 Module ON ..... < 1.8Vdc  
 Module OFF ..... >3.5Vdc or Open Circuit



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