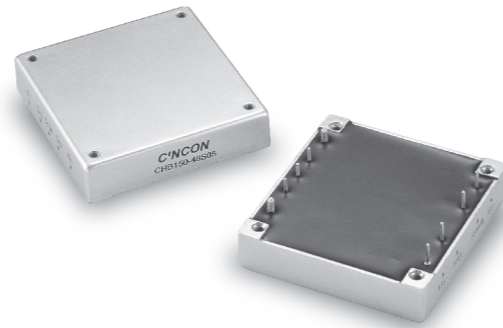


# CHB150

S E R I E S

## 75-150 WATT 1/2 BRICK DC-DC CONVERTERS



### Features

- 75-150W Isolated Output
- Half Brick Package
- Regulated Outputs
- Efficiency to 85%
- 500KHz Switching Frequency
- Five-Sided Shield Metal Case
- Continuous Short Circuit Protection

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT CURRENT		% EFF.	SIZE
				NO LOAD	FULL LOAD		
CHB150-48S25	36-75 VDC	2.5 VDC	30A	25 mA	2.1A	74	Half-Brick
CHB150-48S33	36-75 VDC	3.3 VDC	30A	25 mA	2.6A	79	Half-Brick
CHB150-48S05	36-75 VDC	5 VDC	30A	25 mA	3.7A	83	Half-Brick
CHB150-48S12	36-75 VDC	12 VDC	12.5A	25 mA	3.6A	85	Half-Brick
CHB150-48S15	36-75 VDC	15 VDC	10A	25 mA	3.6A	85	Half-Brick
CHB150-48S24	36-75 VDC	24 VDC	6.25A	25 mA	3.6A	85	Half-Brick

NOTE: 1. Nominal Input Voltage 48 VDC

### Specifications

#### INPUT SPECIFICATIONS:

Input Voltage Range.....48V.....36-75V  
 Undervoltage lockout .....48Vin power up ..... 34V  
 48Vin power down .....32.5V  
 Positive Logic Remote ON/OFF<sup>3,4</sup>  
 Input Filter ..... PI Type

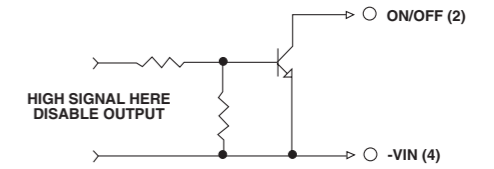
#### OUTPUT SPECIFICATIONS:

Voltage Accuracy : .....±1% max.  
 Transient Response :25% Step Load Change.....<500µ sec.  
 External Trim Adj. Range .....±10%  
 Ripple & Noise, 20MHz BW, 2.5V & 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

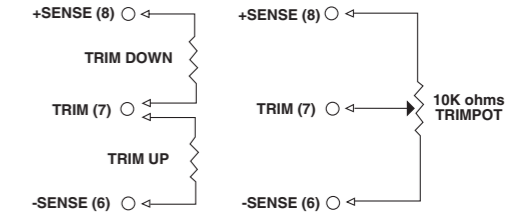
#### GENERAL SPECIFICATIONS:

Efficiency.....See Table  
 Isolation Voltage .....Input/Output..... 1500VDC min.  
 Input/Case..... 1500VDC min.  
 Output/Case.....1500VDC min.  
 Isolation Resistance .....10<sup>9</sup> ohm min.  
 Switching Frequency .....500KHz, Typ.  
 Operating Case Temperature .....-40°C to 100°C  
 Storage Temperature .....-40°C to +105°C  
 Thermal Shutdown, Case Temp. ....100°C Typ.  
 Dimensions .....2.28x2.40x0.50 inches  
 (57.9x61.0x12.7 mm)  
 Case Material.....Aluminum  
 Weight.....100g

### Remote On/Off Control



### External Output Trim



### PIN CONNECTION

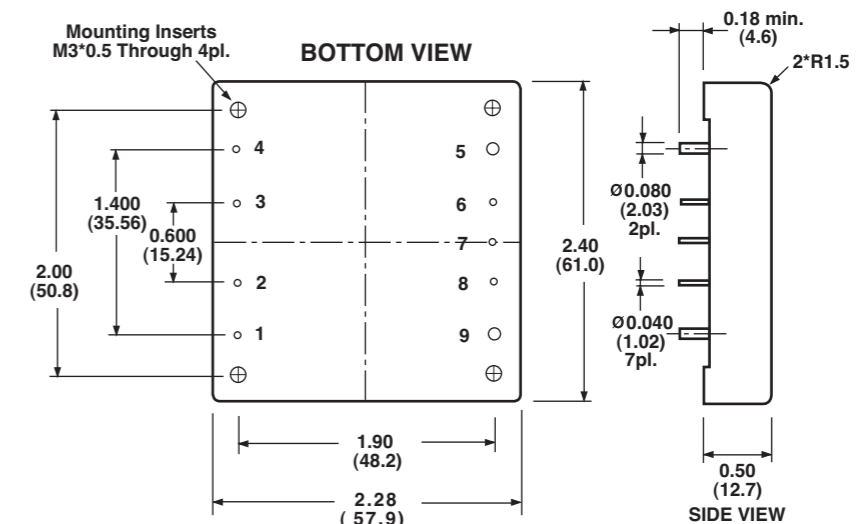
Pin	Function
1	+V Input
2	ON/OFF
3	CASE
4	-V Input
5	-V Output
6	-Sense
7	Trim
8	+Sense
9	+Vout

#### NOTE:

1. Measured From High Line to Low Line.
2. Measured From Full Load to Zero Load.
3. Logic Compatibility .....Open Collector Ref. to -Input.  
 Module ON .....Open Circuit  
 Module OFF .....<0.8Vdc
4. Suffix "N" to the Model Number with Negative Logic Remote ON/OFF.

### 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.