

CHB100

50 TO 100 WATT WIDE INPUT DC-DC CONVERTERS SINGLE OUTPUT



Only for Nominal Input Voltage 48 VDC



Features

- 50-100W Isolated Output
- Efficiency to 85%
- 500KHz Switching Frequency
- 2 : 1 Input Range
- Regulated Outputs
- Continuous Short Circuit Protection
- Five-Sided Metal Case
- Industry Standard Half-Brick Package

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT CURRENT NO LOAD	INPUT CURRENT FULL LOAD	%EFF	CASE
CHB100-24S25	18-36 VDC	2.5 VDC	20A	50 mA	2705 mA	77	HB
CHB100-24S33		3.3 VDC	20A		3480 mA	79	
CHB100-24S05		5 VDC	20A		5020 mA	83	
CHB100-24S12		12 VDC	8.3A		4880 mA	85	
CHB100-24S15		15 VDC	6.7A		4925 mA	85	
CHB100-24S24	36-75 VDC	24 VDC	4.17A	50 mA	4905 mA	85	HB
CHB100-48S25		2.5 VDC	20A		1335 mA	78	
CHB100-48S33		3.3 VDC	20A		1720 mA	80	
CHB100-48S05		5 VDC	20A		2480 mA	84	
CHB100-48S12		12 VDC	8.3A		2442 mA	85	
CHB100-48S15		15 VDC	6.7A		2463 mA	85	
CHB100-48S24		24 VDC	4.17A		2463 mA	85	

NOTE : 1. Nominal Input Voltage 24 or 48 VDC

Specifications

INPUT SPECIFICATIONS:

Input Voltage Range.....	24V.....18-36V
	48V.....36-75V
Undervoltage lockout	24Vin power up 17V
	24Vin power down 16V
	48Vin power up 34V
	48Vin power down 32.5V
Positive Logic Remote ON/OFF ^{1,4}	
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 ¹	±0.2% max.
Load Regulation ²	±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 ⁹ 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

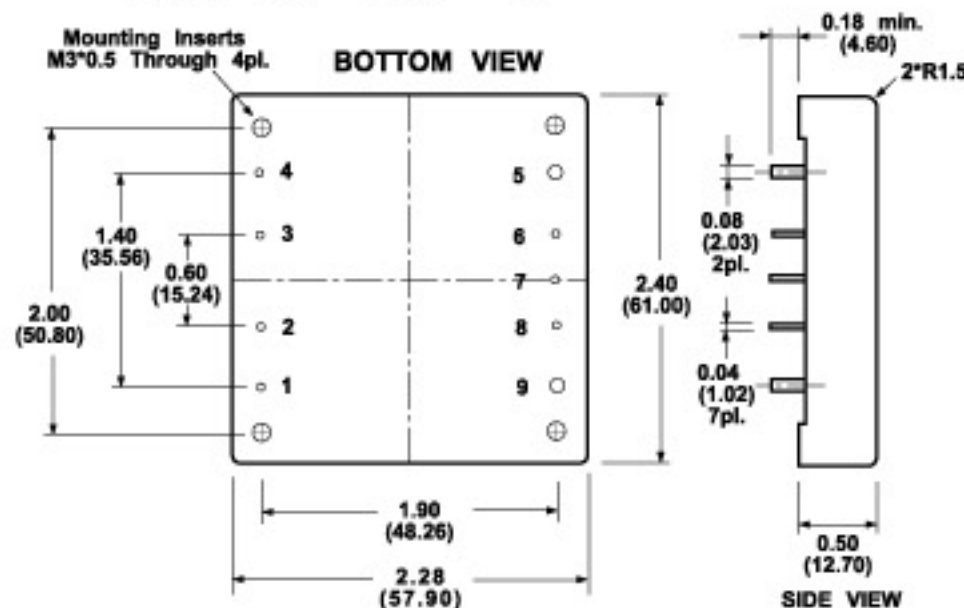
NOTE:

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)

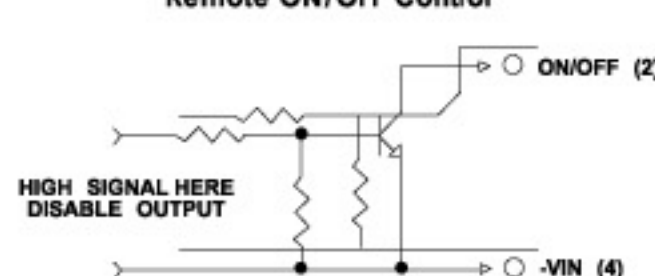
Tolerances	Inches	XX±.02	.XXX±.010	Pin
	Millimeters	X±.5	.XX±.250	±0.02 ±0.5



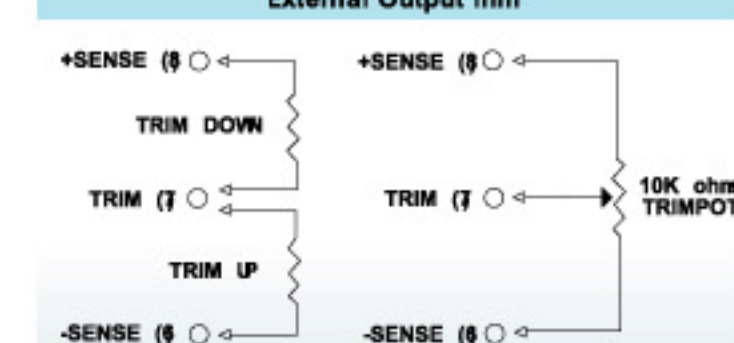
PIN CONNECTION

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



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