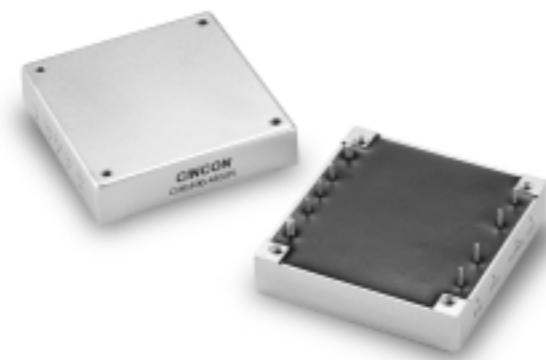


# CHB100

S E R I E S



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



### 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		%EFF	CASE
				NO LOAD	FULL LOAD		
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	24 VDC	4.17A	4905 mA	85			
CHB100-48S25	36-75 VDC	2.5 VDC	20A	50 mA	1335 mA	78	HB
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 <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:

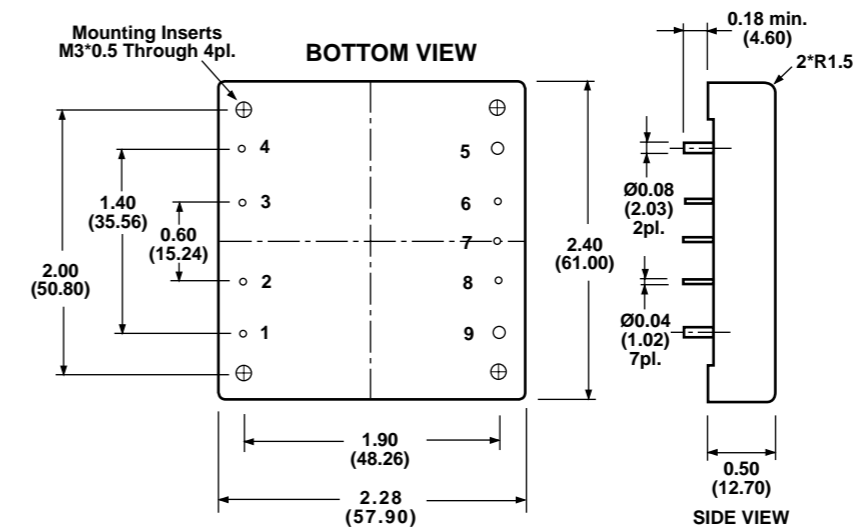
Efficiency.....	See Table
Isolation Voltage .....	Input/Output..... 1500VDC min.
	Input/Case..... 1500VDC min.
	Output/Case..... 1500VDC min.
Isolation Resistance .....	10 <sup>7</sup> ohm min.
Switching Frequency .....	500KHz ,Typ.
Operating case Temperature .....	-40°C to 100°C
Storage Temperature .....	-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

#### 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
	Millimeters	.X±.5	.XX±.250
			Pin ±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

