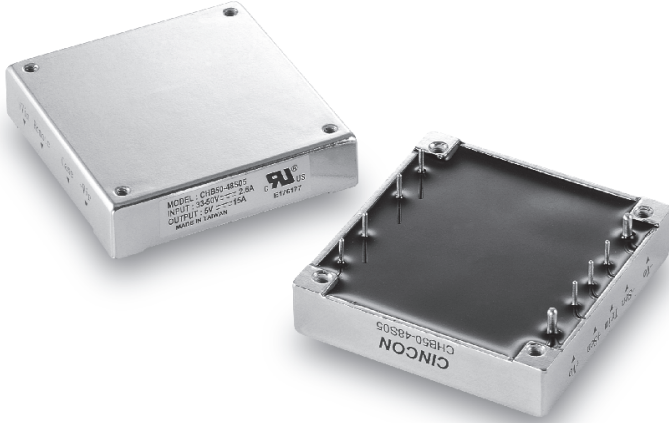


DC DC

Part Num

CHB50 SERIES

25-50 WATT 1/2 BRICK DC-DC CONVERTERS



Features:

- 25-50W Isolated Output
- Half Brick Package
- Regulated Outputs
- Efficiency to 86%
- 300KHz Switching Frequency
- Five-Sided Shield Metal Case
- Continuous Short Circuit Protection

Safety Approvals



Electrical Characteristics:

MODEL	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT CURRENT		%EFF	SIZE
				NO LOAD	FULL LOAD		
CHB50-12S25	9-18 VDC	2.5 VDC	10A	50 mA	2740 mA	76	Half-Brick
CHB50-12S33	9-18 VDC	3.3 VDC	10A	50 mA	3525 mA	78	Half-Brick
CHB50-12S05	9-18 VDC	5 VDC	10A	50 mA	5145 mA	81	Half-Brick
CHB50-12S12	9-18 VDC	12 VDC	4.16A	50 mA	4950 mA	84	Half-Brick
CHB50-12S15	9-18 VDC	15 VDC	3.33A	50 mA	4950 mA	84	Half-Brick
CHB50-12S24	9-18 VDC	24 VDC	2.08A	50 mA	4950 mA	84	Half-Brick
CHB50-24S25	18-36 VDC	2.5 VDC	10A	50 mA	1353 mA	77	Half-Brick
CHB50-24S33	18-36 VDC	3.3 VDC	10A	50 mA	1740 mA	79	Half-Brick
CHB50-24S05	18-36 VDC	5 VDC	10A	50 mA	2540 mA	82	Half-Brick
CHB50-24S12	18-36 VDC	12 VDC	4.16A	50 mA	2450 mA	85	Half-Brick
CHB50-24S15	18-36 VDC	15 VDC	3.33A	50 mA	2450 mA	85	Half-Brick
CHB50-24S24	18-36 VDC	24 VDC	2.08A	50 mA	2419 mA	86	Half-Brick
CHB50-48S25	36-75 VDC	2.5 VDC	10A	50 mA	676 mA	77	Half-Brick
CHB50-48S33	36-75 VDC	3.3 VDC	10A	50 mA	870 mA	79	Half-Brick
CHB50-48S05	36-75 VDC	5 VDC	10A	50 mA	1250 mA	83	Half-Brick
CHB50-48S12	36-75 VDC	12 VDC	4.16A	50 mA	1220 mA	85	Half-Brick
CHB50-48S15	36-75 VDC	15 VDC	3.33A	50 mA	1220 mA	85	Half-Brick
CHB50-48S24	36-75 VDC	24 VDC	2.08A	50 mA	1209 mA	86	Half-Brick

NOTE: 1. Nominal Input Voltage 12, 24 or 48 VDC

Specification

INPUT SPECIFICATIONS:

Input Voltage Range.....	12V.....	9-18V
	24V.....	18-36V
	48V.....	36-75V
Undervoltage lockout	12Vin power up.....	8.8V
	power down	8V
	24Vin power up.....	17V
	power down	16V
	48Vin power up	34V
	power down	32.5V
Positive Logic Remote ON/OFF _{3,4}		
Input Filter		PI Type

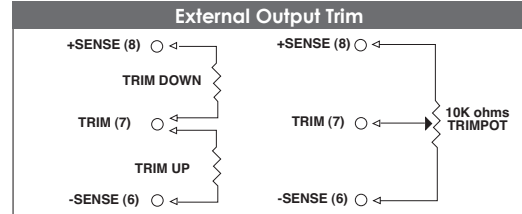
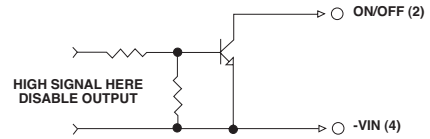
OUTPUT SPECIFICATIONS:

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.....	20mV RMS., max.	
	75mV pk-pk, max.	
	12V & 15V.....	30mV RMS., max.
		100mV 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 Voltage	Input/Output.....1500VDC min
	Input/Case..... 1500VDC min
	Output/Case.....1500VDC min
Isolation Resistance	107 ohm min.
Switching Frequency	(12/24)Vin.....400KHz, Typ.
	48Vin.....300KHz, Typ.
Operating Case Temperature	-40°C to 100°C
Storage Temperature	-55°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.....	88g

Remote On/Off Control



PIN CONNECTION

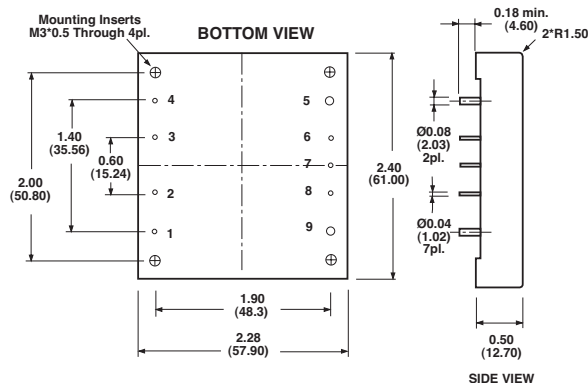
Pin	Function
1	+V Input
2	ON/OFF
3	CASE
4	-V Input
5	-V Output
6	-Sense
7	Trim
8	+Sense
9	+Vout

NOTES:

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: xxx=±0.02, xxxxx=±0.010
Millimeters: xx=±0.5, xxx=±0.25



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