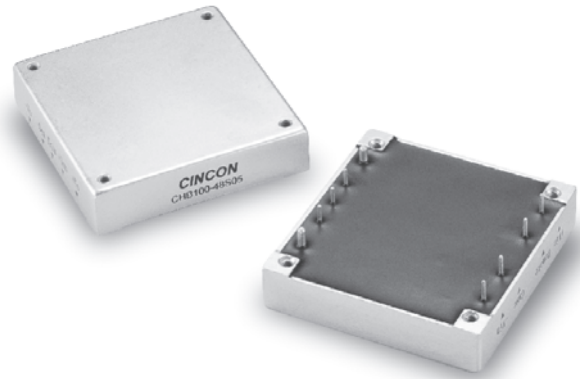


CHB100

S E R I E S



50-100 WATT DC-DC CONVERTERS SINGLE OUTPUT



Features

- 50-100W Isolated Output
- Efficiency to 89%
- 500KHz Switching Frequency
- 2 : 1 Input Range
- Regulated Outputs
- Continuous Short Circuit Protection
- Five-Sided Metal Case
- Half-Brick size meet industrial standard
- CE Mark Meets 2004/108/EC
- UL60950-1 Approval
- Without Tantalum Capacitor inside (V2.X Only, with T_C Label)

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT		INPUT CURRENT		% EFF.	Capacitor Load max.
			MIN.	MAX.	NO LOAD	FULL LOAD		
CHB100-24S25	18-36 VDC	2.5 VDC	0 mA	20 A	50 mA	2637 mA	79	20000 μ F
CHB100-24S33		3.3 VDC	0 mA	20 A		3313 mA	83	20000 μ F
CHB100-24S05		5 VDC	0 mA	20 A		4960 mA	84	20000 μ F
CHB100-24S12		12 VDC	0 mA	8.3 A		4770 mA	87	8300 μ F
CHB100-24S15		15 VDC	0 mA	6.7 A		4758 mA	88	6700 μ F
CHB100-24S24		24 VDC	0 mA	4.17 A		4793 mA	87	4170 μ F
CHB100-48S25	36-75 VDC	2.5 VDC	0 mA	20 A	50 mA	1302 mA	80	20000 μ F
CHB100-48S33		3.3 VDC	0 mA	20 A		1676 mA	82	20000 μ F
CHB100-48S05		5 VDC	0 mA	20 A		2422 mA	86	20000 μ F
CHB100-48S12		12 VDC	0 mA	8.3 A		2331 mA	89	8300 μ F
CHB100-48S15		15 VDC	0 mA	6.7 A		2352 mA	89	6700 μ F
CHB100-48S24		24 VDC	0 mA	4.17 A		2369 mA	88	4170 μ F

NOTE: 1. Nominal Input Voltage 24 or 48 VDC

Specifications

INPUT SPECIFICATIONS:

Input Voltage Range.....	24V.....	18-36V
	48V.....	36-75V
Input Surge Voltage (100ms max.)	24V	50Vdc max.
	48V	100Vdc max.
Undervoltage lockout	24Vin power up.....	0.17V
	power down	0.16V
	48Vin power up.....	0.34V
	power down	0.325V

Positive Logic Remote ON/OFF^{3,4}

Input Filter PI Type

OUTPUT SPECIFICATIONS:

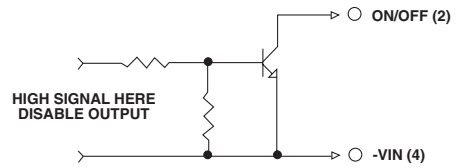
Voltage Accuracy.....	±1% max.
Transient Response : 25% Step Load Change.....	< 500µs
External Trim Adj. Range	±10%
Ripple & Noise, 20MHz BW, 2.5V & 3.3V & 5V.....	40mV RMS max.
	100mV pk-pk max.
12V & 15V.....	60mV RMS max.
	150mV pk-pk max.
24V.....	100mV RMS max.
	240mV pk-pk max.

Temperature Coefficient.....	±0.03%/°C max.
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
Start up time	5ms typ.

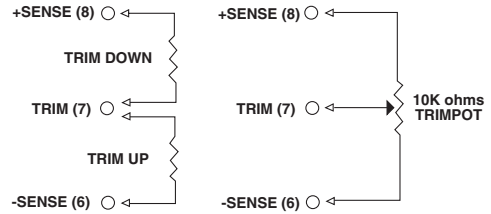
GENERAL SPECIFICATIONS:

Efficiency.....	See Table
Isolation Voltage	Input/Output..... 1500VDC min.
	Input/Case..... 1500VDC min.
	Output/Case..... 1500VDC min.
Isolation Resistance	10 ⁹ ohm min.
Isolation Capacitance	1000pF typ.
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.
Humidity	95% RH max. Non condensing
MTBF	MIL-STD-217F, GB, 25°C, Full Load900KHrs typ.
Dimensions	2.28x2.40x0.50 inches (57.9x61.0x12.7 mm)
Case Material.....	Aluminum
Weight.....	0.95g

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	+V Output

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.
5. Output Ripple and Noise measured with 10µF tantalum and 1µF ceramic capacitor across output
6. Suffix "-C" to the Model Number with Clear Mounting Insert (3.2mm DIA.)

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

