



# CHB75 SERIES

## 75 WATT WIDE INPUT DC-DC CONVERTERS

### DUAL OUTPUT



## FEATURES

- \* 75W Isolated Output
- \* Efficiency to 84%
- \* 400KHz Switching Frequency
- \* 2:1 Input Range
- \* Regulated Outputs
- \* Continuous Short Circuit Protection
- \* Half-Brick Size Meet Industrial Standard
- \* Total Power 75W with 15A Maximum Per Channel
- \* CE Mark Meets 2004/108/EC
- \* UL60950-1 Approval



MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT		INPUT CURRENT		% EFF.	CAPACITOR LOAD MAX.
			MIN.	MAX.	NO LOAD	FULL LOAD		
CHB75-24D05-3V3	18-36 VDC	VO1= 5V VO2=3.3V	0 A 0 A	15 A 15 A	50 mA	3765 mA	83% <sup>(2)</sup>	15000uF
CHB75-24D05-2V5	18-36 VDC	VO1= 5V VO2=2.5V	0 A 0 A	15 A 15 A	50 mA	3765 mA	83% <sup>(2)</sup>	15000uF
CHB75-48D05-3V3	36-75 VDC	VO1= 5V VO2=3.3V	0 A 0 A	15 A 15 A	30 mA	1860 mA	84% <sup>(2)</sup>	15000uF
CHB75-48D05-2V5	36-75 VDC	VO1= 5V VO2=2.5V	0 A 0 A	15 A 15 A	30 mA	1860 mA	84% <sup>(2)</sup>	15000uF

NOTE: 1. Nominal Input Voltage 24, 48VDC  
2. Measured with 15A Load on Vo1

# SPECIFICATIONS

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

## INPUT SPECIFICATIONS:

Input Voltage Range	24V	18-36V
	48V	36-75V
Input Surge Voltage (100ms max.)	24V	50Vdc max.
	48V	100Vdc max.
Under Voltage Lockout	24Vin power up	17V
	24Vin power down	15.5V
	48Vin power up	34V
	48Vin power down	32.5V
Positive Logic Remote On/Off (note4&5)		
Input Filter		Pi Type

## OUTPUT SPECIFICATIONS:

Voltage Accuracy	±2% max.
Transient Response: 25% Step Load Change	<500µs
External Trim Adj. Range, Each Output	±5%
Ripple & Noise, 20MHz BW (note6)	40mV RMS max.
	100mV pk-pk max.
Temperature Coefficient	±0.03%/°C
Short Circuit Protection	Continuous
Line Regulation (note1)	±0.2% max.
Load Regulation (note2)	±0.5% max.
Over Voltage Protection Trip Range, % Vo nom.	115-140%
Current Limit (note3)	110%-140% Nominal Output
Start up time	20ms typ.

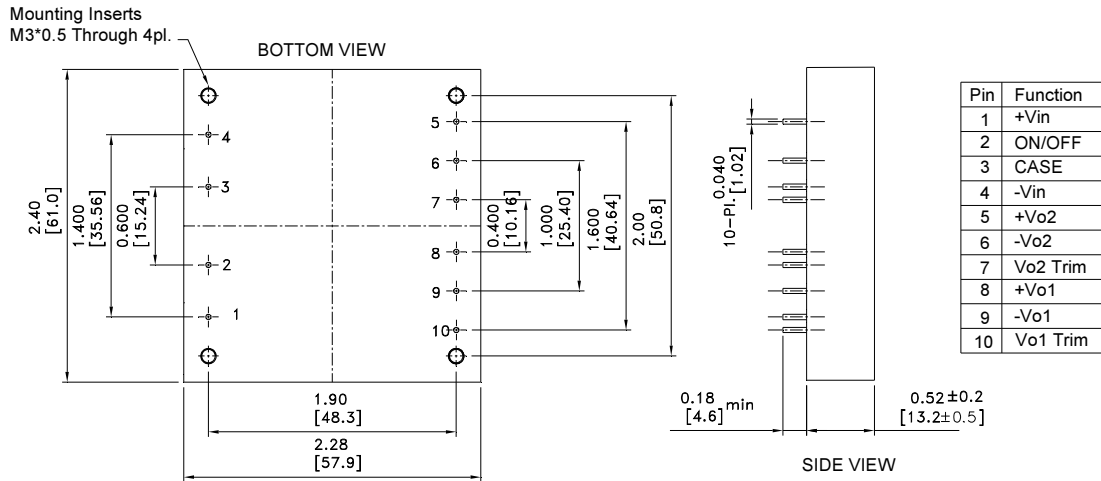
## GENERAL SPECIFICATIONS:

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.
Isolation Capacitance	1000pF typ.
Switching Frequency	400KHz typ.
Operating Case Temperature	-40°C to 100°C
Storage Temperature	-55°C to +105°C
Humidity	95% RH max. Non condensing
MTBF	MIL-HDBK-217F, GB, 25°C, Full Load 700 Khrs typ.
Thermal Shutdown Range Case Temp.	100°C typ.
Dimensions	2.28×2.40×0.52 inches(57.9×61.0×13.2 mm)
Case Material	Aluminum Baseplate with Plastic Case
Weight	108g

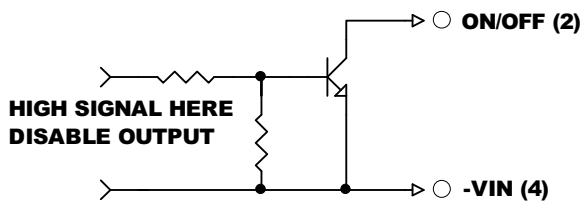
## NOTE :

1. Measured from high line to low line.
2. Measured from full load to min. load.
3. Measured with output current on output1 (Vo1)
4. Logic compatibility ..... open collector refer to -Input  
 Module on ..... open circuit  
 Module off ..... < 0.8VDC
5. Suffix "N" to the model number with negative logic remote on/off.
6. The output noise is measured with 10uF tantalum and 1uF ceramic capacitor across output.
7. Suffix "-C" to the model number with clear mounting insert (3.2mm DIA.)

CASE HB  
 All Dimensions In Inches (mm)  
 Tolerances Inches: X.XX= ±0.02 , X.XXX= ±0.010  
 Millimeters: X.X= ±0.5 , X.XX=±0.25



## REMOTE ON/OFF CONTROL



## EXTERNAL OUTPUT TRIM

