



FEATURE

- * 150W Isolated Output
- * Efficiency to 90%
- * Fixed Switching Frequency
- * Input Under Voltage Protection
- * Over Temperature Protection
- * Over Voltage/Current Protection
- * Remote On/Off
- * Industry Standard Half-Brick Package
- * Fully Isolated 1500VDC
- * UL60950-1 2nd Approval

CHB150W8 SERIES

150 WATT 8:1 INPUT

DC-DC CONVERTERS

SINGLE OUTPUT



MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT		INPUT CURRENT		% EFF.			CAPACITIVE LOAD MAX.
			MIN.	MAX.	NO LOAD	FULL LOAD	(2)	(1)	(3)	
CHB150W8-36S12	9-75 VDC	12 VDC	0 mA	12.5 A	60 mA	4.66 A	89.5	89.5	89.5	5000μF
CHB150W8-36S15	9-75 VDC	15 VDC	0 mA	10 A	60 mA	4.63 A	90	90	90	5000μF
CHB150W8-36S24	9-75 VDC	24 VDC	0 mA	6.25 A	60 mA	4.66 A	89.5	89.5	89	2000μF ⁽⁴⁾
CHB150W8-36S28	9-75 VDC	28 VDC	0 mA	5.35 A	60 mA	4.63 A	90	90	89.5	1500μF ⁽⁴⁾
CHB150W8-36S48	9-75 VDC	48 VDC	0 mA	3.13 A	60 mA	4.63 A	90.5	90	89.5	1000μF ⁽⁴⁾

NOTE:

1. Nominal Input Voltage 36 VDC
2. Measured at 24Vin
3. Measured at 48Vin
4. The output terminal of 24, 28, 48Vout models required a minimum capacitor 100uF to maintain specified regulation.

SPECIFICATIONS

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

INPUT SPECIFICATIONS:

Operating Input Voltage Range	36V	9-75V
Input Surge Voltage (100ms max.)		100Vdc max
Under Voltage Lockout	power up	9.5V
	power down	8.0V
Positive Logic Remote On/Off (see note 4&5)		
Input Filter		LC Type

OUTPUT SPECIFICATIONS:

Voltage Accuracy	±1.5% max.
Transient Response:25% Step Load Change	<500µs
External Trim Adj. Range (note6)	±10%
Ripple & Noise, 20MHz BW	
12V&15V	60mV RMS, 120mV pk-pk max.
24V&28V	100mV RMS, 280mV pk-pk max.
48V	200mV RMS, 480mV pk-pk max.
Temperature Coefficient	±0.03%/°C
Short Circuit Protection	Continuous
Line Regulation(note1)	±0.2% max.
Load Regulation(note2)	±0.2% max.
Over Voltage Protection Trip Range ,% Vo nom.	115-140%
Current Limit	105- 200% Nominal Output
Start up Time	100ms typ.

GENERAL SPECIFICATIONS:

Efficiency	See Table
Isolation Voltage	Input/Output 1500VDC min.
	Input/Case, Output/Case 1500VDC min.
Isolation Resistance	10 ⁷ ohm min.
Isolation Capacitance	12V/15V 3500pF typ.
	24V/28V/48V 2500pF typ.
Switching Frequency	200KHz typ.

Operating Case Temperature	-40°C to 100°C
Storage Temperature	-55°C to +105°C
Thermal Shutdown, Case Temperature	110°C Typ.
Humidity	95% RH max. Non condensing
MTBF ... MIL-HDBK-217F, GB, 25°C Full Load	665Khrs typ.
Dimensions	2.28×2.40×0.5 inches (57.9×61.0×12.7 mm)
Case Material	Aluminum Baseplate with Plastic Case
Weight	109g

NOTE:

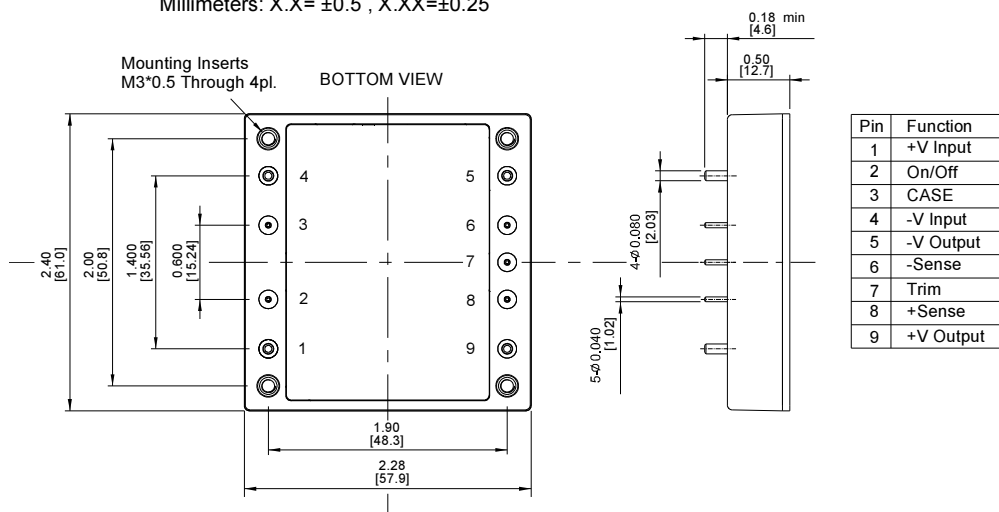
1. Measured from high line to low line.
2. Measured from full load to zero load.
3. Output ripple and noise measured with 10uF tantalum (for 48Vout with 10uF aluminum), 1uF ceramic capacitor and minimum capacitor across output.
4. Logic compatibility open collector ref. to -input
 Module on >3.5Vdc to 75Vdc or open circuit
 Module off 0 to < 1.2Vdc
5. Suffix "N" to the model number with negative logic remote on/off
 Module on 0 to < 1.2Vdc
 Module off >3.5Vdc to 75Vdc or open circuit
6. The input external capacitor recommend to parallel with 330uF
 ESR<0.7Ω to reduce the input ripple voltage.

CASE HB

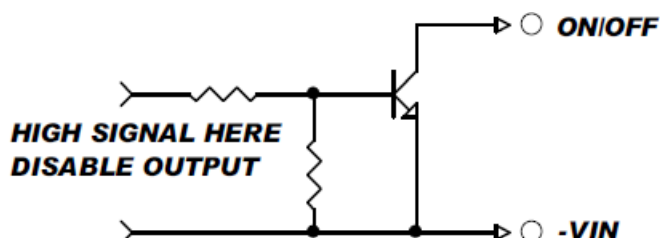
All Dimensions In Inches(mm)

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

