CHB150W8 SERIES
150 WATT 8:1 INPUT
DC-DC   CONVERTERS
SINGLE OUTPUT

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

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℃ 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 (note 4&5)
Input Filter (note 6) ……….……….….......……..…….......... LC Type
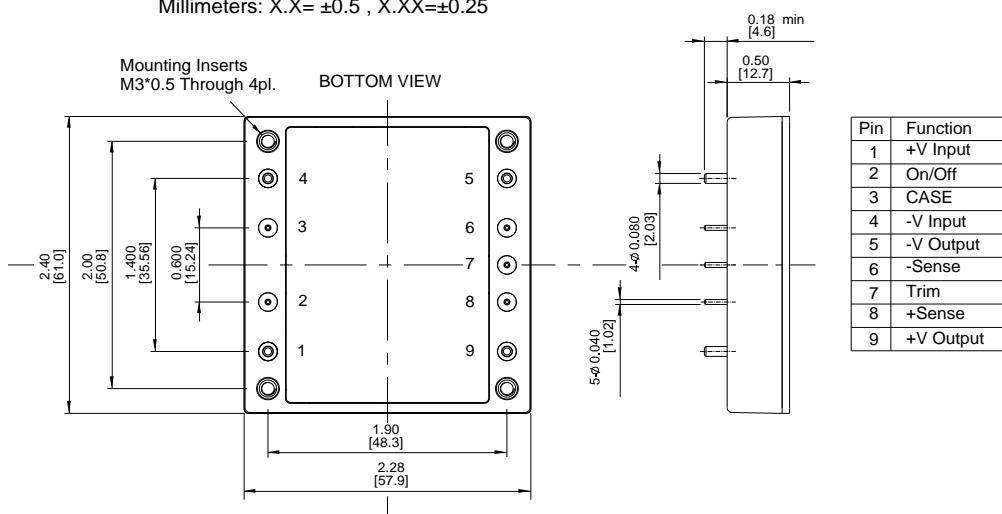
OUTPUT SPECIFICATIONS:

Voltage Accuracy …...…......……..………….......... ±1.0% 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 (note 1) ………………......…….......…… ±0.2% max.
Load Regulation (note 2) ……………………......…...…..… ±0.2% max.
Over Voltage Protection Trip Range ,% Vo nom. 115-140%
Current Limit ....………………………… 105- 200% Nominal Output
Start up Time …………………………………….................. 100ms typ.

GENRAL 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℃ to 100℃
Storage Temperature ……………….…........…….....….. -55℃ to +105℃
Thermal Shutdown, Case Temperature …..………............. 110℃ Typ.
Humidity .... 95% RH max. Non condensing
MTBF ... MIL-HDBK-217F, GB, 25℃ Full Load ..…………… 665Khrs typ.
Dimensions .... 2.28×2.40x0.5 inches (57.9x61.0×12.7 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.
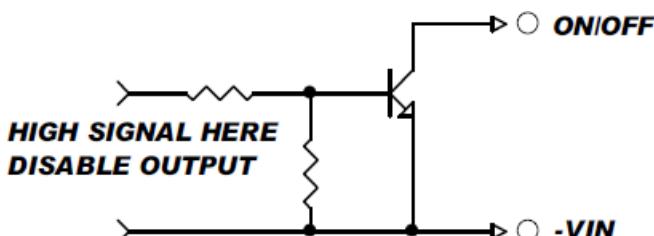
CASE HB
All Dimensions In Inches(mm)
Tolerances   Inches: X.XX= ±0.02 , X.XXX= ±0.010
                Millimeters: X.X= ±0.5 , X.XX=±0.25

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

REMOTE ON/OFF CONTROL

HIGH SIGNAL HERE DISABLE OUTPUT

EXTERNAL OUTPUT TRIM

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