

99 TO 150 WATT 4:1 INPUT RANGE DC-DC CONVERTERS



Features:

- 99-150W Isolated Output
- 4 : 1 Input Wide Range
- Half-Brick Package
- Efficiency to 90%
- Regulated Outputs
- Remote ON/OFF
- OTP/OVP/OC
- Continuous Short Circuit Protection

Safety Approvals



Electrical Characteristics:

MODEL	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT		INPUT CURRENT		%EFF	SIZE
			MIN	MAX	NO LOAD	FULL LOAD		
CHB150W-24S3V3	9-36 VDC	3.3VDC	0mA	30 A	200mA	4741mA	85	Half-Brick
CHB150W-24S05	9-36 VDC	5.0VDC	0mA	30 A	200mA	7022mA	87	Half-Brick
CHB150W-24S12	9-36 VDC	12 VDC	0mA	12.5 A	100mA	6944mA	88	Half-Brick
CHB150W-24S15	9-36 VDC	15 VDC	0mA	10 A	100mA	6944mA	88	Half-Brick
CHB150W-24S24	9-36 VDC	24 VDC	0mA	6.5 A	100mA	7022mA	88	Half-Brick
CHB150W-48S3V3	18-75VDC	3.3VDC	0mA	30 A	100mA	2371mA	87	Half-Brick
CHB150W-48S05	18-75VDC	5.0VDC	0mA	30 A	100mA	3511mA	89	Half-Brick
CHB150W-48S12	18-75VDC	12 VDC	0mA	12.5 A	50mA	3472mA	90	Half-Brick
CHB150W-48S15	18-75VDC	15 VDC	0mA	10 A	50mA	3472mA	90	Half-Brick
CHB150W-48S24	18-75VDC	24 VDC	0mA	6.5 A	50mA	3511mA	89	Half-Brick

NOTE : 1. Nominal Input Voltage 24, 48 VDC

Specification

INPUT SPECIFICATIONS:

Input Voltage Range.....	24V.....	9-36V
	48V.....	18-75V
Undervoltage lockout	24V _{in} power up.....	8.8V
	24V _{in} power down	8.0V
	48V _{in} power up.....	17V
	48V _{in} power down	16V
Positive Logic Remote ON/OFF4, 5		
Input Filter		PI Type

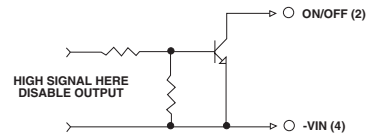
OUTPUT SPECIFICATIONS:

Voltage Accuracy :	±1.5% max.
Transient Response :25% Step Load Change.....	<500µ sec.
External Trim Adj. Range	±10%
Ripple & Noise, 20MHz BW,	
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
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% ~140% Nominal Output

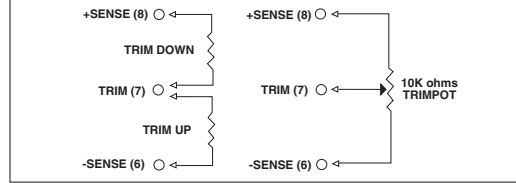
GENERAL SPECIFICATIONS:

Efficiency.....	See Table
Isolation Voltage	Input/Output.....1500VDC min
	Input/Case..... 1500VDC min
	Output/Case.....1500VDC min
Isolation Resistance	10 ⁷ ohm min.
Switching Frequency	250KHz, Typ.
Operating Case Temperature	-40°C to 100°C
Storage Temperature	-55°C to +105°C
Thermal Shutdown, case Temp.	110°C Typ.
Dimensions	2.28x2.40x0.52 inches
	(57.9x61.0x13.2 mm)
Case Material.....	Aluminum Base Plate with Pastic Case

Remote On/Off Control



External Output Trim



PIN CONNECTION

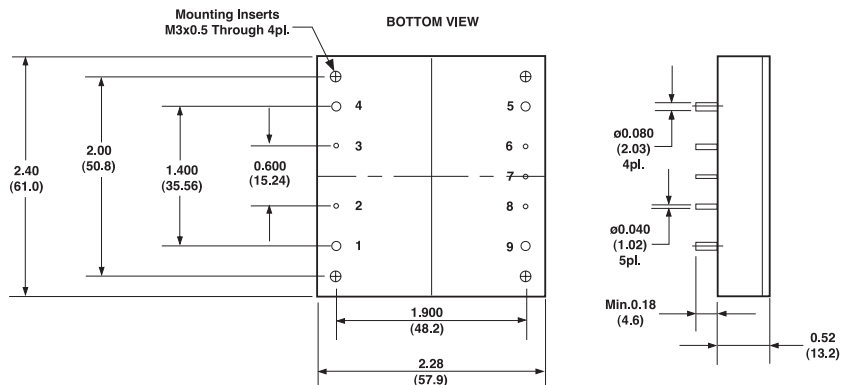
Pin	Function
1	+V Input
2	ON/OFF
3	CASE
4	-V Input
5	-V Output
6	-Sense
7	Trim
8	+Sense
9	+Vout

NOTES:

1. Measured From High Line to Low Line
2. Measured From Full Load to Zero Load
3. Output Ripple and Noise measured with 10µF tantalum and 1µF Ceramic capacitor across output
4. Logic Compatibility Open Collector ref to -Input
Module ON > 3.5Vdc or Open Circuit
Module OFF < 1.8Vdc
5. Suffix "N" to the Model Number with Negative Logic Remote ON/OFF
Module ON < 1.8Vdc
Module OFF >3.5Vdc or Open Circuit

CASE FB

All Dimensions in Inches(mm)
Tolerance Inches: xxxx= ±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.