




CHB100 SERIES

50 TO 100 WATT WIDE INPUT 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  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	0mA	20A	50 mA	2637 mA	79	20000uF
CHB100-24S33	18-36 VDC	3.3 VDC	0mA	20A	50 mA	3313 mA	83	20000uF
CHB100-24S05	18-36 VDC	5 VDC	0mA	20A	50 mA	4960 mA	84	20000uF
CHB100-24S12	18-36 VDC	12 VDC	0mA	8.3A	50 mA	4770 mA	87	8300uF
CHB100-24S15	18-36 VDC	15 VDC	0mA	6.7A	50 mA	4758 mA	88	6700uF
CHB100-24S24	18-36 VDC	24 VDC	0mA	4.17A	50 mA	4793 mA	87	4170uF
CHB100-48S25	36-75 VDC	2.5 VDC	0mA	20A	50 mA	1302 mA	80	20000uF
CHB100-48S33	36-75 VDC	3.3 VDC	0mA	20A	50 mA	1676 mA	82	20000uF
CHB100-48S05	36-75 VDC	5 VDC	0mA	20A	50 mA	2422 mA	86	20000uF
CHB100-48S12	36-75 VDC	12 VDC	0mA	8.3A	50 mA	2331 mA	89	8300uF
CHB100-48S15	36-75 VDC	15 VDC	0mA	6.7A	50 mA	2352 mA	89	6700uF
CHB100-48S24	36-75 VDC	24 VDC	0mA	4.17A	50 mA	2369 mA	88	4170uF

NOTE: 1. Nominal Input Voltage 24 or 48VDC

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.

Undervoltage lockout:

24Vin power up -->17V, power down ---->16V
 48Vin power up -->34V, power down ---->32.5V

Positive Logic Remote ON/OFF (note 3 & 4)

Input Filter PI Type

OUTPUT SPECIFICATIONS:

Voltage Accuracy: ±1% max.
 Transient Response:25% Step Load Change<500u sec.
 External Trim Adj. Range ± 0 %

Ripple & Noise, 20MHz BW(note 5)

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
 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 110% ~140% Nominal Output
 Start up time 5ms Typ.

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

GENERAL SPECIFICATIONS:

Efficiency See Table
 Isolation Voltage Input/Output 1500VDC min.
 Input/Case 1500VDC min.
 Output/Case 1500VDC min.
 Isolation Resistance 10⁷ 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.

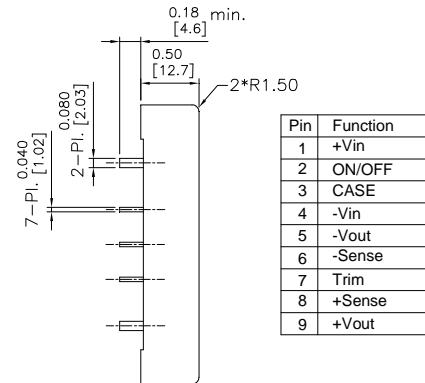
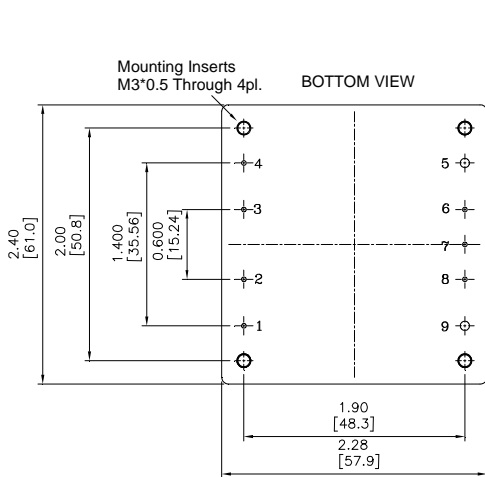
Humidity 95% RH max. Non condensing
 MTBF MIL-STD-217F, GB, 25°C, Full Load 900khrs Typ.

Dimensions 2.28x2.40x0.50 inches (57.9x61.0x12.7 mm)

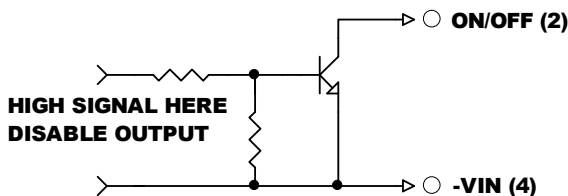
Case Material Aluminum
 Weight 95g

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 10uF tantalum and 1uF ceramic capacitor across output
6. Suffix "-C" to the Model Number with Clear Mounting Insert (3.2mm DIA.)



REMOTE ON/OFF CONTROL



EXTERNAL OUTPUT TRIM

