

CHB100/CHB150

S E R I E S

50 ~ 150 Watts DIP Type Single Output DC - DC Converter



FEATURES

- ◆ 50-150W Isolated Output / 2:1 Input Range
- ◆ Regulated Outputs / Efficiency To 89%
- ◆ Half-Brick size meet Industrial Standard
- ◆ 500KHz Switching Frequency
- ◆ CE Mark Meets 2004/108/EC ; UL60950-1 Approval
- ◆ Five-Sided Metal Case

SPECIFICATIONS

Input Voltage Range.....24V: 18-36VDC / 48V: 36-75VDC
 Undervoltage Lockout.....
 24Vin power up: 17VDC / power down: 16VDC
 48Vin power up: 34VDC / power down: 32.5VDC
 Positive Logic Remote On/Off.....See note 3 & 4
 Input Filter.....PI Type
 Voltage Accuracy..... 1% max.
 Transient Response.....25% Step Load Change.....<500μs.
 External Trim Adj. Range..... 10%
 R & N (20MHz BW).....2.5 & 3.3 & 5V.....100mV pk-pk max.
 12V & 15V.....150mV pk-pk max.
 24V.....240mV pk-pk max.
 Temperature Coefficient..... 0.03%/°C max.
 Short Circuit Protection.....Continuous
 Line Regulation¹..... 0.2% max.
 Load Regulation²..... 0.2% max.
 OVP trip Range, % Vo nom.....115-140%
 Current Limit.....110%~140% Nominal Output
 Switching Frequency.....500KHz,Typ.
 Isolation Voltage.....1500 VDC min.
 Isolation Resistance.....10⁷ohm min.
 Operating Case Temperature.....-40°C To+100°C
 Storage Temperature-40°C To +105°C
 Thermal Shutdown, Case Temp.100°C Typ.
 Case Material..... Aluminum
 Dimensions.....2.28 x 2.40 x 0.50 inches (57.9 x 61.0 x 12.7mm)
 Weight.....95g (CHB100) ; 100g (CHB150)

NOTE:

- (1) Measured from high line to low line.
 (2) Measured from full load to zero load

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (A)	EFF. %
CHB100-24S25	18-36	2.5	0~20	79
CHB100-24S33	18-36	3.3	0~20	83
CHB100-24S05	18-36	5	0~20	84
CHB100-24S12	18-36	12	0~8.3	87
CHB100-24S15	18-36	15	0~6.7	88
CHB100-24S24	18-36	24	0~4.17	87
CHB100-48S25	36-75	2.5	0~20	80
CHB100-48S33	36-75	3.3	0~20	82
CHB100-48S05	36-75	5	0~20	86
CHB100-48S12	36-75	12	0~8.3	89
CHB100-48S15	36-75	15	0~6.7	89
CHB100-48S24	36-75	24	0~4.17	88
CHB150-48S25	36-75	2.5	0~30	77
CHB150-48S33	36-75	3.3	0~30	82
CHB150-48S05	36-75	5	0~30	86
CHB150-48S12	36-75	12	0~12.5	89
CHB150-48S15	36-75	15	0~10	89
CHB150-48S24	36-75	24	0~6.25	89

NOTE:

- (3) Logic Compatibility: Open collector ref. to -Input
 Module ON: Open Circuit
 Module OFF < 0.8VDC
 (4) Suffix " N " to the Model No. with Negative Logic Remote ON/OFF
 (5) The Output Noise is Measured with 10μF Tantalum and 1μF Ceramic Capacitor across output.

MECHANICAL DRAWING (Unit: inch(mm))

Mounting Inserts
M3*0.5 Through 4pcs.

BOTTOM VIEW

Dimensions: 2.00 (50.80), 1.40 (35.56), 0.60 (15.24), 2.40 (61.0), 1.90 (48.2), 2.28 (57.9)

SIDE VIEW

Dimensions: Min. 0.18 (4.6), 2*R1.5, Ø0.08 (2.03) 2pcs, Ø0.04 (1.02) 7pcs, 0.50 (12.7)

Remote On/Off Control

HIGH SIGNAL HERE DISABLE OUTPUT

External Output Trimming

Trim Down, Trim Up, 10K ohms TRIMPOT

PIN CONNECTION			
PIN	FUNC.	PIN	FUNC.
1.	+Vin	6.	-Sense
2.	On/Off	7.	Trim
3.	Case	8.	+Sense
4.	-Vin	9.	+Vout
5.	-Vout		

DC - DC Converter R