

CHB300-300S SERIES

300 WATT, INPUT RANGE 180-425 VDC

Features

- ◆ 300W Isolated Output
- ◆ Efficiency to 89%
- ◆ Fixed Switching Frequency
- ◆ Input Under-Voltage Protection
- ◆ Over Temperature Protection
- ◆ Over Voltage/Current Protection
- ◆ Remote On/Off
- ◆ Half-Brick Size Meet Industrial Standard
- ◆ UL/C-UL 60950 Certified
- ◆ Fully Isolated 3000VAC
- ◆ Off-Line Systems Using PFC Front-Ends

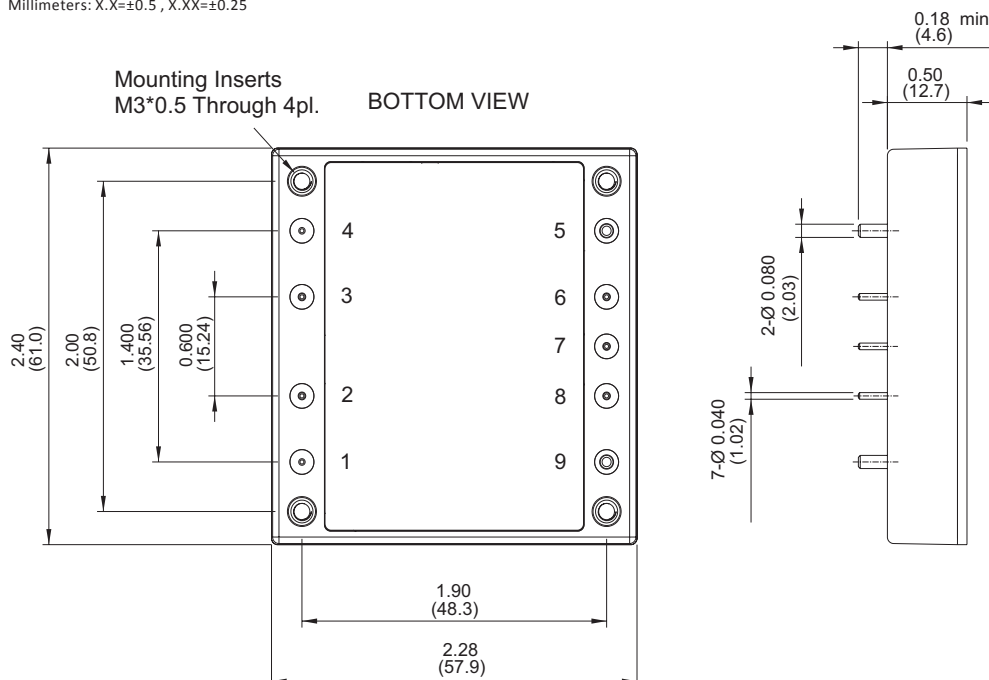


Mechanical Dimensions

All Dimensions in Inches (mm)

Tolerance Inches: X.XX=±0.02, X.XXX=±0.010

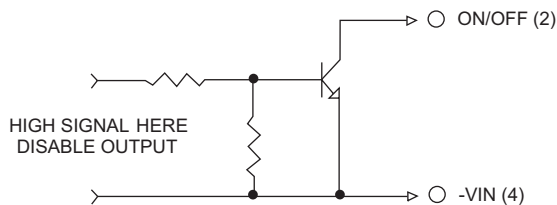
Millimeters: X.X=±0.5, X.XX=±0.25



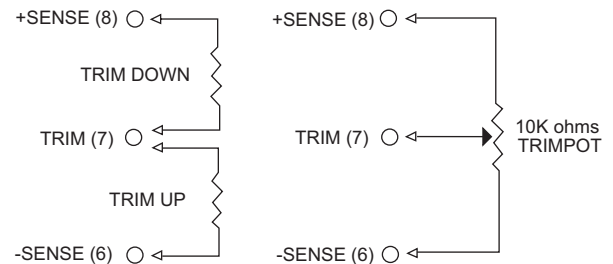
PIN	Function
1	+V Input
2	ON/OFF
3	NC
4	-V Input
5	-V Output
6	-Sense
7	Trim
8	+Sense
9	+V Output

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT		INPUT CURRENT		% EFF.	CAPACITOR LOAD MAX.
			MIN.	MAX.	NO LOAD	FULL LOAD		
CHB300-300S05	180-425 VDC	5 VDC	0 mA	60 A	100 mA	1.92 A	87	4700μF
CHB300-300S12	180-425 VDC	12 VDC	0 mA	25 A	100 mA	1.92 A	87	4000μF
CHB300-300S24	180-425 VDC	24 VDC	0 mA	12.5 A	100 mA	1.87 A	89	3000μF
CHB300-300S28	180-425 VDC	28 VDC	0 mA	10.7 A	100 mA	1.87A	89	1000μF
CHB300-300S48	180-425 VDC	48 VDC	0 mA	6.25 A	100 mA	1.87 A	89	1000μF

Remote On/Off Control



External Output Trim



Specifications

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

INPUT SPECIFICATIONS

Input Voltage Range.	300V..... 180-425V
Input over voltage protection	Module on.....440V Module off.....450V
Under voltage lockout	300Vin power up 175V 300Vin power down.....160V
Positive Logic Remote On/Off	See note 5 & 6
Input Filter	Pi Type

OUTPUT SPECIFICATIONS

Voltage Accuracy :	±1.5% max.
Transient Response:25% Step Load Change	< 500µs
External Trim Adj. Range (4)	±10%/°C
Load share Accuracy	±10% at 50% to 100%Full Load
Ripple & Noise, 20MHz BW (3)	
5V	75mV RMS max., 150mV pk-pk max
12V	120mV RMS max., 240mV pk-pk max.
24V	150mV RMS max., 470mV pk-pk max.
28V	150mV RMS max., 470mV pk-pk max.
48V	200mV RMS max., 740mV pk-pk max.
Temperature Coefficient	±0.03%/°C
Short Circuit Protection	Continuous
Line Regulation (1)	±0.2% max.
Load Regulation (2)	±0.5% max.
Over Voltage Protection trip Range ,% Vo nom	115-140%
Current Limit	105%-140% Nominal Output

GENERAL SPECIFICATIONS

Efficiency.	See Table
Isolation Voltage	Input/Output..... 3000VAC min. Input/Case.....2500VAC min. Output/Case.....500VAC min.
Isolation Resistance	10 ⁷ ohm min.
Switching Frequency	200KHz, Typ.
Operating Case Temperature	-40°C to 100°C
Storage Temperature	-55°C to +105°C
Thermal Shutdown, Case Temp.	105°C Typ.
Humidity	95% RH max. Non condensing
Dimensions	2.28 × 2.40 × 0.52 inches (57.9 × 61.0 × 13.2 mm)
Case Material	Aluminum Baseplate with Plastic Case

NOTE

1. Measured from high line to low line.
2. Measured from full load to zero load.
3. Output ripple and noise measured with 1µF ceramic capacitor across output
4. Logic compatibility.....open collector refer to -Vin
Module On.....>3.5VDC to 75VDC or open circuit
Module On.....>1.2VDC
5. Suffix "N" to the model number with negative logic remote on/off
Module On.....>1.2VDC
Module On.....>3.5VDC to 75VDC or open circuit