



## FEATURES

- \* 49.5W-75W Isolated Output
- \* Efficiency to 89%
- \* 300/400KHz Switching Frequency
- \* 2:1 Input Range
- \* Regulated Outputs
- \* Continuous Short Circuit Protection
- \* Five-Sided Metal Case
- \* Half-Brick Size Meet Industrial Standard
- \* Safety Meets IEC/EN/UL60950-1
- \* UL60950-1 Approval



| MODEL<br>NUMBER | INPUT<br>VOLTAGE | OUTPUT<br>VOLTAGE | OUTPUT CURRENT |        | INPUT CURRENT |           | %<br>EFF. | CAPACITOR<br>LOAD MAX. |
|-----------------|------------------|-------------------|----------------|--------|---------------|-----------|-----------|------------------------|
|                 |                  |                   | MIN.           | MAX.   | NO LOAD       | FULL LOAD |           |                        |
| CHB75-12S33     | 9 -18 VDC        | 3.3 VDC           | 0 mA           | 15 A   | 50 mA         | 5290 mA   | 78        | 10000uF                |
| CHB75-12S05     | 9 -18 VDC        | 5 VDC             | 0 mA           | 15 A   | 50 mA         | 7530 mA   | 83        | 10000uF                |
| CHB75-12S12     | 9 -18 VDC        | 12 VDC            | 0 mA           | 6.25 A | 50 mA         | 7183 mA   | 87        | 10000uF                |
| CHB75-12S15     | 9 -18 VDC        | 15 VDC            | 0 mA           | 5 A    | 50 mA         | 7267 mA   | 86        | 4000uF                 |
| CHB75-12S24     | 9 -18 VDC        | 24 VDC            | 0 mA           | 3.13 A | 50 mA         | 7183 mA   | 87        | 2000uF                 |
| CHB75-24S33     | 18-36 VDC        | 3.3 VDC           | 0 mA           | 15 A   | 50 mA         | 2578 mA   | 80        | 10000uF                |
| CHB75-24S05     | 18-36 VDC        | 5 VDC             | 0 mA           | 15 A   | 50 mA         | 3720 mA   | 84        | 10000uF                |
| CHB75-24S12     | 18-36 VDC        | 12 VDC            | 0 mA           | 6.25 A | 50 mA         | 3551 mA   | 88        | 10000uF                |
| CHB75-24S15     | 18-36 VDC        | 15 VDC            | 0 mA           | 5 A    | 50 mA         | 3551 mA   | 88        | 4000uF                 |
| CHB75-24S24     | 18-36 VDC        | 24 VDC            | 0 mA           | 3.13 A | 50 mA         | 3551 mA   | 88        | 2000uF                 |
| CHB75-48S33     | 36-75 VDC        | 3.3 VDC           | 0 mA           | 15 A   | 50 mA         | 1273 mA   | 81        | 10000uF                |
| CHB75-48S05     | 36-75 VDC        | 5 VDC             | 0 mA           | 15 A   | 50 mA         | 1860 mA   | 84        | 10000uF                |
| CHB75-48S12     | 36-75 VDC        | 12 VDC            | 0 mA           | 6.25 A | 50 mA         | 1755 mA   | 89        | 10000uF                |
| CHB75-48S15     | 36-75 VDC        | 15 VDC            | 0 mA           | 5 A    | 50 mA         | 1775 mA   | 88        | 4000uF                 |
| CHB75-48S24     | 36-75 VDC        | 24 VDC            | 0 mA           | 3.13 A | 50 mA         | 1755 mA   | 89        | 2000uF                 |

NOTE: 1. Nominal Input Voltage 12, 24 or 48VDC

# SPECIFICATIONS

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

## INPUT SPECIFICATIONS:

|                                  |     |             |
|----------------------------------|-----|-------------|
| Input Voltage Range              | 12V | 9-18V       |
|                                  | 24V | 18-36V      |
|                                  | 48V | 36-75V      |
| Input Surge Voltage (100ms max.) | 12V | 25Vdc max.  |
|                                  | 24V | 50Vdc max.  |
|                                  | 48V | 100Vdc max. |

### Under Voltage Lockout:

|       |          |                  |       |
|-------|----------|------------------|-------|
| 12Vin | power up | 8.8V, power down | 8V    |
| 24Vin | power up | 17V, power down  | 16V   |
| 48Vin | power up | 34V, power down  | 32.5V |

### Positive Logic Remote On/Off (note3&4)

Input Filter ..... Pi Type

## OUTPUT SPECIFICATIONS:

|                                         |            |
|-----------------------------------------|------------|
| Voltage Accuracy                        | ±1.0% max. |
| Transient Response:25% Step Load Change | <500µs     |
| External Trim Adj. Range                | ±10 %      |
| Ripple & Noise, 20MHz BW(note5)         |            |

|           |                  |
|-----------|------------------|
| 3.3V & 5V | 20mV RMS max.    |
|           | 75mV pk-pk max.  |
| 12V & 15V | 30mV RMS max.    |
|           | 100mV pk-pk max. |
| 24V       | 100mV RMS max.   |
|           | 240mV pk-pk max. |

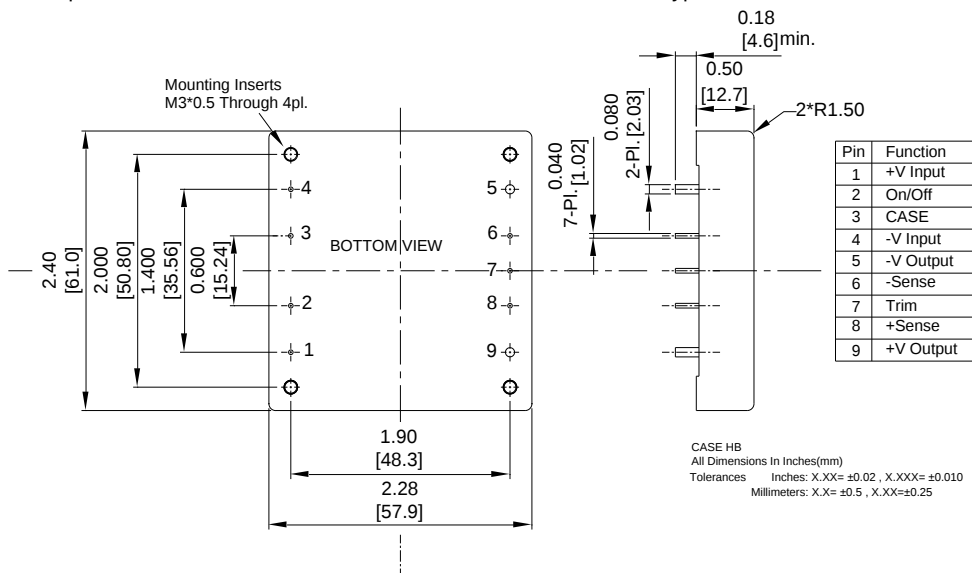
|                                               |                           |
|-----------------------------------------------|---------------------------|
| Temperature Coefficient                       | ±0.03%/°C max.            |
| Short Circuit Protection                      | Continuous                |
| Line Regulation (note1)                       | ±0.2% max.                |
| Load Regulation (note2)                       | ±0.2% max.                |
| Over Voltage Protection Trip Range, % Vo nom. | 115-140%                  |
| Current Limit                                 | 110% ~150% Nominal Output |
| Start up Time                                 | 5ms typ.                  |

## GENERAL SPECIFICATIONS:

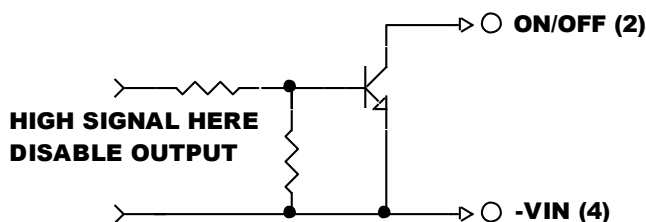
|                             |                                                  |
|-----------------------------|--------------------------------------------------|
| Efficiency                  | See Table                                        |
| Isolation Voltage           | Input/Output 1500VDC min.                        |
|                             | Input/Case 1500VDC min.                          |
|                             | Output/Case 1500VDC min.                         |
| Isolation Resistance        | 10 <sup>7</sup> ohm min.                         |
| Isolation Capacitance       | 1000pF typ.                                      |
| Switching Frequency         | (12/24)Vin 400KHz typ.                           |
|                             | 48Vin 300KHz typ.                                |
| Operating Case Temperature  | -40°C to 100°C                                   |
| Storage Temperature         | -55°C to +105°C                                  |
| Thermal Shutdown Case Temp. | 100°C typ.                                       |
| Humidity                    | 95% RH max. Non condensing                       |
| MTBF                        | MIL-HDBK-217F, GB, 25°C, Full Load 1000Khrs typ. |
| Dimensions                  | 2.28×2.40×0.50 inches (57.9×61.0×12.7 mm)        |
| Case Material               | Aluminum                                         |
| Weight                      | 92g                                              |

## 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 to < 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.)
7. On/Off Pin is not directly applied voltage, please refer to remote on/off control circuit.



## REMOTE ON/OFF CONTROL



## EXTERNAL OUTPUT TRIM

