Date: 2019/09/27

CHB100W-24S24

DC-DC CONVERTER

All Specifications are Typical at Nominal Line, Full load, and 25°C Unless Otherwise Noted

OUTPUT SPECIFICATIONS

OUTPUT VOLTAGE/CURRENT ..... Vo = 24V/4.17A
VOLTAGE ACCURACY ..... ±1.0% max.
RIPPLE AND NOISE, 20MHz BW(SEE NOTE 3) ..... 100mV RMS max., 240mVpk-pk max.
LINE REGULATION (SEE NOTE 1) ..... ±0.2% max.
LOAD REGULATION (SEE NOTE 2) ..... ±0.2% max.
SHORT CIRCUIT PROTECTION ..... Continuous
OUTPUT VOLTAGE ADJUSTMENT RANGE , %Vo ..... 90% - 110%
OVER VOLTAGE PROTECTION TRIP RANGE, % Vo NOM. 115-140%
CURRENT LIMIT ..... 110-140% Nominal Output
CAPACITOR LOAD ..... 1800uF max.
START UP TIME ..... 25ms typ.

INPUT SPECIFICATIONS

INPUT VOLTAGE RANGE ..... 24V ..... 9 - 36VDC
POSITIVE LOGIC REMOTE ON/OFF CONTROL ..... MODULE OFF ..... 0 to < 1.8VDC
MODULE ON ..... >3.5Vdc or Open Circuit
UNDER VOLTAGE LOCKOUT ..... POWER UP: 8.8V, POWER DOWN: 8.0V
INPUT FILTER ..... Pi Network
INPUT SURGE VOLTAGE (100ms max.) ..... 50Vdc max.

GENERAL SPECIFICATIONS

EFFICIENCY ..... 87.5% typ.
ISOLATION VOLTAGE ..... (Input/Output, Input/Case, Output/Case) ..... 1500VDC min.
ISOLATION CAPACITANCE ..... 1500pF typ.
SWITCHING FREQUENCY ..... 250KHz typ.
MTBF ..... MIL-HDBK-217F, GB, 25℃, FULL LOAD ..... 700Khrs typ.

ENVIRONMENTAL SPECIFICATIONS

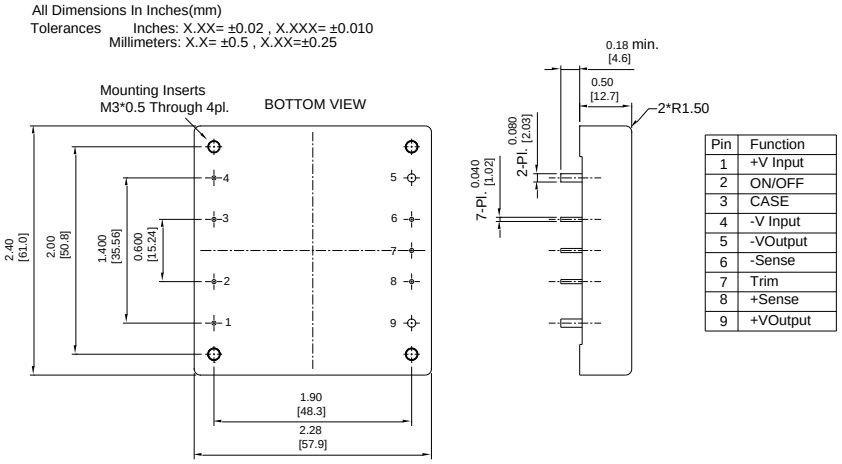
OPERATING CASE TEMPERATURE RANGE ..... -40℃ TO +100℃
STORAGE TEMPERATURE RANGE ..... -55℃ TO +105℃
THERMAL SHUTDOWN RANGE, CASE TEMPERATURE .....105℃ typ.

PHYSICAL CHARACTERISTICS

DIMENSIONS ..... 2.28x2.40x0.50 INCHES (57.9 × 61.0 × 12.7 mm)
CASE MATERIAL ..... Aluminum
WEIGHT 95g

NOTE:

1. LINE REGULATION: MEASURED FROM HIGH LINE TO LOW LINE
2. LOAD REGULATION: MEASURED FROM FULL LOAD ZERO LOAD
3. OUTPUT RIPPLE AND NOISE IS MEASURED WITH 10uF TANTALUM AND 1uF CERAMIC CAPACITOR ACROSS OUTPUT



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