

H100W

S E R I E S

66-100 WATT 4:1 INPUT DC-DC CONVERTERS SINGLE OUTPUT



Features

- 66-100W Isolated Output
- Efficiency to 89%
- 250KHz Switching Frequency
- 4 : 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

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT		INPUT CURRENT		% EFF.	CAPACITOR LOAD MAX.
			MIN.	MAX.	NO LOAD	FULL LOAD		
H100W-24S33	9-36 VDC	3.3VDC	0mA	20 A	35mA	3333mA	82.5	20000uF
H100W-24S5	9-36 VDC	5.0VDC	0mA	20 A	35mA	4931mA	84.5	20000uF
H100W-24S12	9-36 VDC	12 VDC	0mA	8.3 A	35mA	4854mA	85.5	8300uF
H100W-24S15	9-36 VDC	15 VDC	0mA	6.7 A	35mA	4813mA	87	6700uF
H100W-24S24	9-36 VDC	24 VDC	0mA	4.17 A	35mA	4766mA	87.5	1800uF
H100W-24S48	9-36 VDC	48 VDC	0mA	2.08 A	35mA	5042mA	82.5	470uF
H100W-48S33	18-75VDC	3.3VDC	0mA	20 A	30mA	1667mA	82.5	20000uF
H100W-48S5	18-75VDC	5.0VDC	0mA	20 A	30mA	2422mA	86	20000uF
H100W-48S12	18-75VDC	12 VDC	0mA	8.3 A	30mA	2371mA	87.5	8300uF
H100W-48S15	18-75VDC	15 VDC	0mA	6.7 A	30mA	2379mA	88	6700uF
H100W-48S24	18-75VDC	24 VDC	0mA	4.17 A	30mA	2343mA	89	2200uF
H100W-48S48	18-75VDC	48 VDC	0mA	2.08 A	30mA	2462mA	84.5	470uF

NOTE: 1. Nominal Input Voltage 24 or 48 VDC

Specifications

INPUT SPECIFICATIONS:

Input Voltage Range.....	24V.....	9-36V
	48V.....	18-75V
Input Surge Voltage (100ms max.)	24V	50Vdc max.
	48V	100Vdc max.
Undervoltage lockout	24Vin power up.....	8.8V
	24Vin power down	8.0V
	48Vin power up.....	17V
	48Vin power down	16V
Positive Logic Remote ON/OFF ^{4,5}		
Input Filter		PI Type

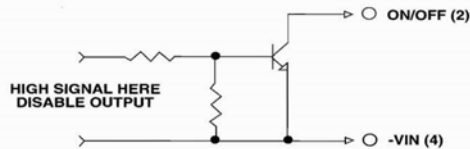
OUTPUT SPECIFICATIONS:

Voltage Accuracy :		±1.5% max.
Transient Response :25% Step Load Change.....		<500µ sec.
External Trim Adj. Range		±10%
Ripple & Noise, 20MHz BW		
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.	
48V	200mV RMS, max./480mV pk-pk, max.	
Temperature Coefficient.....		±0.03%/°C
Short Circuit Protection.....		Continuous
Line Regulation ¹		±0.2% max.
Load Regulation ²		±0.2% max.
Over Voltage Protection trip Range, % Vo nom.....		115-140%
Current Limit	110% ~140% Nominal Output	
Start up time		25ms Typ.

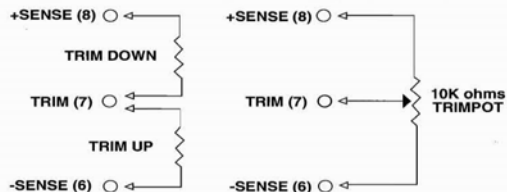
GENERAL SPECIFICATIONS:

Efficiency.....		See Table
Isolation Voltage	Input/Output.....	1500VDC min.
	Input/Case.....	1500VDC min.
	Output/Case.....	1500VDC min.
Isolation Resistance		10 ⁹ ohm min.
Isolation Capacitance		1500pF typ.
Switching Frequency		250KHz, 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	
MTBF	MIL-STD-217F, GB, 25°C, Full Load	700Khrs Typ.
Dimensions	2.28x2.40x0.50 inches	(57.9x61.0x12.7 mm)
Case Material.....		Aluminum
Weight.....		.95g

Remote On/Off Control



External Output Trim



PIN CONNECTION

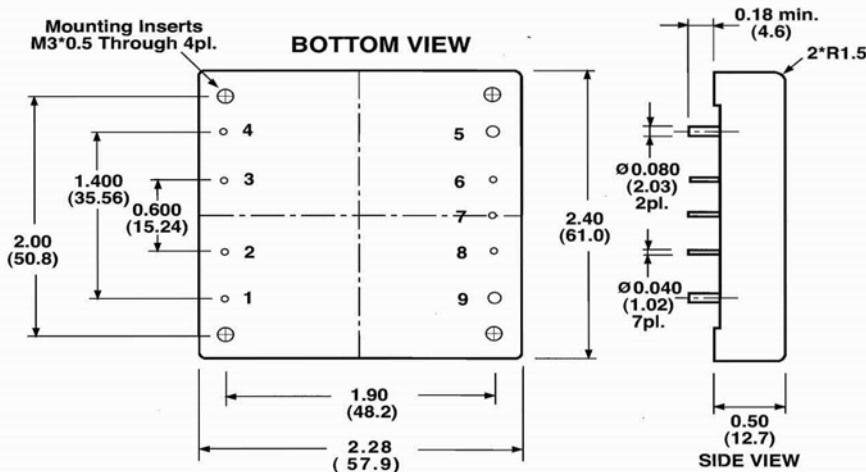
Pin	Function
1	+V Input
2	ON/OFF
3	CASE
4	-V Input
5	-Vout
6	-Sense
7	Trim
8	+Sense
9	+Vout

NOTE:

1. Measured From High Line to Low Line
2. Measured From Full Load to Zero Load
3. Output Ripple and Noise measured with 10µF tantalum and 1µF Ceramic capacitor across output
4. Logic Compatibility Open Collector ref to -Input
Module ON > 3.5Vdc or Open Circuit
Module OFF < 1.8Vdc
5. Suffix "N" to the Model Number with Negative Logic Remote ON/OFF
Module ON < 1.8Vdc
Module OFF > 3.5Vdc or Open Circuit
6. Suffix "-C" to the Model Number with Clear Mounting Insert (3.2mm DIA.)
7. Require a 47µF Aluminum Capacitor Connected Between +Vout and -Vout for 48Vout Models

CASE HB

All Dimensions In Inches(mm)
Tolerance Inches: x.xx= ±0.02, x.xxx= ±0.010
Millimeters: x.x= ±0.5, x.xx= ±0.25



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