

COB100W

S E R I E S

NEW



100 WATT
 4:1 INPUT RANGE
 DC-DC CONVERTERS



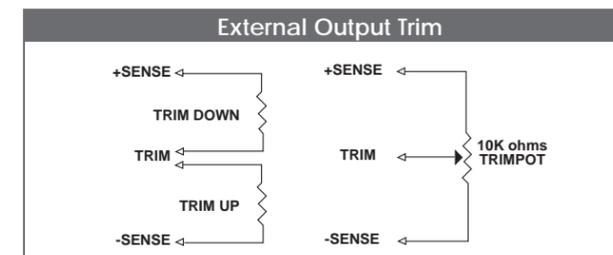
Features

- 100W Isolated Output
- Quarter-Brick Package
- 4 : 1 Input Range
- Efficiency up to 88%
- Regulated Outputs
- Continuous Short Circuit Protection
- OTP / OVP / OCP
- 1500VDC Isolation

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT		INPUT CURRENT		% EFF.	SIZE
			MIN.	MAX.	NO LOAD	FULL LOAD		
CQB100W-48S3V3	18-75VDC	3.3VDC	0mA	30 A	60mA	2344mA	88	Quarter-Brick
CQB100W-48S05	18-75VDC	5.0VDC	0mA	20 A	60mA	2367mA	88	Quarter-Brick
CQB100W-48S12	18-75VDC	12 VDC	0mA	8.3A	30mA	2358mA	88	Quarter-Brick
CQB100W-48S15	18-75VDC	15 VDC	0mA	6.7 A	30mA	2379mA	88	Quarter-Brick
CQB100W-48S24	18-75VDC	24 VDC	0mA	4.17 A	30mA	2369mA	88	Quarter-Brick

NOTE: 1. Nominal Input Voltage 48 VDC

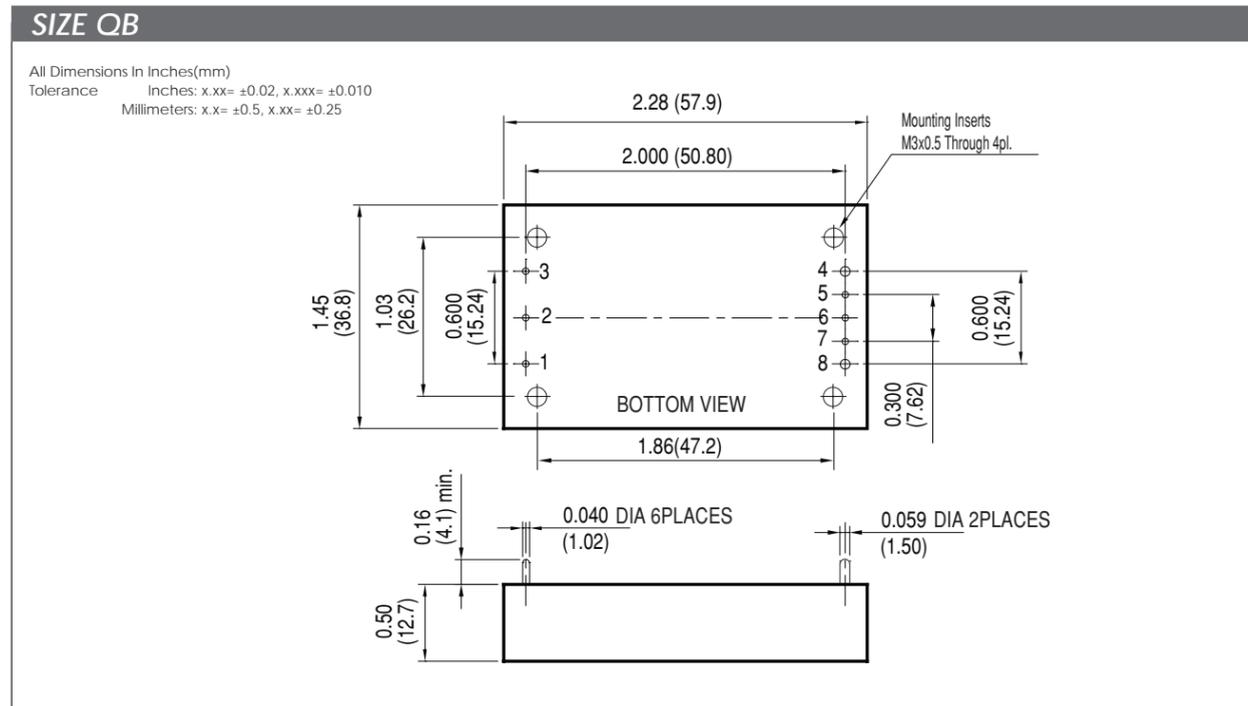
Specifications	
INPUT SPECIFICATIONS:	
Input Voltage Range	18 - 75V
Under voltage lockout	17V typ. power up, 16V typ. power down
Input Filter	Pi Type
Positive Logic Remote ON/OFF (see note 4 & 5)	
OUTPUT SPECIFICATIONS:	
Voltage Accuracy	±1.5% max.
Transient Response :75% to 100% Step Load Change	
Error Band	3.3V±6% Vout, Others±5% Vout
Recover Time	<500uS
External Trim Adj. Range ⁶	±10%
Ripple & Noise, 20MHz BW ³	
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.
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% -160% Nominal Output
GENERAL SPECIFICATIONS:	
Efficiency	See Table
Isolation Voltage	1500VDC min.
Input/Output	1500VDC min.
Input/Case	1500VDC min.
Output/Case	1500VDC min.
Isolation Resistance	10 ¹⁰ ohm min.
Switching Frequency	250KHz, Typ.
Power De-rating Curve	refer to Application Note
Operating Case Temperature	-40°C to 100°C
Storage Temperature Range	-40°C to +105°C
Thermal Shutdown, Case Temp.	110°C Typ.
Dimensions	1.45 x 2.28 x 0.50 inches(36.8 x 57.9 x 12.7 mm)
Case Material	Aluminum Base-plate with Plastic Case
Weight	TBD



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

NOTE:

1. Measured From High Line to Low Line
2. Measured From Full Load to min. Load
3. The output noise is measured with 10uF tantalum capacitor and 1uF ceramic capacitor across output
4. Logic Compatibility Open Collector ref to -Input
 Module ON >3.5Vdc to 75Vdc or Open Circuit
 Module OFF < 1.2Vdc
5. Suffix "N" to the Model Number with Negative Logic Remote ON/OFF
 Module ON >3.5Vdc to 75Vdc or Open Circuit
 Module OFF < 1.2Vdc
6. Trim-up.....connect a resistor between the trim pin and +Sense
 Trim-down.....connect a resistor between the trim pin and -Sense



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

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