



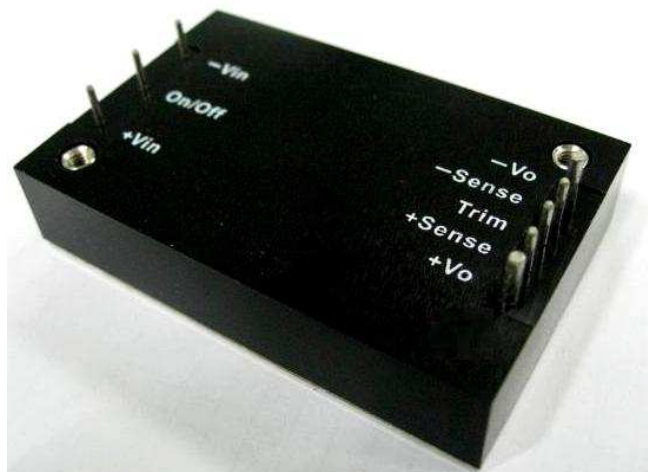
FEATURES

- * 100W Isolated Output
- * Efficiency to 92%
- * 200KHz Switching Frequency
- * 3:1 Input Range
- * Regulated Outputs
- * Remote ON/OFF
- * Over Temperature Protection
- * Over Voltage/Current Protection
- * Continuous Short Circuit Protection
- * Quarter Brick Size meet industrial standard
- * CE Mark Meets 2004/108/EC
- * UL60950-1 Approval
- * Meet EN50155 With External Circuits

CQB100-110S SERIES

100 WATT

DC-DC CONVERTERS



MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT		INPUT CURRENT		% EFF.	Capacitor Load max.
			MIN.	MAX.	NO LOAD	FULL LOAD		
CQB100-110S05	66-160 VDC	5.0VDC	0mA	20 A	30mA	1010mA	90	10000 μ F
CQB100-110S12	66-160 VDC	12 VDC	0mA	8.4 A	40mA	993mA	92	8800 μ F
CQB100-110S24	66-160 VDC	24 VDC	0mA	4.2 A	60mA	1030mA	91	1500 μ F

NOTE: 1. Nominal Input Voltage 110VDC

SPECIFICATIONS

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

INPUT SPECIFICATIONS:

Input Voltage Range	110V	66-160V
Input Surge Voltage (100ms max.)	180Vdc max.	
Under voltage lockout	power up	62V
	power down	56V

Positive Logic Remote ON/OFF:

Logic Compatibility	Open Collector ref to -Input
Module ON.....	> 3.5Vdc to 75Vdc or Open Circuit
Module OFF	< 1.8Vdc

Input Filter PI Type

OUTPUT SPECIFICATIONS:

Voltage Accuracy	±1.5% max.
Transient Response:25% Step Load Change	<200u sec.
External Trim Adj. Range	±10%
Ripple & Noise, 20MHz BW(note 3)	

5V	40mV RMS, 100mV pk-pk max.,
12V	60mV RMS., 150mV pk-pk max.
24V	100mV RMS, 240mV pk-pk max.

Temperature Coefficient $\pm 0.03\%/^{\circ}\text{C}$

Short Circuit Protection Continuous

Line Regulation (note 1) $\pm 0.2\%$ max.

Load Regulation (note 2) $\pm 0.2\%$ max.

Over Voltage Protection trip Range ,% Vo nom. 115-140%

Current Limit 110% ~180% Nominal Output

Start up time 45ms typ.

GENERAL SPECIFICATIONS:

Efficiency See Table

Isolation Voltage Input/Output, Input/Case 2250VDC min.

Output/Case 1500VDC min.

Isolation Resistance 10^7 ohm min.

Isolation Capacitance 1000pF typ.

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

MTBF MIL-HDBK-217E, GB, 25°C, Full Load TBD hrs typ.

Safety UI 60950-1 2nd (Basic insulation). Approval

EMC(note 7) meet EN50155(EN50121-3-2) with external filter

Shock/Vibration meet EN50155(EN61373)

Environmental meet EN50155(EN60068-2-1)

Dimensions 2.28×1.45×0.50 inches (57.9×36.8×12.7 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 10uF tantalum and 1uF ceramic capacitor across output
4. Suffix "N" to the Model Number with Negative Logic Remote ON/OFF

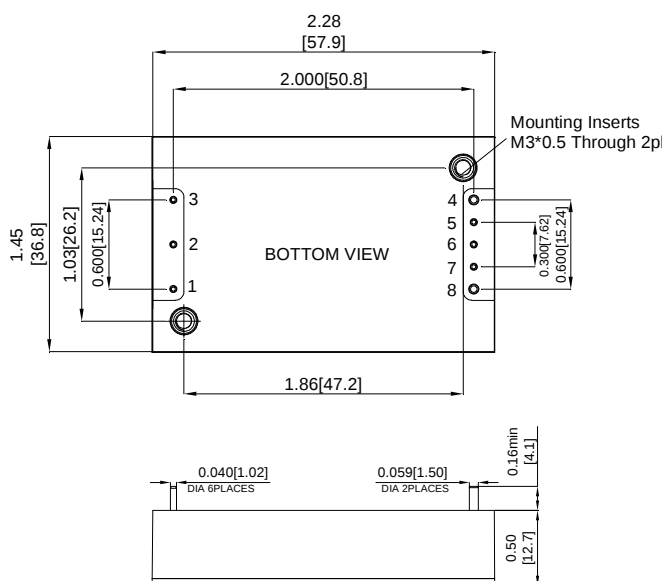
Module ON	< 1.8Vdc
Module OFF	>3.5Vdc to 75Vdc or Open Circuit
5. Suffix "-C" to the Model Number with Clear Mounting Insert (3.2mm DIA.)
6. An external input capacitor 120uF for all models are recommended to reduce input ripple voltage.
7. Design meet EN50155 and RIA12 refer to Application Note

CASE OB

All Dimensions In Inches(mm)

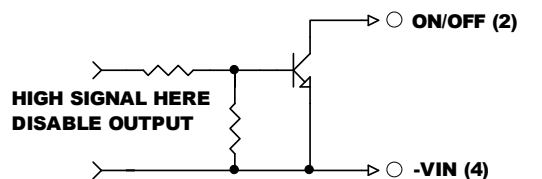
Tolerances Inches: X.XX= ± 0.02 , X.XXX= ± 0.010

Millimeters: X.X= ± 0.5 , X.XX= ± 0.25

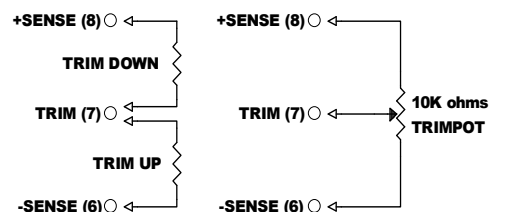


Pin	Function
1	+Vin
2	ON/OFF
3	-Vin
4	-Vout
5	-Sense
6	Trim
7	+Sense
8	+Vout

REMOTE ON/OFF CONTROL



EXTERNAL OUTPUT TRIM



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Cincon:

[CQB100-110S05](#) [CQB100-110S12](#) [CQB100-110S24](#)