CQB-W Series

40-100 WATTS - DC/DC SINGLE OUTPUT

FEATURES

- 1500V DC Isolation
- Quarter Brick Package
- 4 : 1 Input Range
- Regulated Outputs
- Continuous Short Circuit Protection
- Efficiency up to 88%

SPECIFICATIONS

INPUT		
Voltage range	24V 48V	9-36V 18-75V
Under voltage lockout	24Vin power up power down 48Vin power up power down	8.8V 8.0V 17V 16V
Remote On/Off control	ON/OFF pins 2 & 4, positive logic	
Input filter	Pi type	
Isolation	Input/Output Input/Case Output/Case	1500VDC min. 1500VDC min. 1500VDC min.
Isolation resistance	10^7 ohm min	
OUTPUT		
Output voltage	See table	
Output current	See table	
Voltage accuracy	±1.5% max	
Transient response Error band Recover Time	75 to100% Step Load Change ±5% <500µ sec	
External trim adj. range	±10%	
Ripple and noise 20MHz BW	3.3V & 5V 12V & 15V 24V	40mV RMS, max. 100mV pk-pk, max. 60mV RMS, max. 150mV pk-pk, max. 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	115-140%, Vo norminal
Current limit	110% ~140% Nominal Output
Efficiency	See table
Switching frequency	300kHz, typ
ENVIRONMENTAL	
Operating temperature	-40˚C to 100˚C base plate
Storage temperature	-55˚C to +105˚C
Thermal Shutdown	105˚C, case temperature
MECHANICAL	
Dimensions	36.8 x 57.9 x 12.7 mm
Weight	61.8g

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 — < 1.2Vdc
   Module OFF — >3.5Vdc to 75Vdc or Open Circuit
6. Trim-up — connect a resistor between the trim pin and +Sense Trim-down — connect a resistor between the trim pin and -Sense

CQB-W Series

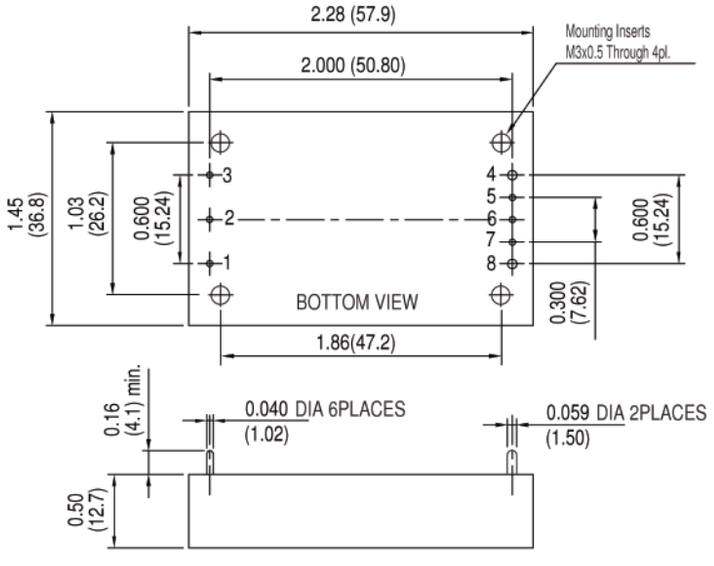
40-100 WATTS - DC/DC SINGLE OUTPUT

SELECTION TABLES

MODEL	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT CURRENT NO LOAD	INPUT CURRENT FULL LOAD	% EFF	SIZE
CQB75W-24S3V3		3.3 VDC	12 A		2037mA	81	
CQB75W-24S05		5.0 VDC	12 A		2976mA	84	
CQB75W-24S12	9-36 VDC	12 VDC	6.25 A	50 mA	3634mA	86	Quarter-Brick
CQB75W-24S15		15 VDC	5 A		3634mA	86	
CQB75W-24S24		24 VDC	3.12 A		3628mA	86	
CQB75W-48S3V3		3.3 VDC	12 A		1006mA	82	
CQB75W-48S05		5.0 VDC	12 A		1471mA	85	
CQB75W-48S12	18-75 VDC	12 VDC	6.25 A	30 mA	1817mA	86	Quarter-Brick
CQB75W-48S15		15 VDC	5 A		1796mA	87	
CQB75W-48S24		24 VDC	3.12 A		1796mA	87	
CQB100W-48S3V3		3.3 VDC	30 A		2344mA	88	
CQB100W-48S05		5.0 VDC	20 A		2367mA	88	
CQB100W-48S12	18-75VDC	12 VDC	8.3A	30 mA	2358mA	88	Quarter-Brick
CQB100W-48S15		15 VDC	6.7 A		2379mA	88	
CQB100W-48S24		24 VDC	4.17 A		2369mA	88	

NOTE: Heatsink and cooling details contact Powerbox Sales

MODULE OUT LINE



PIN CONNECTION

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