

# CQB75W

S E R I E S

**NEW**

**75 WATT  
 4:1 INPUT RANGE  
 DC-DC CONVERTERS**



### Features

- 75W Isolated Output
- Quarter-Brick Package
- Efficiency Up to 87%
- 4 : 1 Input Range
- Continuous Short Circuit Protection

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT		INPUT CURRENT		% EFF.	SIZE
			MIN.	MAX.	NO LOAD	FULL LOAD		
CQB75W-24S3V3	9-36 VDC	3.3 VDC	0mA	12 A	50mA	2037mA	81	Quarter-Brick
CQB75W-24S05	9-36 VDC	5.0 VDC	0mA	12 A	50mA	2976mA	84	Quarter-Brick
CQB75W-24S12	9-36 VDC	12 VDC	0mA	6.25 A	50mA	3634mA	86	Quarter-Brick
CQB75W-24S15	9-36 VDC	15 VDC	0mA	5 A	50mA	3634mA	86	Quarter-Brick
CQB75W-24S24	9-36 VDC	24 VDC	0mA	3.12 A	50mA	3628mA	86	Quarter-Brick
CQB75W-48S3V3	18-75VDC	3.3 VDC	0mA	12 A	30mA	1006mA	82	Quarter-Brick
CQB75W-48S05	18-75VDC	5.0 VDC	0mA	12 A	30mA	1471mA	85	Quarter-Brick
CQB75W-48S12	18-75VDC	12 VDC	0mA	6.25 A	30mA	1817mA	86	Quarter-Brick
CQB75W-48S15	18-75VDC	15 VDC	0mA	5 A	30mA	1796mA	87	Quarter-Brick
CQB75W-48S24	18-75VDC	24 VDC	0mA	3.12 A	30mA	1796mA	87	Quarter-Brick

**Specifications**

**INPUT SPECIFICATIONS:**

Input Voltage Range..... 24V..... 9-36V  
 48V..... 18-75V  
 Under voltage lockout ..... 24Vin power up .....8.8V  
 24Vin power down .....8.0V  
 48Vin power up .....17V  
 48Vin power down .....16V  
 Positive Logic Remote ON/OFF ( see note 4 & 5 )  
 Input Filter .....PI Type

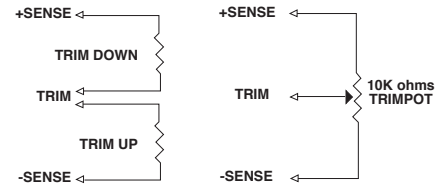
**OUTPUT SPECIFICATIONS:**

Voltage Accuracy : ..... ±1.5% max.  
 Transient Response :75% to 100% Step Load Change  
 Error Band.....±5% Vout  
 Recover Time.....<500uS  
 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  
 Temperature Coefficient..... ±0.03%/°C  
 Short Circuit Protection.....Continuous  
 Line Regulation<sup>1</sup>.....±0.2% max.  
 Load Regulation<sup>2</sup>.....±0.2% max.  
 Over Voltage Protection trip Range ,% Vo nom. ....115-140%  
 Current Limit .....110% ~140% Nominal Output

**GENERAL SPECIFICATIONS:**

Efficiency.....See Table  
 Isolation Voltage .....Input/Output..... 1500VDC min.  
 Input/Case.....1500VDC min.  
 Output/Case.....1500VDC min.  
 Isolation Resistance .....10<sup>7</sup> ohm min.  
 Switching Frequency ..... 300KHz, Typ.  
 Operating Case Temperature ..... -40°C to 100°C  
 Storage Temperature ..... -55°C to +105°C  
 Thermal Shutdown, Case Temp. ....105°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

**External Output Trim**



**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 Zero Load
3. Output Ripple and Noise measured with 10uF tantalum 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 ..... < 1.8Vdc
5. 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

**SIZE QB**

All Dimensions In Inches(mm)

Tolerance Inches: x.xx= ±0.02, x.xxx= ±0.010  
 Millimeters: x.x= ±0.5, x.xx= ±0.25

