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CQB75W SERIES

NEW

75 WATT
4:1 INPUT RANGE
DC-DC CONVERTERS

RoHS

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

NOTE: 1. Nominal Input Voltage 24, 48 VDC

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

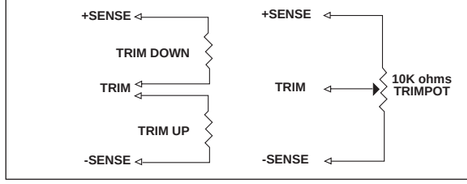
OUTPUT SPECIFICATIONS:

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[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

GENERAL SPECIFICATIONS:

Efficiency.....See Table
Isolation Voltage .....Input/Output..... 1500VDC min.
Input/Case.....1500VDC min.
Output/Case.....1500VDC min.
Isolation Resistance .....10^7 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

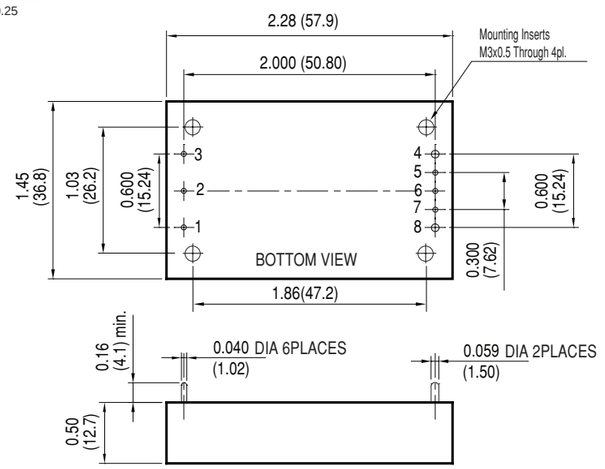
Pin	Function
1	+V Input
2	ON/OFF
3	-V Input
4	-V Output
5	-Sense
6	Trim
7	+Sense
8	+Vout

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



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

CQB75W