

COB75W

SERIES

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

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 up8.8V
 24Vin power down8.0V
 48Vin power up17V
 48Vin power down16V
 Positive Logic Remote ON/OFF (see note 4 & 5)
 Input FilterPI Type

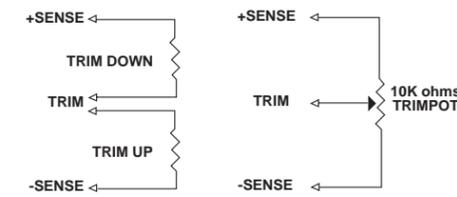
OUTPUT SPECIFICATIONS:

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 & 5V40mV RMS, max.
 100mV pk-pk, max.
 12V & 15V60mV RMS, max.
 150mV pk-pk, max.
 24V100mV RMS, max.
 240mV pk-pk, max.
 Temperature Coefficient..... ±0.03%/°C
 Short Circuit Protection.....Continuous
 Line Regulation¹.....±0.2% max.
 Load Regulation².....±0.2% max.
 Over Voltage Protection trip Range, % Vo nom.115-140%
 Current Limit110% ~140% Nominal Output

GENERAL SPECIFICATIONS:

Efficiency.....See Table
 Isolation VoltageInput/Output..... 1500VDC min.
 Input/Case.....1500VDC min.
 Output/Case.....1500VDC min.
 Isolation Resistance10⁹ 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 MaterialAluminum Base-plate with Plastic Case
 Weight..... TBD

External Output Trim



PIN CONNECTION

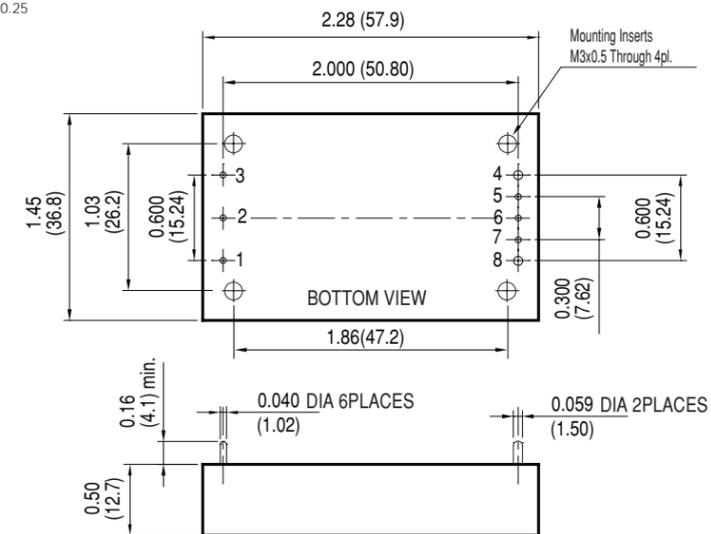
Pin	Function
1	+V Input
2	ON/OFF
3	-V Input
4	-V Output
5	-Sense
6	Trim
7	+Sense
8	+Vout

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.

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