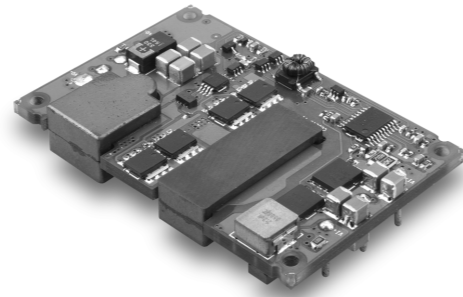


# COB125

**NEW**



## 40 TO 125 WATT OPEN FRAME DC-DC CONVERTERS

### Features

- 40 - 125W Isolated Output
- Efficiency to 92%
- Fixed Switching Frequency
- Monotonic start-up into pre-biased load
- Input under-voltage Protection
- Over Temperature Protection
- Over Current Protection
- Remote ON/OFF
- Industry Standard Quarter Brick Package
- Fully Isolated 2250VDC

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT MIN.	OUTPUT CURRENT MAX.	INPUT CURRENT NO LOAD	INPUT CURRENT FULL LOAD	%EFF	SIZE
CQB125-48S1V0	36-75 VDC	1.0 VDC	0 mA	40A	60 mA	1004mA	83	QB
CQB125-48S1V2	36-75 VDC	1.2 VDC	0 mA	40A	60 mA	1176mA	85	QB
CQB125-48S1V5	36-75 VDC	1.5 VDC	0 mA	40A	60 mA	1436mA	87	QB
CQB125-48S1V8	36-75 VDC	1.8 VDC	0 mA	40A	60 mA	1705mA	88	QB
CQB125-48S2V5	36-75 VDC	2.5 VDC	0 mA	40A	60 mA	2341mA	89	QB
CQB125-48S3V3	36-75 VDC	3.3 VDC	0 mA	35A	60 mA	2704mA	89	QB
CQB125-48S05	36-75 VDC	5.0 VDC	0 mA	25A	60 mA	2894mA	90	QB
CQB125-48S09	36-75 VDC	9.0 VDC	0 mA	13A	60 mA	2679mA	91	QB
CQB125-48S12	36-75 VDC	12 VDC	0 mA	10A	60 mA	2717mA	92	QB

NOTE : 1. Nominal Input Voltage 48 VDC

### Specifications

#### INPUT SPECIFICATIONS:

Input Voltage Range.....48V.....36 – 75V  
 Under voltage lockout ..... 48Vin power up ..... 35V typ.  
 power down ..... 33V typ.  
 Input Filter ..... LC Type

Positive / Negative Logic Remote on/off Control :

Logic Compatibility.....CMOS or Open Collector TTL  
 Module ON.....Open Circuit or Logic High  
 Module OFF.....<1.2VDC

#### OUTPUT SPECIFICATIONS:

Voltage Accuracy.....±1.0% max.  
 Transient Response :25% Step Load Change.....<500u sec.  
 Ripple and Noise, 20MHz BW ..... 100mV p-p max.  
 Temperature Coefficient.....±0.03%/C max.  
 Short Circuit Protection..... Continuous / Hiccup  
 Line Regulation, Note1.....±0.2% max.  
 Load Regulation, Note2.....±0.5% max.  
 Over Voltage Protection Trip Range, %Vo nom.....115%-140%  
 External Trim Adj. Range.....±10%  
 Current Limit..... 110% - 140% Nominal Output

#### GENERAL SPECIFICATIONS:

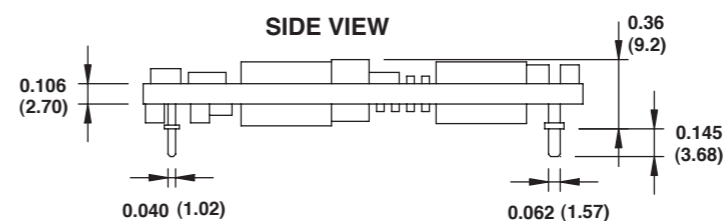
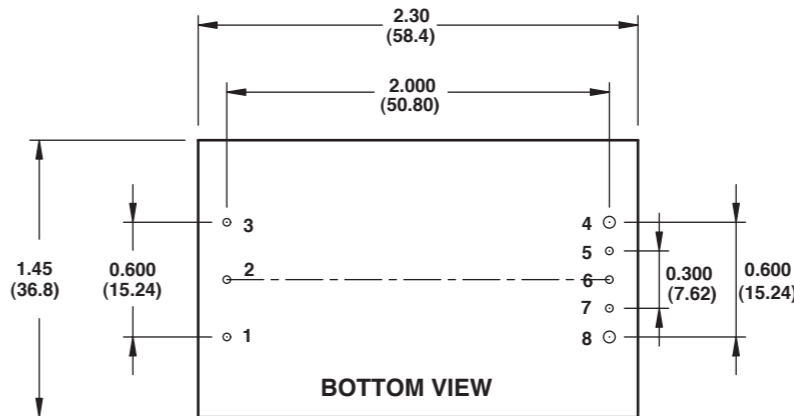
Efficiency.....See Table  
 Isolation Voltage.....2250 VDC min.  
 Isolation Resistance .....10<sup>7</sup> Ohms min.  
 Switching Frequency .....250KHz typ.  
 Over Temperature Protection .....120°C typ.  
 Operating Ambient Temperature Range..... - 40°C to +85°C  
 Power Derating Curve .....refer to Application Note  
 Storage Temperature Range ..... - 40°C to +125°C  
 Dimensions.....2.3 x 1.45 x 0.36 inches  
 (58.4 x 36.8 x 9.2 mm)  
 Weight.....50g

#### NOTE:

1. Measured From High Line to Low Line
2. Measured From Full Load to min. Load
3. Suffix "N" to the Model Number with Negative Logic Remote ON/OFF  
 Module ON.....<1.2VDC  
 Module OFF.....Open Circuit or Logic High
4. The output ripple and noise is measured with 10uF tantalum and 1uF Ceramic capacitor across output.

### SIZE QB

All Dimensions In Inches(mm)  
 Tolerance .xx ±0.02 (.x ±0.5)  
 .xxx ±0.010 (.xx ±0.25)



#### PIN CONNECTION

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