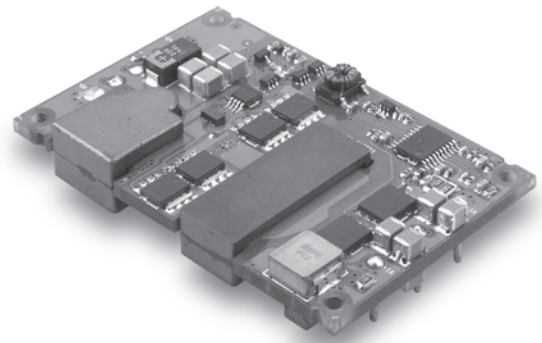


C O B 1 2 5

S E R I E S



100-125 WATT 1/4 BRICK DC-DC CONVERTERS



Features

- 100-125W Isolated Output
- Quarter Brick Package
- Regulated Outputs
- Efficiency to 92%
- 1500VDC Isolation
- Input Under Voltage Protection
- Over Current Protection
- Over Temperature Protection
- Remote On/Off Control
- Safety Meets UL60950-1

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT		INPUT CURRENT		% EFF.	Capacitor Load max.
			MIN.	MAX.	NO LOAD	FULL LOAD		
CQB125-48S2V5	36-75 VDC	2.5 VDC	0 mA	40 A	70 mA	2341 mA	89	10000µF
CQB125-48S3V3	36-75 VDC	3.3 VDC	0 mA	35 A	70 mA	2673 mA	90	10000µF
CQB125-48S05	36-75 VDC	5.0 VDC	0 mA	25 A	90 mA	2861 mA	91	10000µF
CQB125-48S12	36-75 VDC	12 VDC	0 mA	10 A	100 mA	2717 mA	92	2200µF

NOTE: 1. Nominal Input Voltage 48 VDC

Specifications

INPUT SPECIFICATIONS:

Input Voltage Range.....	48V.....	36 – 75V
Input Surge Voltage(100ms max.).....	48V.....	100Vdc max.
Under voltage lockout	power up	35V typ.
	power down	33V typ.
Input Filter		PI Type
Positive Logic Remote on/off Control (see Note4 & 5)		

OUTPUT SPECIFICATIONS:

Voltage Accuracy.....	±1.0% max.	
Transient Response :25% Step Load Change.....	< 500µs	
Ripple and Noise, 20MHz BW	100mV pk-pk max.	
	5V / 12Vout.....	120mV pk-pk max.
Temperature Coefficient.....	±0.03%/°C max.	
Short Circuit Protection.....	Continuous / Hiccup	
Line Regulation ¹	±0.2% max.	
Load Regulation ²	±0.5% max.	
Over Voltage Protection Trip Range, %Vo nom.....	115%-140%	
External Trim Adj. Range ⁴	±10%	
Current Limit.....	110% - 150% Nominal Output	
Start up time	150ms typ.	

GENERAL SPECIFICATIONS:

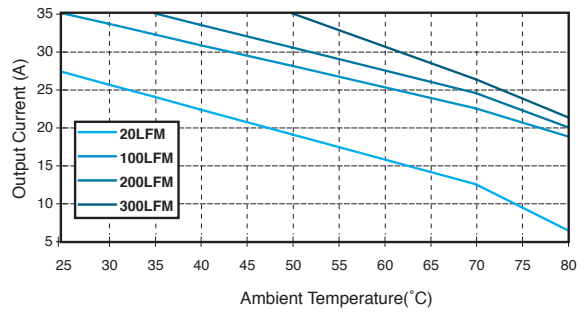
Efficiency.....	See Table	
Isolation Voltage.....	1500 VDC min.	
Isolation Resistance	10 ⁷ Ohms min.	
Isolation Capacitance	1000pF typ.	
Switching Frequency	250KHz typ.	
	5V/12Vout.....	300KHz typ.
Over Temperature Protection	120°C typ.	
Operating Ambient Temperature Range.....	-40°C to +85°C	
Power Derating Curve.....	Refer to Application Note.	
Storage Temperature Range	-40°C to +125°C	
Dimensions.....	2.30x1.45x0.42 inches (58.4x36.8x10.6 mm)	
Weight.....	40g	

NOTE:

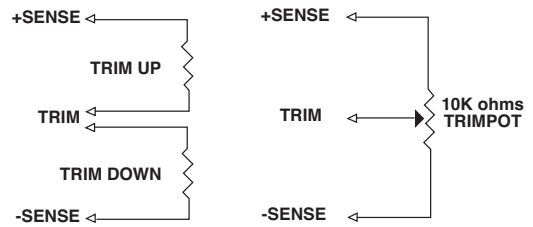
1. Measured From High Line to Low Line.
2. Measured From Full Load to Zero Load.
3. The output ripple and noise is measured with 10uF tantalum and 1µF Ceramic capacitor across output.
4. Logic Compatibility

 - Module ON
 - Module OFF

Typical Derating Curve for CQB125-48S3V3



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	+V Output

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

