

ECBB

S E R I E S

10.8 TO 15 WATT OPEN FRAME DC-DC CONVERTERS



Features

- 10.8 – 15W Isolated Output
- Efficiency to 87%
- Fixed Switching Frequency
- 2 : 1 Input Range
- Regulated Outputs
- Continuous Short Circuit Protection
- PI Input Filter

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT MIN.	OUTPUT CURRENT MAX.	INPUT CURRENT NO LOAD	INPUT CURRENT FULL LOAD	%EFF	SIZE
EC8B-24S18	18-36 VDC	1.8 VDC	0 mA	6000 mA	30 mA	542mA	83	B
EC8B-24S25	18-36 VDC	2.5 VDC	0 mA	6000 mA	30 mA	735mA	85	B
EC8B-24S33	18-36 VDC	3.3 VDC	0 mA	4500 mA	30 mA	720mA	86	B
EC8B-24S05	18-36 VDC	5 VDC	0 mA	3000 mA	40 mA	718mA	87	B
EC8B-48S18	36-75 VDC	1.8 VDC	0 mA	6000 mA	30 mA	271mA	83	B
EC8B-48S25	36-75 VDC	2.5 VDC	0 mA	6000 mA	30 mA	364mA	86	B
EC8B-48S33	36-75 VDC	3.3 VDC	0 mA	4500 mA	30 mA	356mA	87	B
EC8B-48S05	36-75 VDC	5 VDC	0 mA	3000 mA	40 mA	360mA	87	B

NOTE : 1. Nominal Input Voltage 24 or 48VDC

Specifications

INPUT SPECIFICATIONS:

Input Voltage Range.....	24V.....18-36V
	48V.....36-75V
Undervoltage lockout.....	24Vin power up.....17V
	power down.....15.5V
	48Vin power up.....34V
	power down.....32.5V
Input Filter.....	PI Type
Positive Logic Remote on/off Control:	
Logic Compatibility.....	CMOS or Open Collector TTL
Module ON.....	>+5.5VDC or Open Circuit
Module OFF.....	<1.8VDC

GENERAL SPECIFICATIONS:

Efficiency.....	See Table
Isolation Voltage.....	1500 VDC min.
Isolation Resistance.....	10 ⁸ Ohms min.
Switching Frequency.....	350KHz Typ.
Over Temperature Protection.....	120°C Typ.
Operating Ambient Temperature Range.....	-40°C to 85°C
Derating, Above 60°C.....	Linearly to Zero Power at +100°C
Storage Temperature Range.....	-40°C to +120°C
Dimensions.....	2 x 1 x 0.4 inches (50.8 x 25.4 x 10.2 mm)
Material.....	Non-potted With Open Frame Type

OUTPUT SPECIFICATIONS:

Voltage Accuracy.....	±1.0% max.
Transient Response .25% Step Load Change.....	<500µ sec.
Ripple and Noise, 20MHz BW.....	75mV p-p max.
Temperature Coefficient.....	±0.03%/C max.
Short Circuit Protection.....	Continuous
Line Regulation ¹	±0.2% max.
Load Regulation ¹	±1.0% max.
Over Voltage Protection.....	Zener or TVS Clamp
External Trim Adj. Range.....	±10%

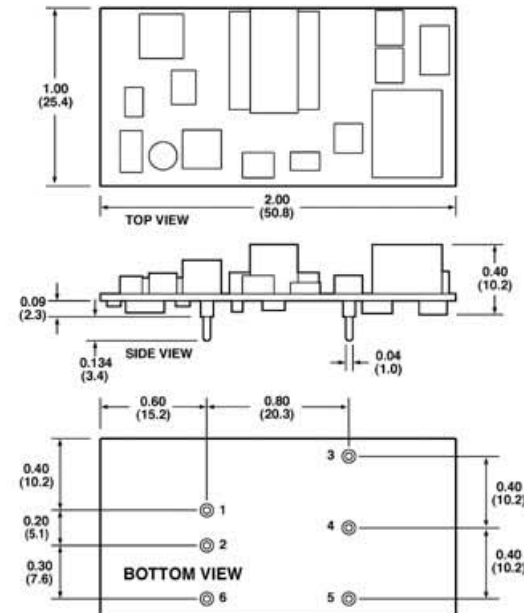
NOTE:

1. Measured From High Line to Low Line
2. Measured From Full Load to Min. Load
3. The output noise is measured with 4.7µf tantalum capacitor and 0.1µf ceramic capacitor across output.

Mechanical Specification

All Dimensions In Inches(mm)

Tolerances .XX±.02 .XXX±.010



PIN CONNECTION

Pin	Function
1	+V Input
2	-V Input
3	+V Output
4	Trim
5	-V Output
6	Remote ON/OFF