

EC4BE

S E R I E S

10 WATT DC-DC CONVERTERS



Features

- 10W Isolated Output
- 2" x 1" Case
- Regulated Outputs
- Efficiency to 82%
- Pi Input Filter
- Continuous Short Circuit Protection
- Meets EN55022 Class A, Conducted

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT		INPUT CURRENT		% EFF.	SIZE
			MIN.	MAX.	NO LOAD	FULL LOAD		
EC4BE01		5 VDC	100 mA	2000 mA	30 mA	1100 mA	76	
EC4BE02		12 VDC	45 mA	830 mA	30 mA	1065 mA	78	
EC4BE03		15 VDC	35 mA	666 mA	30 mA	1065 mA	78	
EC4BE04	9-18 VDC	±12 VDC	±25 mA	±415 mA	40 mA	1065 mA	78	2" x 1"
EC4BE05		±15 VDC	±20 mA	±333 mA	40 mA	1065 mA	78	
EC4BE06		±5 VDC	±50 mA	±1000 mA	40 mA	1065 mA	78	
EC4BE11		5 VDC	100 mA	2000 mA	20 mA	535 mA	78	
EC4BE12		12 VDC	45 mA	830 mA	20 mA	520 mA	80	
EC4BE13		15 VDC	35 mA	666 mA	20 mA	520 mA	80	
EC4BE14	18-36 VDC	±12 VDC	±25 mA	±415 mA	20 mA	520 mA	80	2" x 1"
EC4BE15		±15 VDC	±20 mA	±333 mA	20 mA	520 mA	80	
EC4BE16		±5 VDC	±50 mA	±1000 mA	20 mA	520 mA	80	
EC4BE21		5 VDC	100 mA	2000 mA	10 mA	260 mA	80	
EC4BE22		12 VDC	45 mA	830 mA	10 mA	254 mA	82	
EC4BE23		15 VDC	35 mA	666 mA	10 mA	254 mA	82	
EC4BE24	36-72 VDC	±12 VDC	±25 mA	±415 mA	10 mA	254 mA	82	2" x 1"
EC4BE25		±15 VDC	±20 mA	±333 mA	10 mA	254 mA	82	
EC4BE26		±5 VDC	±50 mA	±1000 mA	10 mA	254 mA	82	

NOTE: 1. Nominal Input Voltage 12, 24 or 48 VDC

Specifications

INPUT SPECIFICATIONS:

Input Voltage Range.....12V.....9-18V
24V.....18-36V
48V.....36-72V
Input Filter.....Pi Type

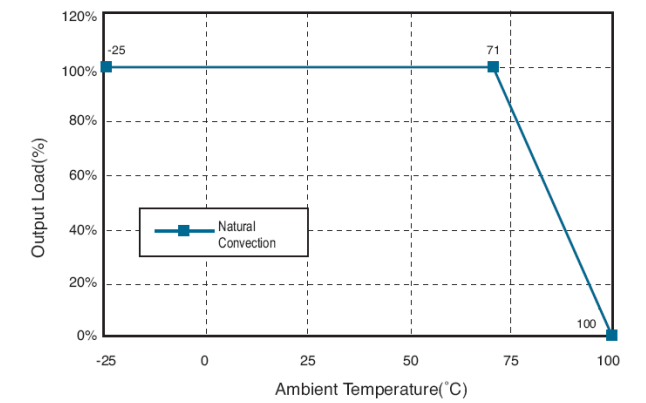
OUTPUT SPECIFICATIONS:

Voltage Accuracy	
Single Output.....	±1.0% max.
Dual + Output.....	±1.0% max.
Dual - Output.....	±1.0% max.
Voltage Balance (Dual).....	±1.0% max.
Transient Response	
Single 25% Step Load Change.....	<500µ sec.
Dual FL-1/2L ±1% Error Band.....	<500µ sec.
Ripple and Noise, 20MHzBW.....	100mV p-p max.
Temperature Coefficient.....	±0.02%/°C max.
Short Circuit Protection.....	Continuous
Line Regulation ¹ Single/Dual Output.....	±0.2% max.
Load Regulation ² Single/Dual Output.....	±1.0% max.

GENERAL SPECIFICATIONS:

Efficiency.....	See Table
Isolation Voltage.....	500 VDC min.
Isolation Resistance.....	10 ⁹ ohms
Switching Frequency.....	200KHz, min.
Operating Ambient Temperature Range.....	-25°C to +71°C
De-rating, Above 71°C.....	Linearly to Zero power at 100°C
Case Temperature ⁴	100°C max
Cooling.....	Natural Convection
Storage Temperature Range.....	-40°C to + 100°C
EMI/RFI.....	Six sided Continuous Shield
Dimensions.....	2.00 x 1.00 x 0.40 inches (50.8 x 25.4 x 10.2 mm)
Case Material.....	Black Coated Copper with Non-Conductive Base
Weight.....	33g

EC4BE Series Derating Curve



NOTE:

1. Measured From High Line to Low Line
2. Measured From Full Load to 1/4 Load
3. A Minimum Load On the Output is Necessary to Maintain Regulation
4. Maximum case temperature under any operating condition should not exceed 100°C.

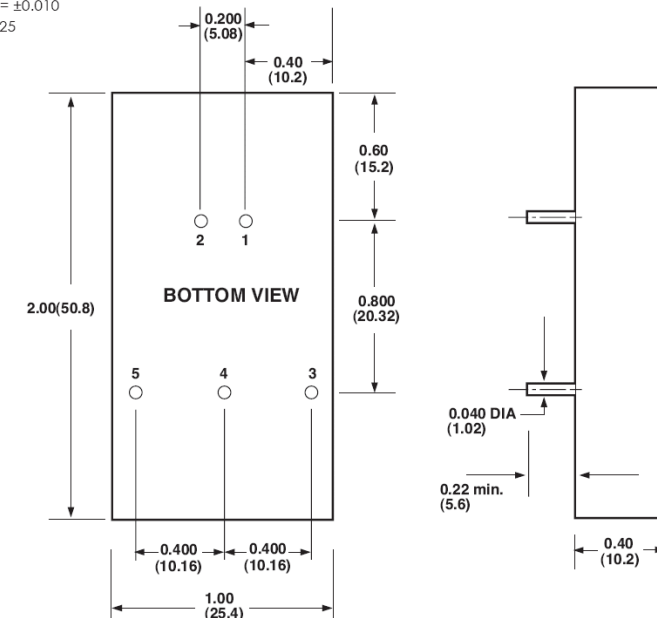
PIN CONNECTION

Pin	Function
1	+ Input
2	- Input
3	+ Output
4	Common/NP
5	- Output

NP*-NO PIN ON SINGLE OUTPUT

CASE B

All Dimensions In Inches(mm)
Tolerances Inches: x.xx= ±0.04, x.xxx= ±0.010
Millimeters: x.x= ±1, x.xx= ±0.25



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