

# 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	9-18 VDC	5 VDC	100 mA	2000 mA	30 mA	1100 mA	76	2" x 1"
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		±12 VDC	±25 mA	±415 mA	40 mA	1065 mA	78	
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	18-36 VDC	5 VDC	100 mA	2000 mA	20 mA	535 mA	78	2" x 1"
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		±12 VDC	±25 mA	±415 mA	20 mA	520 mA	80	
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	36-72 VDC	5 VDC	100 mA	2000 mA	10 mA	260 mA	80	2" x 1"
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		±12 VDC	±25 mA	±415 mA	10 mA	254 mA	82	
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

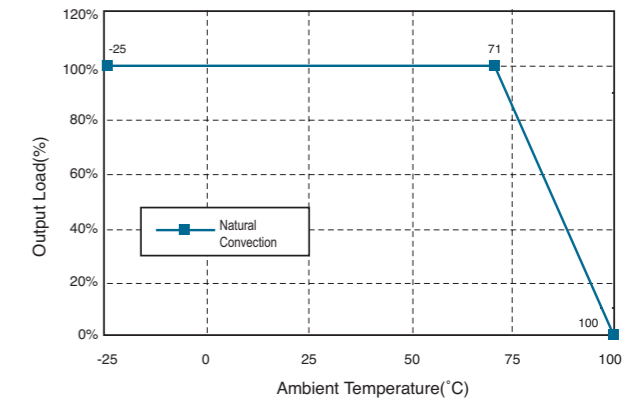
#### OUTPUT SPECIFICATIONS:

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 <sup>1</sup> Single/Dual Output.....	±0.2% max.
Load Regulation <sup>2</sup> Single/Dual Output.....	±1.0% max.

#### GENERAL SPECIFICATIONS:

Efficiency.....	See Table
Isolation Voltage.....	500 VDC min.
Isolation Resistance.....	10 <sup>9</sup> 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 <sup>4</sup> .....	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.....	0.33g

### 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.

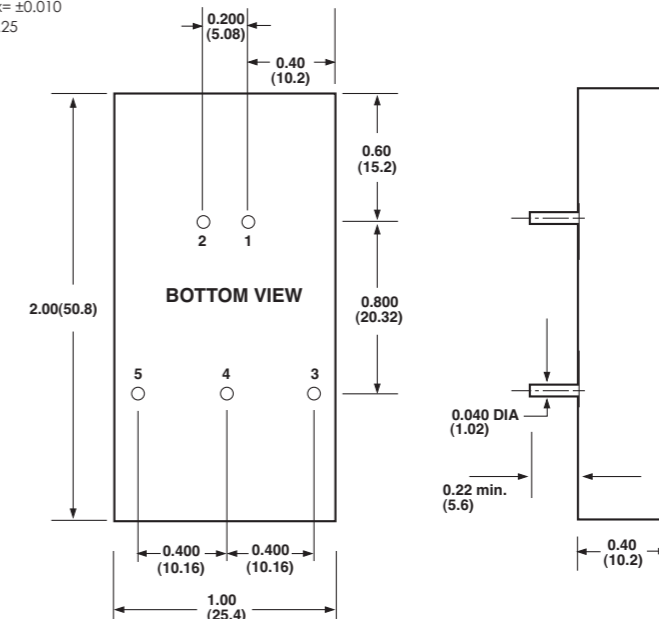
### PIN CONNECTION

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.