

# EC4BW

S E R I E S

## 10 WATT 4:1 INPUT RANGE DC-DC CONVERTERS



### Features

- 10W Isolated Output
- 2" x 1" Case
- 4 : 1 Input Range
- 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
				NO LOAD	FULL LOAD		
EC4BW01		5 VDC	2000 mA	15 mA	534 mA	78	
EC4BW02		12 VDC	830 mA	15 mA	520 mA	80	
EC4BW03		15 VDC	666 mA	15 mA	520 mA	80	
EC4BW04	9-36VDC	±12 VDC	±415 mA	20 mA	520 mA	80	2" x 1"
EC4BW05		±15VDC	±333mA	20 mA	520 mA	80	
EC4BW06		±5 VDC	±1000mA	20 mA	520 mA	80	
EC4BW07		3.3 VDC	2000mA	15 mA	362 mA	76	
EC4BW11		5 VDC	2000 mA	10 mA	260 mA	80	
EC4BW12		12 VDC	830 mA	10 mA	257 mA	81	
EC4BW13		15 VDC	666 mA	10 mA	257 mA	81	
EC4BW14	18-72VDC	±12 VDC	±415 mA	15 mA	257 mA	81	2" x 1"
EC4BW15		±15 VDC	±333 mA	15 mA	253 mA	82	
EC4BW16		±5 VDC	±1000mA	15 mA	253 mA	82	
EC4BW17		3.3 VDC	2000mA	10 mA	181 mA	76	

NOTE: 1. Nominal Input Voltage 24 or 48 VDC

### Specifications

#### INPUT SPECIFICATIONS:

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

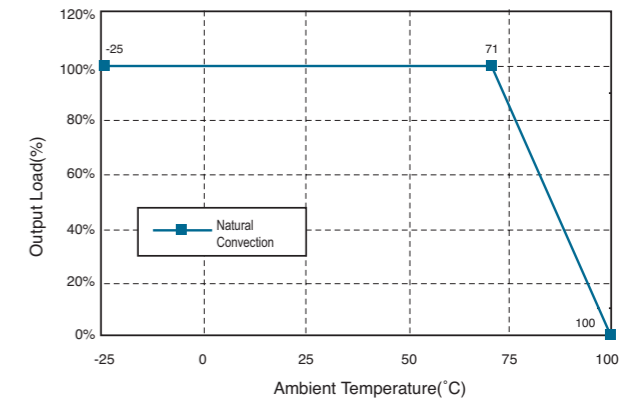
#### OUTPUT SPECIFICATIONS:

Voltage Accuracy  
 Single Output.....±1.0% max.  
 Dual + Output.....±1.0% max.  
 Dual - Output.....±1.0% max.  
 Voltage Balance Dual Output at Full Load.....±1.0% max.  
 Transient Response  
 Single 25% Step Load Change.....<500µ sec.  
 Dual FL-1/2 ±1% Error Band.....<500µ sec.  
 Ripple and Noise,20MHzBW......75mV 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  
 Isolation Resistance.....10<sup>9</sup>ohms  
 Switching Frequency.....300KHz, Typ.  
 Operating Ambient Temperature Range .....-25°C to +71°C  
 De-rating, Above 71°C ..... Linearly to Zero power at 100°C  
 Case Temperature<sup>3</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.....32g

### EC4BW Series Derating Curve



#### NOTE:

1. Measured From High Line to Low Line
2. Measured From Full Load to 1/4 Load
3. Maximum case temperature under any operating condition should not exceed 100°C.

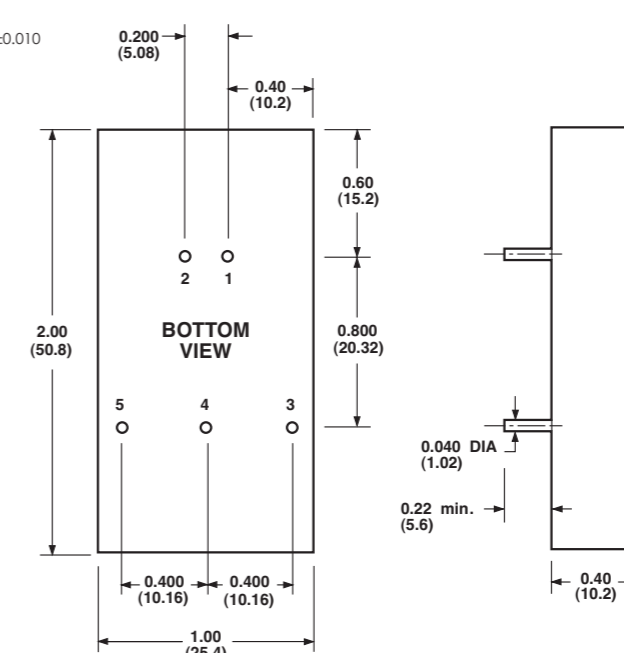
### PIN CONNECTION

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.