

E C 4 B W

S E R I E S

10 WATT 4 : 1 INPUT RANGE DC-DC CONVERTERS



Features

- 10W Isolated Output
- 2"x1" Case Six-Sided Shield Metal 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.	Capacitor Load max.
				NO LOAD	FULL LOAD		
EC4BW01		5 VDC	2000 mA	15 mA	534 mA	78	2000uF
EC4BW02		12 VDC	830 mA	15 mA	520 mA	80	830uF
EC4BW03		15 VDC	666 mA	15 mA	520 mA	80	666uF
EC4BW04	9-36VDC	±12 VDC	±415 mA	20 mA	520 mA	80	T.B.D.
EC4BW05		±15VDC	±333 mA	20 mA	520 mA	80	T.B.D.
EC4BW06		±5 VDC	±1000 mA	20 mA	520 mA	80	T.B.D.
EC4BW07		3.3 VDC	2000 mA	15 mA	362 mA	76	2000uF
EC4BW11		5 VDC	2000 mA	10 mA	260 mA	80	2000uF
EC4BW12		12 VDC	830 mA	10 mA	257 mA	81	830uF
EC4BW13		15 VDC	666 mA	10 mA	257 mA	81	666uF
EC4BW14	18-72VDC	±12 VDC	±415 mA	15 mA	257 mA	81	T.B.D.
EC4BW15		±15 VDC	±333 mA	15 mA	253 mA	82	T.B.D.
EC4BW16		±5 VDC	±1000 mA	15 mA	253 mA	82	T.B.D.
EC4BW17		3.3 VDC	2000 mA	10 mA	181 mA	76	2000uF

NOTE: 1. Nominal Input Voltage 24 or 48 VDC

Specifications

INPUT SPECIFICATIONS:

Input Voltage Range.....	24V.....	9-36V
	48V.....	18-72V
Input Surge Voltage(100ms max.).....	24V.....	50Vdc max.
	48V.....	100Vdc max.
Input Filter.....		Pi Type

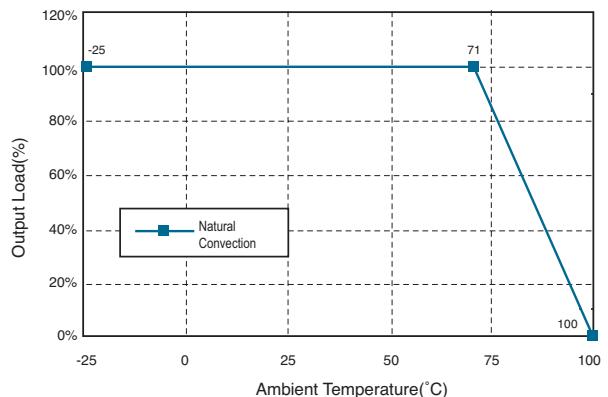
OUTPUT SPECIFICATIONS:

Voltage Accuracy.....	±1.0% max.
Voltage Balance Dual Output at Full Load.....	±1.0% max.
Transient Response	
Single 25% Step Load Change.....	< 500µs
Dual FL-1/2L ±1% Error Band.....	< 500µs
Ripple and Noise,20MHzBW.....	75mV pk-pk max.
Temperature Coefficient.....	±0.02%/°C max.
Short Circuit Protection.....	Continuous
Line Regulation ¹ Single/Dual	±0.2% max.
Load Regulation ² Single/Dual	±1.0% max.
Start up time.....	24Vin..... 5ms typ. 48Vin..... 10ms typ.

GENERAL SPECIFICATIONS:

Efficiency.....	See Table
Isolation Voltage.....	500 VDC min.
Isolation Resistance.....	10 ⁹ ohm min.
Isolation Capacitance	500pF typ.
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 ³	100°C max.
Cooling	Natural Convection
Storage Temperature Range.....	-40°C to +100°C
Humidity	95% RH max. Non condensing
MTBF	MIL-STD-217-F, GB, 25°C, Full Load 750Khrs typ.
EMI/RFI.....	Six sided Continuous Shield
Dimensions.....	2.00x1.00x0.40 inches (50.8x25.4x10.2 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= ±1.0, x.xx= ±0.25

