

EC4AW

S E R I E S

5-6 WATT 4 : 1 INPUT RANGE DC-DC CONVERTERS



Features

- 5-6W Isolated Output
- 4 : 1 Input Range
- DIP-24 / SMD Package
- Regulated Outputs
- Efficiency to 80%
- Pi Input Filter
- Continuous Short Circuit Protection

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT CURRENT		% EFF.	CASE
				NO LOAD	FULL LOAD		
EC4AW01	9-36VDC	5 VDC	1000 mA	15 mA	267 mA	78	DIP-24
EC4AW02		12 VDC	470 mA	15 mA	294 mA	80	
EC4AW03		15 VDC	400 mA	15 mA	313 mA	80	
EC4AW04		±12 VDC	±230 mA	25 mA	288 mA	80	
EC4AW05		±15 VDC	±190 mA	25 mA	297 mA	80	
EC4AW06		±5 VDC	±500 mA	25 mA	267 mA	78	
EC4AW07		3.3 VDC	1000 mA	15 mA	191 mA	72	
EC4AW11	18-72VDC	5 VDC	1000 mA	7.5 mA	134 mA	78	DIP-24
EC4AW12		12 VDC	470 mA	7.5 mA	149 mA	79	
EC4AW13		15 VDC	400 mA	7.5 mA	157 mA	80	
EC4AW14		±12 VDC	±230 mA	12 mA	146 mA	79	
EC4AW15		±15 VDC	±190 mA	12 mA	149 mA	80	
EC4AW16		±5 VDC	±500 mA	12 mA	135 mA	77	
EC4AW17		3.3 VDC	1000 mA	7.5 mA	100 mA	70	

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.....±2.0% max.
 Voltage Balance (Dual).....±1.0% max.
 Temperature Coefficient.....±0.05%/°C
 Ripple and Noise, 20MHz BW.....3.3V/5V.....100mV pk-pk max.
 12V/15V.....1% pk-pk max.
 Short Circuit Protection.....Continuous
 Line Regulation, Single/Dual¹.....±0.5% max.
 Load Regulation, Single².....±0.5% max.
 Dual³.....±1.0% max.

GENERAL SPECIFICATIONS:

Efficiency..... See Table
 Isolation Resistance.....10⁹ ohm min
 Switching Frequency.....200KHz min
 Operating Ambient Temperature Range-25°C to +71°C
 De-rating, Above 71°C(Plastic Case)..... Linearly to Zero power at 95°C
 De-rating, Above 71°C (Copper Case)... Linearly to Zero power at 100°C
 Case Temperature (Plastic case⁴)95°C max
 (Copper case⁴)100°C max
 Cooling Natural Convection
 Storage Temperature Range.....-40°C to +100°C
 Dimensions.....DIP.....1.25x0.80x0.40 inches(31.8x20.3x10.2 mm)
 SMD.....1.25x0.80x0.45 inches(31.8x20.3x11.4 mm)
 Weight.....12.5g

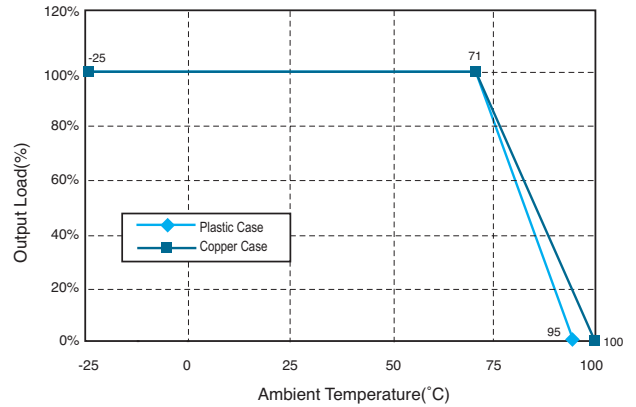
ISOLATION VOLTAGE:

1.5K VDC min..... Standard or Suffix "HM" Models
 3K VDC min (note 4)..... Suffix "H" Models

CASE MATERIAL:

Standard Models..... Non-Conductive Black Plastic
 Suffix "HM" Models (note 5)..... Black Coated Copper with
 Non-Conductive Base

EC4AW Series Derating Curve



NOTE:

1. Measured From High Line to Low Line.
2. Measured From Full Load to 10% Load.
3. Measured From Full Load to 1/4 Load.
4. Non-Conductive Black Plastic Only.
5. Suffix "S" to the Model Number with SMD package.
6. Maximum case temperature under any operating condition should not be exceeded 95°C(PlasticCase), 100°C(Copper Case).

PIN CONNECTION

Pin	Single Output		Dual Output	
	DIP	SMD	DIP	SMD
1, 24	NP	NC	NP	NC
2, 3	-V Input		-V Input	
4,5	NP	NC	NP	NC
9	NC		Common	
10,15	NC		NC	
11	NC		-V Output	
12,13	NP	NC	NP	NC
14	+V Output		+V Output	
16	-V Output		Common	
20, 21	NP	NC	NP	NC
22, 23	+V Input		+V Input	

*NP-NO PIN

*NC-NO CONNECTION WITH PIN

CASE A

NOTE: Pin Size is 0.02" Inch (0.5mm) DIA ±0.05
 All Dimensions In Inches(mm)
 Tolerance Inches: x.xx= ±0.02, x.xxx= ±0.010
 Millimeters: x.x= ±0.5, x.xx= ±0.25

