

# EC4AW

## 5-6 WATT WIDE INPUT DC-DC CONVERTERS



### Features

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

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT CURRENT		% EFF.	CASE
				NO LOAD	FULL LOAD		
EC4AW01		5 VDC	1000 mA	15 mA	267 mA	78	
EC4AW02		12 VDC	470 mA	15 mA	294 mA	80	
EC4AW03		15 VDC	400 mA	15 mA	313 mA	80	
EC4AW04	9-36 VDC	±12 VDC	±230 mA	25 mA	288 mA	80	A
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		5 VDC	1000 mA	7.5 mA	134 mA	78	
EC4AW12		12 VDC	470 mA	7.5 mA	149 mA	79	
EC4AW13		15 VDC	400 mA	7.5 mA	157 mA	80	
EC4AW14	18-72 VDC	±12 VDC	±230 mA	12 mA	146 mA	79	A
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 p-p max.
	12V/15V.....	1% p-p max.
Short Circuit Protection.....		Continuous
Line Regulation <sup>1</sup> , Single/Dual.....		± 0.5% max.
Load Regulation, Single <sup>2</sup> .....		± 0.5% max.
	Dual <sup>3</sup> .....	± 1.0% max.

#### GENERAL SPECIFICATIONS:

Efficiency.....		See Table
Isolation Resistance.....		10 <sup>6</sup> ohms
Switching Frequency.....		200KHz, min.
Operating Temperature Range.....		-25°C to + 71°C
Case Temperature (Plastic case).....		95°C max.
	(Copper case).....	100°C max.
Cooling.....		Free-Air Convection
Storage Temperature Range.....		-40°C to + 100°C
Dimensions.....		1.25 x 0.8 x 0.4 inches (31.8 x 20.3 x 10.2mm)
Weight.....		12.5g

#### ISOLATION VOLTAGE:

1.5 KVDC min.....		Standard Models
3 KVDC min <sup>4</sup> .....		Suffix "H" Models

#### CASE MATERIAL:

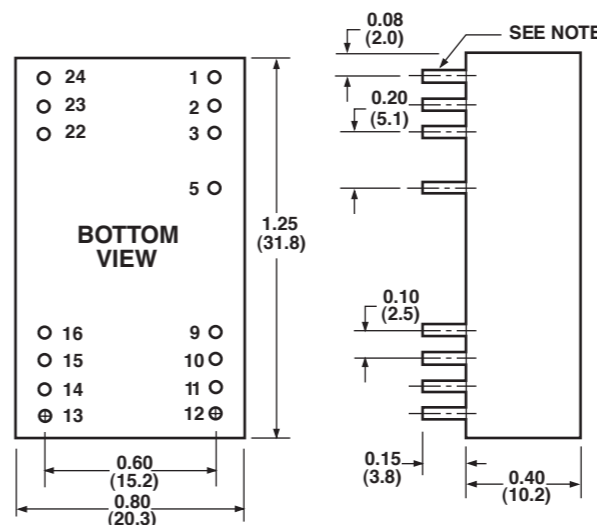
Standard Models.....		Non-Conductive Black Plastic
Suffix "HM" Models <sup>5</sup> .....		Black Coated Copper with Non-Conductive Base

#### 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 "HM" 1.5K VDC Instead of 3K VDC Isolation

### CASE A

NOTE: Pin Size is 0.02" Inch (0.5mm) DIA  
All Dimension In Inches(mm)  
Tolerance .xx= ±0.02, .xxx= ±0.10



#### PIN CONNECTION 1.5K VDC & 3K VDC

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

\*NP-NO PIN

\*NC-NO CONNECTION WITH PIN