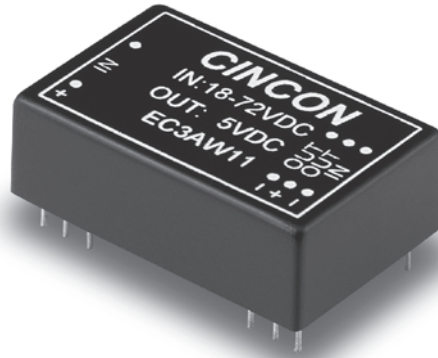


# EC3AW

S E R I E S

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



### Features

- 3W Isolated Output
- 4 : 1 Input Range
- DIP-24 / SMD Package
- Regulated Outputs
- Efficiency to 77%
- Pi Input Filter
- Continuous Short Circuit Protection

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT CURRENT		% EFF.	CASE
				NO LOAD	FULL LOAD		
EC3AW01	9-36VDC	5 VDC	600 mA	15 mA	174 mA	72	DIP-24
EC3AW02		12 VDC	250 mA	15 mA	165 mA	76	
EC3AW03		15 VDC	200 mA	15 mA	165 mA	76	
EC3AW04		±5 VDC	±300 mA	25 mA	179 mA	70	
EC3AW05		±12 VDC	±125 mA	25 mA	174 mA	72	
EC3AW06		±15 VDC	±100 mA	25 mA	174 mA	72	
EC3AW07		3.3 VDC	600 mA	15 mA	117 mA	70	
EC3AW11	18-72VDC	5 VDC	600 mA	7.5 mA	87 mA	72	DIP-24
EC3AW12		12 VDC	250 mA	7.5 mA	81 mA	77	
EC3AW13		15 VDC	200 mA	7.5 mA	81 mA	77	
EC3AW14		±5 VDC	±300 mA	12 mA	88 mA	71	
EC3AW15		±12 VDC	±125 mA	12 mA	87 mA	72	
EC3AW16		±15 VDC	±100 mA	12 mA	87 mA	72	
EC3AW17		3.3 VDC	600 mA	7.5 mA	58 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, Single & ±5V ..... 100mV pk-pk max.  
 Dual..... 1% pk-pk max.  
 Short Circuit Protection..... Continuous  
 Line Regulation<sup>1</sup>, Single/Dual<sup>1</sup>.....± 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>9</sup> ohm min.  
 Switching Frequency..... 100KHz  
 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 case\*) ..... 95°C max  
 (Copper case\*) ..... 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

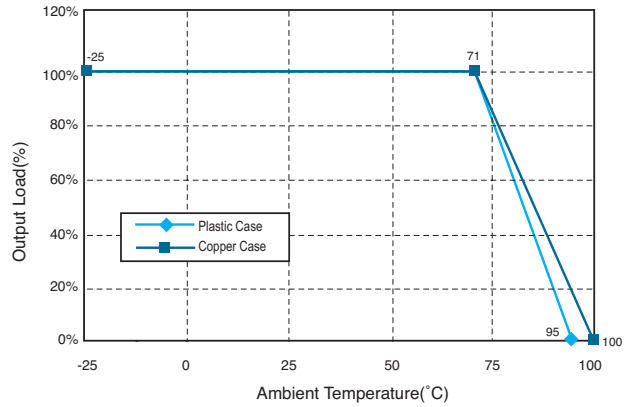
### ISOLATION VOLTAGE:

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

### CASE MATERIAL:

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

## EC3AW 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 packages.
6. Maximum case temperature under any operating condition should not be exceeded 95°C(Plastic Case),100°C(Copper Case).

## PIN CONNECTION

500 VDC					1.5K & 3K VDC				
Pin	Single Output		Dual Output		Pin	Single Output		Dual Output	
	DIP	SMD	DIP	SMD		DIP	SMD	DIP	SMD
1,24	+V Input		+V Input		1,24	NP	NC	NP	NC
2,23	NC		-V Output		2,3	-V Input		-V Input	
3,22	NC		Common		4,5	NP	NC	NP	NC
4	NP	NC	NP	NC	9	NC		Common	
5	NP	NC	NP	NC	10,15	NC		NC	
9	NP	NC	NP	NC	11	NC		-V Output	
10,15	-V Output		Common		12,13	NP	NC	NP	NC
11,14	+V Output		+V Output		14	+V Output		+V Output	
12,13	-V Input		-V Input		16	-V Output		Common	
16	NP	NC	NP	NC	20,21	NP	NC	NP	NC
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

