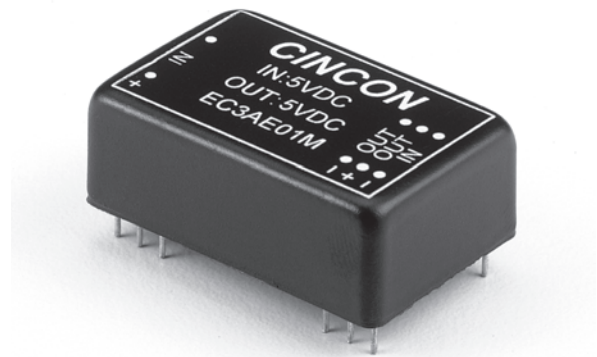


# EC3AE

S E R I E S

## 3 WATT DC-DC CONVERTERS



### Features

- 3W Isolated Output
- Efficiency to 61%
- DIP-24 / SMD Package
- LC Input Filter
- Regulated Outputs
- Low Ripple and Noise

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT CURRENT		% EFF.	CASE
				NO LOAD	FULL LOAD		
EC3AE01M EC3AE02M EC3AE03M EC3AE04M EC3AE05M	5 VDC	5 VDC 12 VDC 15 VDC ±12 VDC ±15 VDC	600 mA 250 mA 200 mA ±125 mA ±100 mA	120 mA	984 mA	61	DIP-24
EC3AE11M EC3AE12M EC3AE13M EC3AE14M EC3AE15M	12 VDC	5 VDC 12 VDC 15 VDC ±12 VDC ±15 VDC	600 mA 250 mA 200 mA ±125 mA ±100 mA	60 mA	410 mA	61	DIP-24
EC3AE21M EC3AE22M EC3AE23M EC3AE24M EC3AE25M	24 VDC	5 VDC 12 VDC 15 VDC ±12 VDC ±15 VDC	600 mA 250 mA 200 mA ±125 mA ±100 mA	40 mA	205 mA	61	DIP-24
EC3AE31M EC3AE32M EC3AE33M EC3AE34M EC3AE35M	28 VDC	5 VDC 12 VDC 15 VDC ±12 VDC ±15 VDC	600 mA 250 mA 200 mA ±125 mA ±100 mA	35 mA	176 mA	61	DIP-24
EC3AE41M EC3AE42M EC3AE43M EC3AE44M EC3AE45M	48 VDC	5 VDC 12 VDC 15 VDC ±12 VDC ±15 VDC	600 mA 250 mA 200 mA ±125 mA ±100 mA	20 mA	102 mA	61	DIP-24

### Specifications

**INPUT SPECIFICATIONS:**

Input Voltage Range.....±10%  
Input Filter.....LC Type

**OUTPUT SPECIFICATIONS:**

Voltage Accuracy.....± 3.0% max.  
Temperature Coefficient.....± 0.02% /°C  
Ripple and Noise, 20MHz BW.....50mV pk-pk max.  
Short Circuit Protection.....Indefinite & Current Limit  
Line Regulation<sup>1</sup> .....± 0.3% max.  
Load Regulation<sup>2</sup> Single.....± 0.5% max.  
Dual.....± 1.0% max.

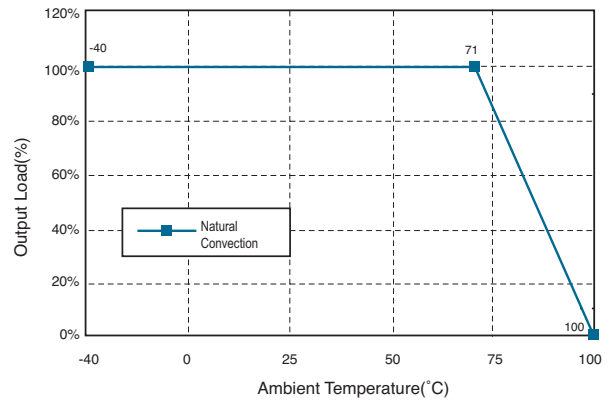
**GENERAL SPECIFICATIONS:**

Efficiency..... See Table  
Isolation Capacitance.....150pF typ.  
Isolation Resistance.....10<sup>9</sup> ohm min.  
Switching Frequency.....80KHz 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>4</sup>.....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.....1.25x 0.80x0.45 inches (31.8x20.3x1.4 mm)  
Weight.....17.2g  
Case Material ..... Black Coated Copper with  
Non-Conductive Base

**ISOLATION VOLTAGE:**

500 VDC min.....Standard Models

### EC3AE Series Derating Curve



**NOTE:**

- Measured From High Line to Low Line.
- Measured From Full Load to 10% Load.
- Suffix "S" to the Model Number with SMD packages.
- Maximum case temperature under any operating condition should not be exceeded 100°C.

### PIN CONNECTION

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

\*NC-NO CONNECTION WITH PIN

\*NP-No 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

