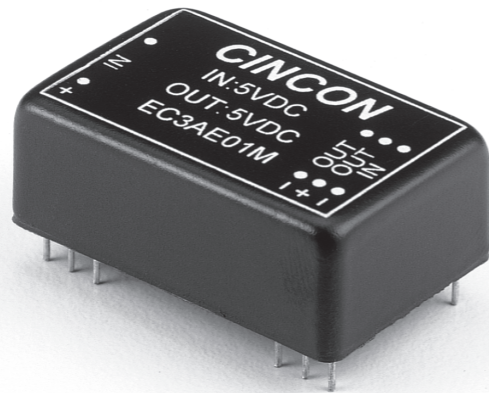


# EC3AE

S E R I E S

## 3 WATT DC-DC CONVERTERS



### Features

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

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

### 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 p-p max.  
 Short Circuit Protection.....Indefinite & Current Limit  
 Line Regulation<sup>1</sup>, Single/Dual.....± 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> ohms  
 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.....1.25 x 0.80 x 0.40 inches (31.8 x 20.3 x 10.2mm)  
 SMD.....1.25 x 0.80 x 0.45 inches (31.8 x 20.3 x 11.4mm)  
 Weight.....17.2g

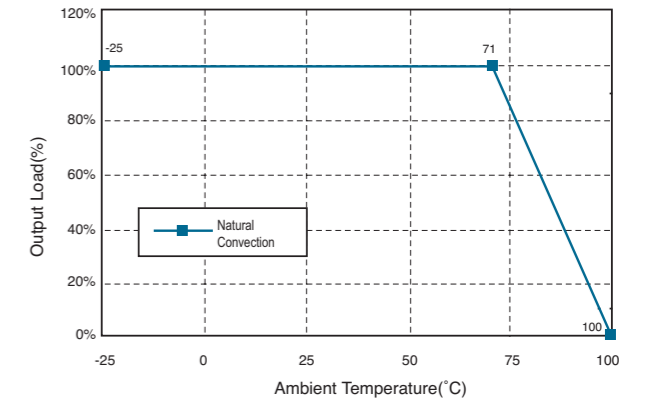
#### ISOLATION VOLTAGE:

500 VDC min.....Standard Models

#### CASE MATERIAL:

Standard Models.....Black Coated Copper with  
 Non-Conductive Base

### EC3AE Series Derating Curve



#### NOTE:

1. Measured From High Line to Low Line
2. Measured From Full Load to 10% Load
3. Suffix "S" to the Model Number with SMD packages
4. Maximum case temperature under any operating condition should not exceed 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  
 All Dimensions In Inches (mm)  
 Tolerance Inches: xx= ±.02, xxx= ±.010  
 Millimeters: x= ±.5, xx= ±.25

