



EC3AE SERIES

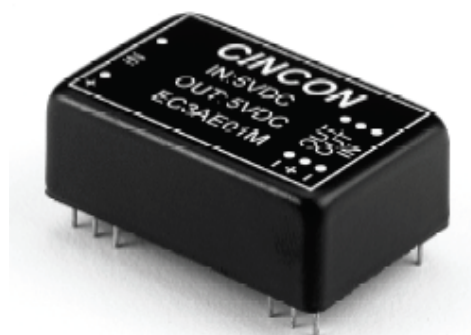
3 WATT

DC-DC CONVERTERS



FEATURES

- * 3W Isolated Output
- * DIP-24/SMD Package
- * Efficiency to 61%
- * Regulated Outputs
- * 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	5 VDC	12 VDC	250 mA	120 mA	984 mA	61	DIP-24
EC3AE03M	5 VDC	15 VDC	200 mA	120 mA	984 mA	61	DIP-24
EC3AE04M	5 VDC	±12 VDC	±125 mA	120 mA	984 mA	61	DIP-24
EC3AE05M	5 VDC	±15 VDC	±100 mA	120 mA	984 mA	61	DIP-24
EC3AE11M	12 VDC	5 VDC	600 mA	60 mA	410 mA	61	DIP-24
EC3AE12M	12 VDC	12 VDC	250 mA	60 mA	410 mA	61	DIP-24
EC3AE13M	12 VDC	15 VDC	200 mA	60 mA	410 mA	61	DIP-24
EC3AE14M	12 VDC	±12 VDC	±125 mA	60 mA	410 mA	61	DIP-24
EC3AE15M	12 VDC	±15 VDC	±100 mA	60 mA	410 mA	61	DIP-24
EC3AE21M	24 VDC	5 VDC	600 mA	40 mA	205 mA	61	DIP-24
EC3AE22M	24 VDC	12 VDC	250 mA	40 mA	205 mA	61	DIP-24
EC3AE23M	24 VDC	15 VDC	200 mA	40 mA	205 mA	61	DIP-24
EC3AE24M	24 VDC	±12 VDC	±125 mA	40 mA	205 mA	61	DIP-24
EC3AE25M	24 VDC	±15 VDC	±100 mA	40 mA	205 mA	61	DIP-24
EC3AE31M	28 VDC	5 VDC	600 mA	35 mA	176 mA	61	DIP-24
EC3AE32M	28 VDC	12 VDC	250 mA	35 mA	176 mA	61	DIP-24
EC3AE33M	28 VDC	15 VDC	200 mA	35 mA	176 mA	61	DIP-24
EC3AE34M	28 VDC	±12 VDC	±125 mA	35 mA	176 mA	61	DIP-24
EC3AE35M	28 VDC	±15 VDC	±100 mA	35 mA	176 mA	61	DIP-24
EC3AE41M	48 VDC	5 VDC	600 mA	20 mA	102 mA	61	DIP-24
EC3AE42M	48 VDC	12 VDC	250 mA	20 mA	102 mA	61	DIP-24
EC3AE43M	48 VDC	15 VDC	200 mA	20 mA	102 mA	61	DIP-24
EC3AE44M	48 VDC	±12 VDC	±125 mA	20 mA	102 mA	61	DIP-24
EC3AE45M	48 VDC	±15 VDC	±100 mA	20 mA	102 mA	61	DIP-24

SPECIFICATIONS

All Specifications Typical At Nominal Line, Full Load, and 25°C Unless Otherwise Noted

INPUT SPECIFICATIONS:

Input Voltage Range $\pm 10\%$
Input Filter LC Type

OUTPUT SPECIFICATIONS:

Voltage Accuracy $\pm 3.0\%$ max.
Temperature Coefficient $\pm 0.02\%/^{\circ}\text{C}$
Ripple & Noise, 20MHz BW 50mV pk-pk max.
Short Circuit Protection Indefinite & Current Limit
Line Regulation (note 1) $\pm 0.3\%$ max.
Load Regulation (note 2) Single $\pm 0.5\%$ max.
Dual $\pm 1.0\%$ max.

GENERAL SPECIFICATIONS:

Efficiency See Table
Isolation Capacitance 150pF typ.
Isolation Resistance 10^9 ohm min.
Switching Frequency 80KHz typ.
Operating Ambient Temperature Range -25°C to $+71^{\circ}\text{C}$
De-rating, Above 71°C Linearly to Zero power at 100°C
Case Temperature (note 4) 100°C max.
Cooling Natural Convection
Storage Temperature Range -40°C to $+100^{\circ}\text{C}$
Dimensions DIP 1.25x0.80x0.40 inches(31.8x20.3x10.2 mm)
SMD 1.25x0.80x0.45 inches(31.8x20.3x11.4 mm)
Weight 17.2g

ISOLATION VOLTAGE:

500 VDC min. Standard Models

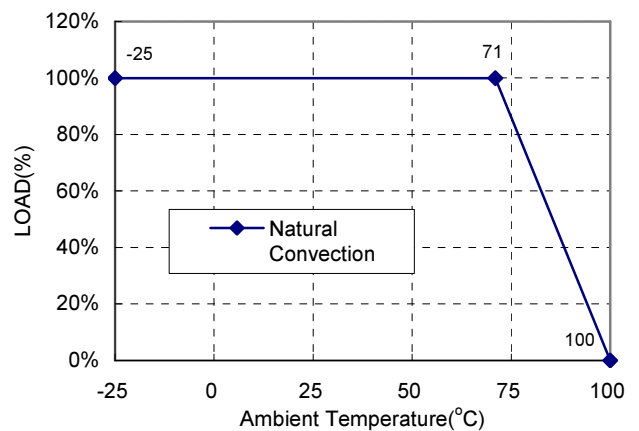
CASE MATERIAL:

Standard Models 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. Suffix "S" to the model number with SMD packages.
4. Maximum case temperature under any operating condition should not be exceeded 100°C .

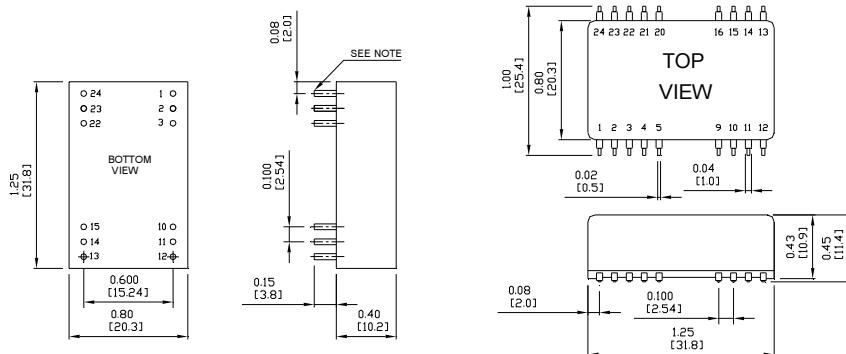
Typical Derating curve for Natural Convection



Case A Dimensions:

NOTE: Pin Size is 0.02 ± 0.002 Inch (0.5 ± 0.05 mm) DIA
All Dimensions In Inches (mm)
Tolerances Inches: X.XX = ± 0.02 , X.XXX = ± 0.010
Millimeters: X.X = ± 0.5 , X.XX = ± 0.25

CASE AS



PIN CONNECTION				
500 VDC				
Pin	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

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