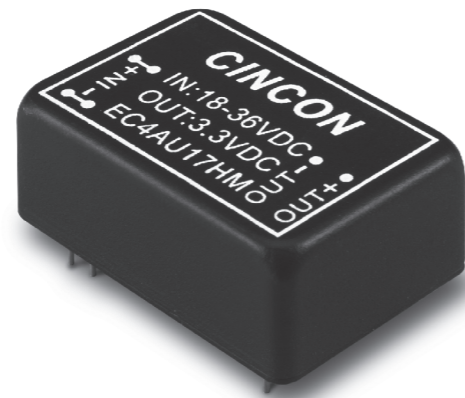


# EC4AU

S E R I E S

## 6 WATT DC-DC CONVERTERS



### Features

- 5-6W Isolated Output
- DIP-24 / SMD Package
- Regulated Outputs
- Efficiency to 87%
- Meets EN55022 Class A, Conducted
- Pi Input Filter
- Continuous Short Circuit Protection

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT		INPUT CURRENT		% EFF.	CASE
			MIN.	MAX.	NO LOAD	FULL LOAD		
EC4AU01HM	9-18 VDC	5 VDC	50 mA	1000 mA	20 mA	514 mA	81	DIP-24
EC4AU02HM		12 VDC	25 mA	500 mA		595 mA	84	
EC4AU03HM		15 VDC	20 mA	400 mA		588 mA	85	
EC4AU04HM		±12 VDC	13 mA	±250 mA		588 mA	85	
EC4AU05HM		±15 VDC	10 mA	±200 mA		588 mA	85	
EC4AU06HM		±5 VDC	25 mA	±500 mA		514 mA	81	
EC4AU07HM		3.3 VDC	60 mA	1200 mA		429 mA	77	
EC4AU11HM	18-36 VDC	5 VDC	50 mA	1000 mA	5 mA	251 mA	83	DIP-24
EC4AU12HM		12 VDC	25 mA	500 mA		291 mA	86	
EC4AU13HM		15 VDC	20 mA	400 mA		287 mA	87	
EC4AU14HM		±12 VDC	13 mA	±250 mA		291 mA	86	
EC4AU15HM		±15 VDC	10 mA	±200 mA		287 mA	87	
EC4AU16HM		±5 VDC	25 mA	±500 mA		251 mA	83	
EC4AU17HM		3.3 VDC	60 mA	1200 mA		209 mA	79	
EC4AU21HM	36-75 VDC	5 VDC	50 mA	1000 mA	3 mA	126 mA	83	DIP-24
EC4AU22HM		12 VDC	25 mA	500 mA		145 mA	86	
EC4AU23HM		15 VDC	20 mA	400 mA		144 mA	87	
EC4AU24HM		±12 VDC	13 mA	±250 mA		145 mA	86	
EC4AU25HM		±15 VDC	10 mA	±200 mA		144 mA	87	
EC4AU26HM		±5 VDC	25 mA	±500 mA		126 mA	83	
EC4AU27HM		3.3 VDC	60 mA	1200 mA		104 mA	79	

NOTE: 1. Nominal Input Voltage 12, 24 or 48 VDC

### Specifications

**INPUT SPECIFICATIONS:**

Input Voltage Range.....	12V.....	9-18V
	24V.....	18-36V
	48V.....	36-75V
Under Voltage Lockout.....	12Vin Power Up.....	8.5V
	12Vin Power Down.....	8V
	24Vin Power Up.....	16.5V
	24Vin Power Down.....	16V
	48Vin Power Up.....	32.5V
	48Vin Power Down.....	32V
Input Filter.....		Pi Type

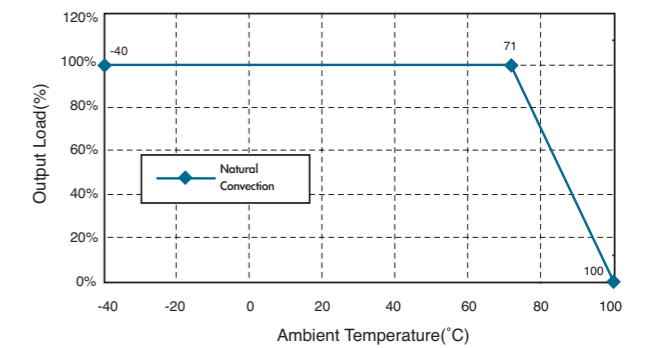
**OUTPUT SPECIFICATIONS:**

Voltage Accuracy.....	±1.5% max.
Voltage Balance (Dual).....	±1.0% max.
Transient Response: 25% Step Load Change	
Error Band.....	±6% Vout Nominal
Recovery Time.....	<500us
Ripple and Noise, 20MHz BW.....	100mV p-p max.
Temperature Coefficient.....	±0.05%/°C
Line Regulation <sup>1</sup> .....	±0.5% max.
Load Regulation <sup>2</sup> .....	Single..... ±0.5% max.
	Dual..... ±1.0% max.
Output Short Circuit Protection.....	Continuous

**GENERAL SPECIFICATIONS:**

Efficiency.....	See Table
Isolation Voltage.....	1500VDC min.
Isolation Resistance.....	10 <sup>9</sup> Ohm min.
Switching Frequency.....	100KHz min.
Operating Ambient Temperature.....	-40°C to +85°C
De-rating, Above 71°C.....	Linearly to Zero Power at 100°C
Case Temperature <sup>3</sup> .....	100°C max.
Cooling.....	Natural Convection
Storage Temperature.....	-40°C to +125°C
EMI.....	Conductive EMI Meet EN55022 Class A
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)
Case Material.....	Black Coated Copper with Non-Conductive Base
Weight.....	15g

### EC4AU 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 25% Load
4. Suffix "S" to the Model Number with SMD packages
5. Maximum case temperature under any operating condition should not exceed 100°C

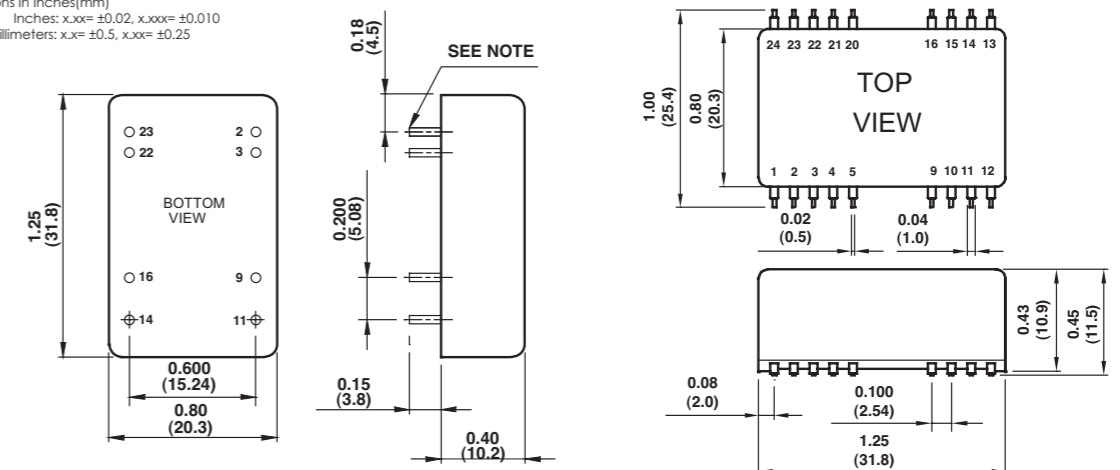
### PIN CONNECTION

Pin	Single Output		Dual Output	
	DIP	SMD	DIP	SMD
1, 24	NP	NC	NP	NC
2, 3	-V Input		-V Input	
4, 5	NP	NC	NP	NC
9	NP	NC	Common	
10	NP	NC	NC	
11	NC		-V Output	
12	NP	NC	NP	NC
13	NP	NC	NP	NC
14	+V Output		+V Output	
15	NP	NC	NP	NC
16	-V Output		Common	
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  
All Dimensions In Inches(mm)  
Tolerance Inches: x.xx= ±0.02, x.xxx= ±0.010  
Millimeters: x.x= ±0.5, x.xx= ±0.25



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