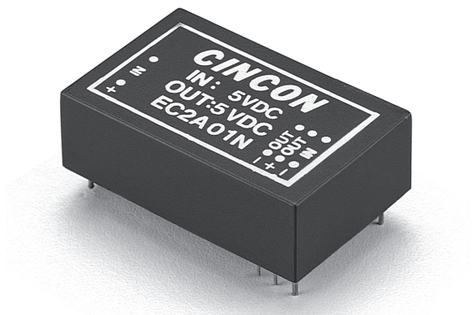
EC2AN SERIES

1.0-1.5 WATT, UNREGULATED DC-DC CONVERTERS



RoHS

Features

- 1-1.5W Output Power
- Unregulated Outputs
- DIP-24 / SMD Package
- Efficiency to 70%
- Input Voltage 5V & 12V
- Pi Input Filter

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT CURRENT		CASE
				NO LOAD	FULL LOAD	
EC2A01N	5 VDC	5 VDC	220mA	115 mA	330 mA	DIP-24
EC2A02N		12 VDC	125 mA	115 mA	420 mA	DIP-24
EC2A03N		15 VDC	100 mA	115 mA	420 mA	DIP-24
EC2A04N		±12 VDC	±62 mA	115 mA	420 mA	DIP-24
EC2A05N		±15 VDC	±50 mA	115 mA	420 mA	DIP-24
EC2A11N	12 VDC	5 VDC	220 mA	45 mA	120 mA	DIP-24
EC2A12N		12 VDC	125 mA	45 mA	165 mA	DIP-24
EC2A13N		15 VDC	100 mA	45 mA	165 mA	DIP-24
EC2A14N		±12 VDC	±62 mA	45 mA	165 mA	DIP-24
EC2A15N		±15 VDC	±50 mA	45 mA	165 mA	DIP-24

Specifications

INPUT SPECIFICATIONS:
Input Voltage Range.....±10%
Input Filter.....Pi Type

OUTPUT SPECIFICATIONS:
Voltage Accuracy.....±3.0% max.
Ripple and Noise, 20MHz BW[1].....100mV p-p max.
Short Circuit Protection.....Momentary
Line Regulation[2].....±1.2%
Load Regulation[3], EC2A01N.....±8.0%
All Other Models.....±6.0%

GENERAL SPECIFICATIONS:
Efficiency.....60%~80%
Isolation Capacitance.....30pF
Isolation Resistance.....10^9ohms
Switching Frequency.....20KHz, 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[5]) .....95°C max
(Copper case[5]) .....100°C max
Cooling ..... Natural Convection
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.....11.8g

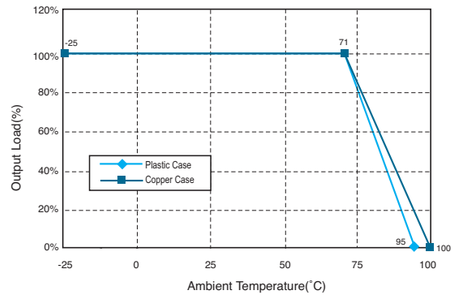
ISOLATION VOLTAGE:
500 VDC min.....Standard Models
3K VDC min.....Suffix "H" Models
1.5K VDC min.....Suffix "HM" Models

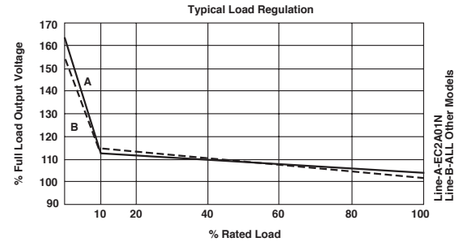
CASE MATERIAL:
Standard Models.....Non-Conductive Black Plastic
Suffix "M" Models.....Black Coated Copper with Non-Conductive Base

NOTE:

1. 15uF 35V, Tantalum Capacitor Across Each Output.
2. Line regulation is per 1.0% change in input voltage.
3. Load regulation is for load change from 100% to 20% See graph of load regulation
4. Suffix "S" to the Model Number with SMD packages
5. Maximum case temperature under any operating condition should not exceed 95°C(Plastic Case), 100°C(Copper Case).

EC2AN Series Derating Curve





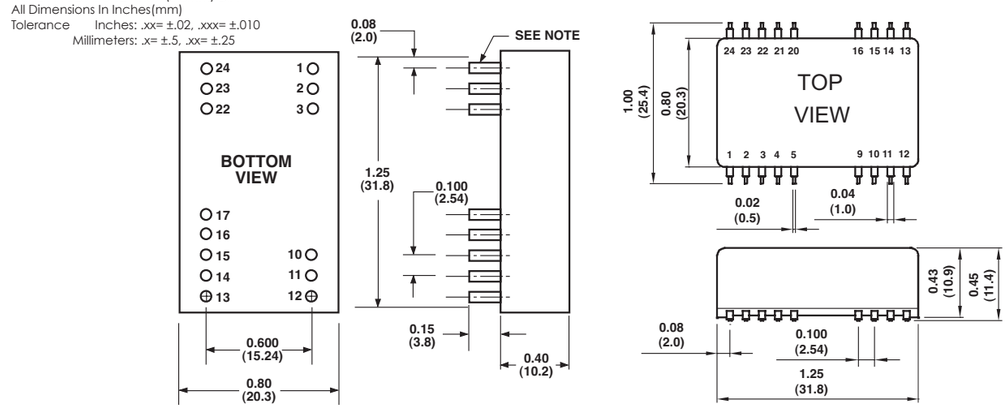
PIN CONNECTION

Pin	500 VDC Single Output DIP	500 VDC Single Output SMD	500 VDC Dual Output DIP	500 VDC Dual Output SMD	Pin	1.5K & 3K VDC Single Output DIP	1.5K & 3K VDC Single Output SMD	1.5K & 3K VDC Dual Output DIP	1.5K & 3K VDC Dual Output SMD
1,24	+V Input		+V Input		1,2,3	+V Input		+V Input	
2,23	NC		-V Output		22,23,24	-V Input		-V Input	
3,22	NC		Common		4	NP	NC	NP	NC
4,5	NP	NC	NP	NC	5	NP	NC	NP	NC
9	NP	NC	NP	NC	9	NP	NC	NP	NC
10	-V Output		Common		10,11	NP	NC	Go Output	
11	+V Output		+V Output		12	-V Output		-TP	
12,13	-V Input		-V Input		13	+V Output		-V Output	
14	+V Output		+V Output		14	NP	NC	NP	NC
15	-V Output		Common		15	NP	NC	+V Output	
16	NP	NC	NP	NC	16	NP	NC	+TP	
17	NP		NP		17	+TP	NP	NP	
20,21	NP	NC	NP	NC	20,21	NP	NC	NP	NC

*NP-NO PIN *TP-TEST POINT
*NC-NO CONNECTION WITH PIN *GO-GROUND

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



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

Mouser Electronics

Authorized Distributor

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Cincon:

EC2A01N EC2A02N EC2A04N EC2A05N EC2A11N EC2A14N EC2A15N EC2A04N-H EC2A01N-H EC2A04N-S EC2A02N-S EC2A14N-S EC2A01N-S EC2A14N-HM EC2A13N-S EC2A02N-HM EC2A13N-H EC2A05N-H EC2A03N-S EC2A15N-HM EC2A01NM EC2A02NM EC2A09NM EC2A19NM EC2A05NM EC2A14NM EC2A15NM EC2A01N-HM EC2A15N-S EC2A04N-HM EC2A11N-H EC2A03N-HM EC2A12N-HM EC2A05N-HM EC2A11N-S EC2A12N-S EC2A05N-S EC2A02N-H EC2A11N-HM EC2A14N-H EC2A12N-H EC2A03N-H EC2A15N-H