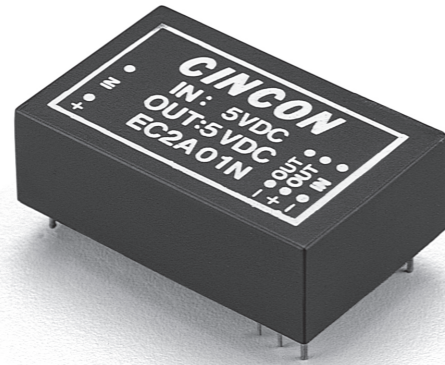


EC2AN

S E R I E S

1.0-1.5 WATT, UNREGULATED DC-DC CONVERTERS



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	220mA	115 mA	330 mA	DIP-24
EC2A02N		12 VDC	125 mA	115 mA	420 mA	DIP-24
EC2A03N	5 VDC	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		5 VDC	220 mA	45 mA	120 mA	DIP-24
EC2A12N		12 VDC	125 mA	45 mA	165 mA	DIP-24
EC2A13N	12 VDC	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 BW¹.....100mV p-p max.
Short Circuit Protection.....Momentary
Line Regulation².....±1.2%
Load Regulation³, EC2A01N.....±8.0%
All Other Models.....±6.0%

GENERAL SPECIFICATIONS:

Efficiency.....60%~80%
Isolation Capacitance.....30pF
Isolation Resistance.....10⁹ohms
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 case⁴)95°C max
(Copper case⁵)100°C max
Cooling Natural Convection
DimensionsDIP.....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

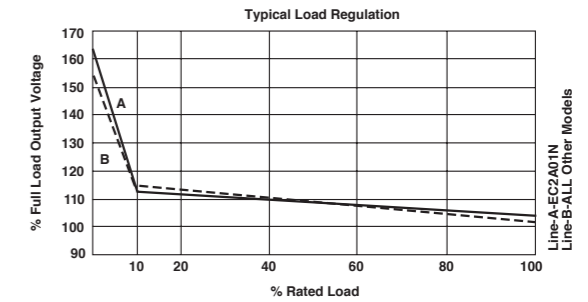
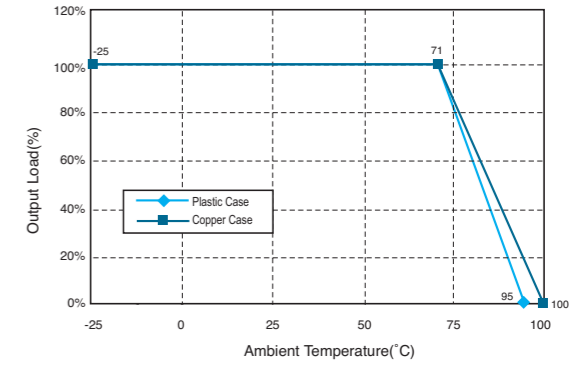
CASE MATERIAL:

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

