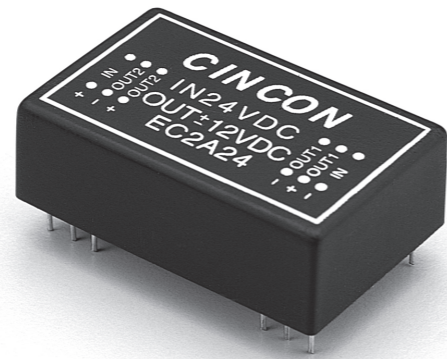


# EC2A

S E R I E S

## 1.5 WATT DC-DC CONVERTERS



### Features

- 1.5W Output Power
- DIP-24 / SMD Package
- Regulated Outputs
- Efficiency to 50%
- Pi Input Filter
- Low Ripple and Noise

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT CURRENT		CASE
				NO LOAD	FULL LOAD	
EC2A01	5 VDC	5 VDC	300 mA	110 mA	620 mA	DIP-24
EC2A02		12 VDC	125 mA		550 mA	
EC2A03		15 VDC	100 mA		550 mA	
EC2A04		±12 VDC	±60 mA		550 mA	
EC2A05		±15 VDC	±50 mA		550 mA	
EC2A11	12 VDC	5 VDC	300 mA	40 mA	260 mA	DIP-24
EC2A12		12 VDC	125 mA		215 mA	
EC2A13		15 VDC	100 mA		215 mA	
EC2A14		±12 VDC	±60 mA		215 mA	
EC2A15		±15 VDC	±50 mA		215 mA	
EC2A21	24 VDC	5 VDC	300 mA	20 mA	130 mA	DIP-24
EC2A22		12 VDC	125 mA		115 mA	
EC2A23		15 VDC	100 mA		115 mA	
EC2A24		±12 VDC	±60 mA		115 mA	
EC2A25		±15 VDC	±50 mA		115 mA	
EC2A31	28 VDC	5 VDC	300 mA	20 mA	110 mA	DIP-24
EC2A32		12 VDC	125 mA		100 mA	
EC2A33		15 VDC	100 mA		100 mA	
EC2A34		±12 VDC	±60 mA		100 mA	
EC2A35		±15 VDC	±50 mA		100 mA	
EC2A41	48 VDC	5 VDC	300 mA	15 mA	65 mA	DIP-24
EC2A42		12 VDC	125 mA		60 mA	
EC2A43		15 VDC	100 mA		60 mA	
EC2A44		±12 VDC	±60 mA		60 mA	
EC2A45		±15 VDC	±50 mA		60 mA	

### Specifications

#### INPUT SPECIFICATIONS:

Input Voltage Range.....±10%  
 Input Filter.....Pi Type

#### OUTPUT SPECIFICATIONS:

Voltage Accuracy.....± 4.0% max.  
 Temperature Coefficient.....± 0.02% / °C  
 Ripple and Noise, 20MHz BW.....50mV p-p max.  
 Short Circuit Protection.....Momentary  
 Line Regulation.....± 0.3%  
 Load Regulation.....± 0.5%

#### GENERAL SPECIFICATIONS:

Efficiency.....50%  
 Isolation Capacitance.....30pF  
 Isolation Resistance.....10<sup>9</sup> ohms  
 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<sup>2</sup>) .....95°C max  
 Case Temperature (Copper case<sup>2</sup>) .....100°C max  
 Cooling ..... Natural Convection  
 Storage Temperature Range.....-40°C to + 100°C  
 Dimensions .....DIP.....1.25 x 0.8 x 0.4 inches  
 (31.8 x 20.3 x 10.2mm)  
 SMD.....1.25 x 0.8 x 0.45 inches  
 (31.8 x 20.3 x 11.4mm)  
 Weight.....12.5g

#### ISOLATION VOLTAGE:

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

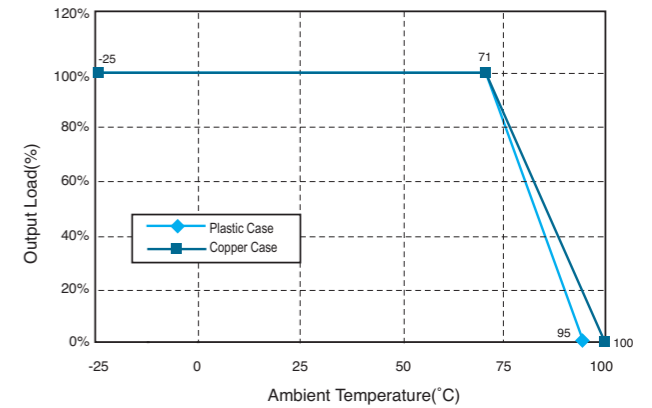
#### CASE MATERIAL:

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

#### NOTE:

1. Suffix "S" to the Model Number with SMD packages
2. Maximum case temperature under any operating condition should not exceed 95°C (Plastic Case), 100°C (Copper Case).

### EC2A Series Derating Curve



Ambient Temperature(°C)

### PIN CONNECTION

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

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

### CASE A

NOTE: Pin Size is .02" Inch (0.5mm) DIA  
 All Dimensions In Inches(mm)  
 Tolerance Inches: .xx= ±.02, .xxx= ±.010  
 Millimeters: x= ±.5, .xx= ±.25

