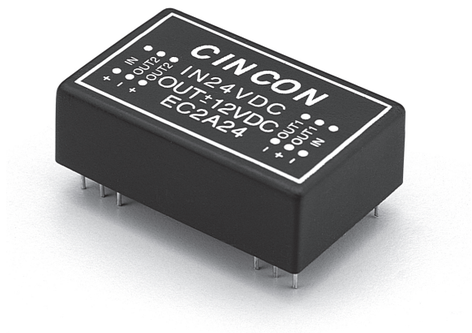
EC2A

S E R I E S

1.5 WATT DC-DC CONVERTERS



RoHS

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	300 mA		620 mA	
EC2A02		12 VDC	125 mA		550 mA	
EC2A03	5 VDC	15 VDC	100 mA	110 mA	550 mA	DIP-24
EC2A04		±12 VDC	±60 mA		550 mA	
EC2A05		±15 VDC	±50 mA		550 mA	
EC2A11		5 VDC	300 mA		260 mA	
EC2A12		12 VDC	125 mA		215 mA	
EC2A13	12 VDC	15 VDC	100 mA	40 mA	215 mA	DIP-24
EC2A14		±12 VDC	±60 mA		215 mA	
EC2A15		±15 VDC	±50 mA		215 mA	
EC2A21		5 VDC	300 mA		130 mA	
EC2A22		12 VDC	125 mA		115 mA	
EC2A23	24 VDC	15 VDC	100 mA	20 mA	115 mA	DIP-24
EC2A24		±12 VDC	±60 mA		115 mA	
EC2A25		±15 VDC	±50 mA		115 mA	
EC2A31		5 VDC	300 mA		110 mA	
EC2A32		12 VDC	125 mA		100 mA	
EC2A33	28 VDC	15 VDC	100 mA	20 mA	100 mA	DIP-24
EC2A34		±12 VDC	±60 mA		100 mA	
EC2A35		±15 VDC	±50 mA		100 mA	
EC2A41		5 VDC	300 mA		65 mA	
EC2A42		12 VDC	125 mA		60 mA	
EC2A43	48 VDC	15 VDC	100 mA	15 mA	60 mA	DIP-24
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.....10^9 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[2]) .....95°C max
(Copper case[2]) .....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

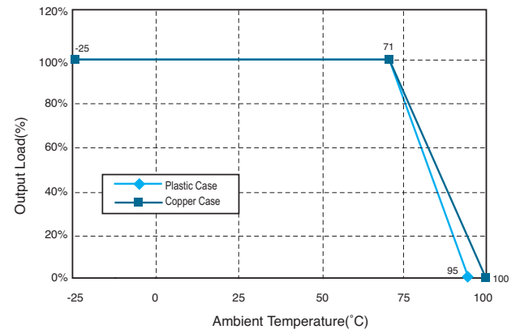
CASE MATERIAL:

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



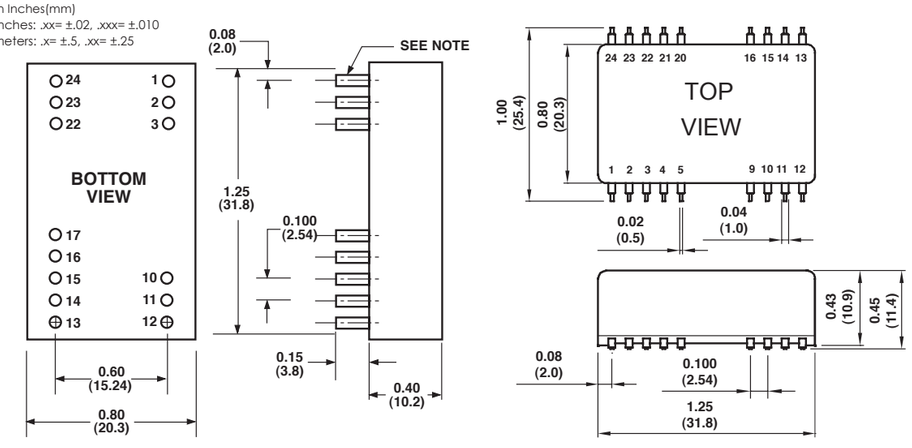
PIN CONNECTION

500 VDC					1.5K & 3K VDC				
Pin	Single Output		Dual Output		Pin	Single Output		Dual Output	
	DIP	SMD	DIP	SMD		DIP	SMD	DIP	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 .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.