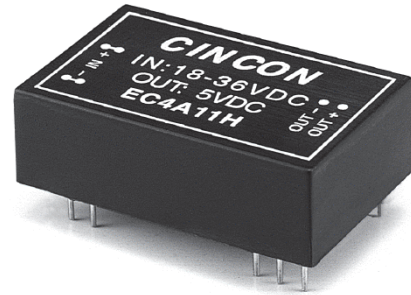


EC4A

S E R I E S

5-6 WATT DC-DC CONVERTERS



Features

- 5-6W Isolated Output
- Efficiency to 84%
- DIP-24 / SMD Package
- Pi Input Filter
- Regulated Outputs
- Continuous Short Circuit Protection

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT CURRENT		% EFF.	CASE
				NO LOAD	FULL LOAD		
EC4A01	9-18 VDC	5 VDC	1000 mA	7.5 mA	541 mA	77	DIP-24
EC4A02		12 VDC	470 mA	7.5 mA	573 mA	82	
EC4A03		15 VDC	400 mA	7.5 mA	625 mA	80	
EC4A04		±12 VDC	±230 mA	12 mA	554 mA	83	
EC4A05		±15 VDC	±190 mA	12 mA	556 mA	81	
EC4A06		±5 VDC	±500 mA	12 mA	541 mA	77	
EC4A07		3.3 VDC	1000 mA	7.5 mA	382 mA	72	
EC4A11	18-36 VDC	5 VDC	1000 mA	5 mA	260 mA	80	DIP-24
EC4A12		12 VDC	470 mA	5 mA	280 mA	84	
EC4A13		15 VDC	400 mA	5 mA	298 mA	84	
EC4A14		±12 VDC	±230 mA	7.5 mA	280 mA	82	
EC4A15		±15 VDC	±190 mA	7.5 mA	293 mA	81	
EC4A16		±5 VDC	±500 mA	7.5 mA	260 mA	80	
EC4A17		3.3 VDC	1000 mA	5 mA	186 mA	74	
EC4A21	36-72 VDC	5 VDC	1000 mA	2 mA	132 mA	79	DIP-24
EC4A22		12 VDC	470 mA	2 mA	142 mA	83	
EC4A23		15 VDC	400 mA	2 mA	154 mA	81	
EC4A24		±12 VDC	±230 mA	3 mA	142 mA	81	
EC4A25		±15 VDC	±190 mA	3 mA	147 mA	81	
EC4A26		±5 VDC	±500 mA	3 mA	130 mA	80	
EC4A27		3.3 VDC	1000 mA	2 mA	93 mA	74	

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

Specifications

INPUT SPECIFICATIONS:

Input Voltage Range.....12V.....9-18V
 24V.....18-36V
 48V.....36-72V
 Input Filter.....Pi Type

OUTPUT SPECIFICATIONS:

Voltage Accuracy.....±2.0% max.
 Voltage Balance (Dual).....±1.0% max.
 Temperature Coefficient.....±0.05%/°C
 Ripple and Noise, 20MHz BW.....3.3V/5V.....100mV p-p max.
 12V/15V.....1% p-p max.
 Short Circuit Protection.....Continuous
 Line Regulation, Single/Dual.....±0.5% max.
 Load Regulation, Single.....±0.5% max.
 Dual.....±1.0% max.

GENERAL SPECIFICATIONS:

Efficiency.....See Table
 Isolation Resistance.....10⁹ Ohms
 Switching Frequency.....100KHz, 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*)95°C max
 (Copper case*)100°C max
 Cooling Natural Convection
 Storage Temperature Range.....-40°C to +100°C
 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.....12.5g

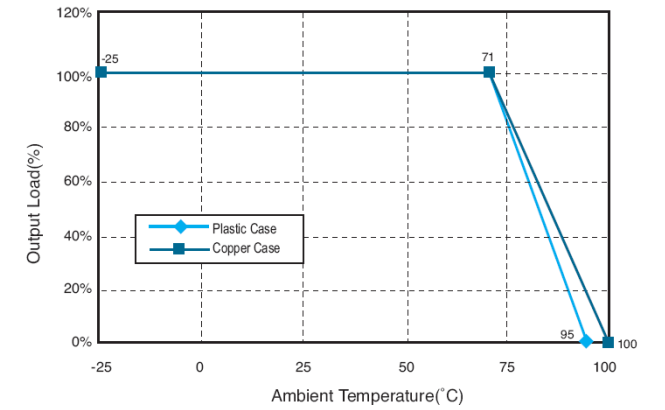
ISOLATION VOLTAGE:

500 VDC min.....Standard Models
 3K VDC min*.....Suffix "H" Models
 15K VDC min.....Suffix "HM" Models

CASE MATERIAL:

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

EC4A 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 1/4 Load
4. Non-Conductive Black Plastic Only
5. Suffix "S" to the Model Number with SMD packages
6. Maximum case temperature under any operating condition should not exceed 95°C (Plastic Case), 100°C (Copper Case).

PIN CONNECTION

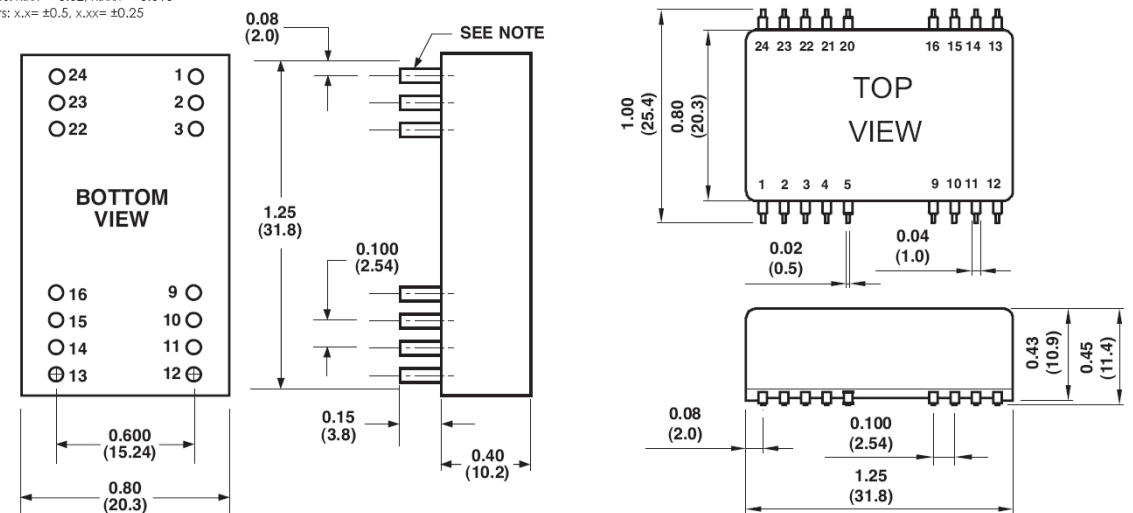
Pin	500 VDC				1.5K & 3K VDC				
	Single Output DIP	Single Output SMD	Dual Output DIP	Dual Output SMD	Pin	Single Output DIP	Single Output SMD	Dual Output DIP	Dual Output SMD
1,24	+V Input		+V Input		1,24	NP	NC	NP	NC
2,23	NC		-V Output		2,3	-V Input		-V Input	
3,22	NC		Common		4,5	NP	NC	NP	NC
4	NP	NC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