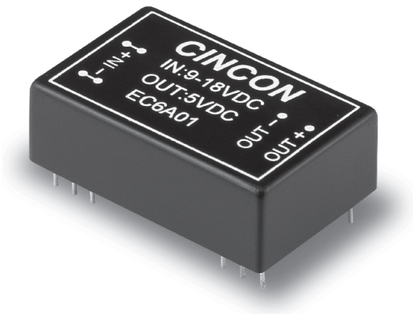
EC6A

S E R I E S

7.5 WATT DC-DC CONVERTERS



E176177

Features

- 7.5W Isolated Output
- DIP-24 / SMD Package
- Regulated Outputs
- Efficiency to 83%
- Pi Input Filter
- Continuous Short Circuit Protection

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT CURRENT		% EFF.	CASE
				NO LOAD	FULL LOAD		
EC6A01	9-18 VDC	5 VDC	1500 mA	25 mA	801 mA	78	DIP-24
EC6A02		12 VDC	625 mA	25 mA	762 mA	82	
EC6A03		15 VDC	500 mA	25 mA	762 mA	82	
EC6A04		±5 VDC	±750 mA	30 mA	791 mA	79	
EC6A05		±12 VDC	±310 mA	30 mA	753 mA	83	
EC6A06		±15 VDC	±250 mA	30 mA	753 mA	83	
EC6A07		3.3VDC	1500 mA	25 mA	557 mA	74	
EC6A11	18-36 VDC	5 VDC	1500 mA	20 mA	396 mA	79	DIP-24
EC6A12		12 VDC	625 mA	20 mA	381 mA	82	
EC6A13		15 VDC	500 mA	20 mA	381 mA	82	
EC6A14		±5 VDC	±750 mA	25 mA	386 mA	81	
EC6A15		±12 VDC	±310 mA	25 mA	377 mA	83	
EC6A16		±15 VDC	±250 mA	25 mA	377 mA	83	
EC6A17		3.3VDC	1500 mA	20 mA	271 mA	76	
EC6A21	36-72 VDC	5 VDC	1500 mA	10 mA	195 mA	80	DIP-24
EC6A22		12 VDC	625 mA	10 mA	190 mA	82	
EC6A23		15 VDC	500 mA	10 mA	190 mA	82	
EC6A24		±5 VDC	±750 mA	15 mA	193 mA	81	
EC6A25		±12 VDC	±310 mA	15 mA	188 mA	83	
EC6A26		±15 VDC	± 250 mA	15 mA	188 mA	83	
EC6A27		3.3VDC	1500 mA	10 mA	136 mA	76	

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.....100mV p-p max.
Short Circuit Protection.....Continuous
Line Regulation, Single/Dual[1].....± 0.2% max.
Load Regulation, Single[2].....± 0.5% max.
Dual[3].....± 1.0% max.

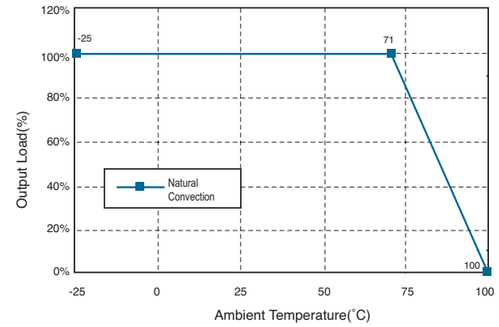
GENERAL SPECIFICATIONS:

Efficiency.....See Table
Isolation Voltage.....1500VDC min.
Isolation Resistance.....10^9 Ohms
Switching Frequency.....300KHz, Typ.
Operating Ambient Temperature Range ..... -25˚Cto +71˚C
De-rating, Above 71˚C..... Linearly to Zero power at 100˚C
Case Temperature[5].....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.....18.4g

CASE MATERIAL:

Case Material .....Black Coated Copper with Non-Conductive Base

EC6A 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. Suffix "S" to the Model Number with SMD packages
5. Maximum case temperature under any operating condition should not exceed 100˚C

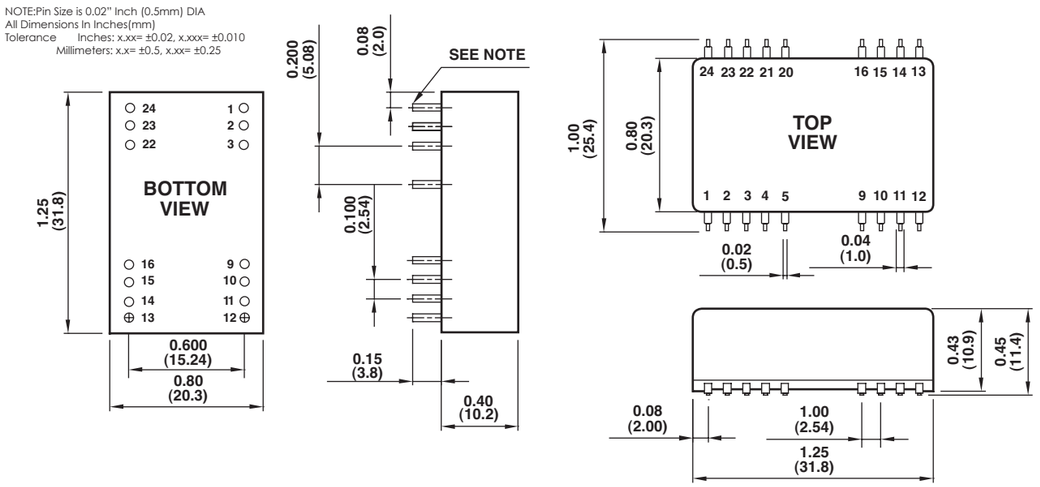
PIN CONNECTION

Pin	1500 VDC			
	Single Output		Dual Output	
	DIP	SMD	DIP	SMD
1, 24	NP	NC	NP	NC
2, 3	-V Input		-V Input	
4, 5	NP	NC	NP	NC
9	NC		Common	
10, 15	NC		NC	
11	NC		-V Output	
12,13	NP	NC	NP	NC
14	+V Output		+V Output	
16	-V Output		Common	
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.