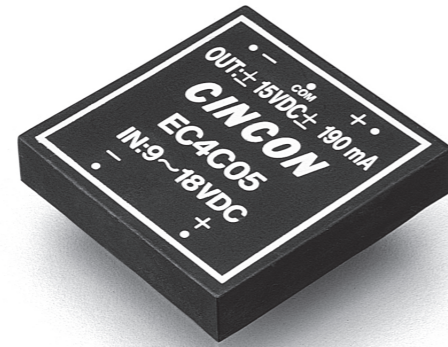


# EC4C

S E R I E S

## 5-6 WATT DC-DC CONVERTERS



### Features

- 5-6W Isolated Output
- 2" x 2" Case
- Regulated Outputs
- Efficiency to 79%
- Fixed 200KHz Switching Frequency
- Alternative Pin Configuration

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT CURRENT		% EFF.	SIZE
				NO LOAD	FULL LOAD		
EC4C01	9-18 VDC	5 VDC	1000 mA	20 mA	570 mA	73	2" x 2"
EC4C02		12 VDC	470 mA	30 mA	626 mA	75	
EC4C03		15 VDC	400 mA	30 mA	667 mA	75	
EC4C04		±12 VDC	±230 mA	35 mA	630 mA	73	
EC4C05		±15 VDC	±190 mA	35 mA	650 mA	73	
EC4C11	18-36 VDC	5 VDC	1000 mA	15 mA	278 mA	75	2" x 2"
EC4C12		12 VDC	470 mA	20 mA	305 mA	77	
EC4C13		15 VDC	400 mA	20 mA	325 mA	77	
EC4C14		±12 VDC	±230 mA	25 mA	307 mA	75	
EC4C15		±15 VDC	±190 mA	25 mA	317 mA	75	
EC4C21	36-72 VDC	5 VDC	1000 mA	10 mA	135 mA	77	2" x 2"
EC4C22		12 VDC	470 mA	15 mA	149 mA	79	
EC4C23		15 VDC	400 mA	15 mA	158 mA	79	
EC4C24		±12 VDC	±230 mA	20 mA	149 mA	77	
EC4C25		±15 VDC	±190 mA	20 mA	154 mA	77	

NOTE: 1. Nominal Input Voltage 12, 24 or 48 VDC  
2. Alternative pin-out version. To order, suffix a "S" to the standard model number.

### Specifications

#### INPUT SPECIFICATIONS:

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

#### OUTPUT SPECIFICATIONS:

Voltage Accuracy  
Single Output.....±1.0% max.  
Dual + Output.....±1.0% max.  
Dual - Output.....±3.0% max.  
Voltage Balance Dual Output at Full Load.....±1.0% max.  
Transient Response  
Single 25% Step Load Change.....<500µ sec.  
Dual FL-1/2L ±1% Error Band.....<500µ sec.  
Ripple & Noise 20MHz BW.....10mV RMS. max.  
75mV p-p max.  
Temperature Coefficient.....±0.02%/°C  
Short Circuit Protection.....Indefinite & Current Limit  
Line Regulation<sup>1</sup> Single/Dual Output.....±0.2% max.  
Load Regulation<sup>2</sup> Single/Dual Output.....±1.0% max.

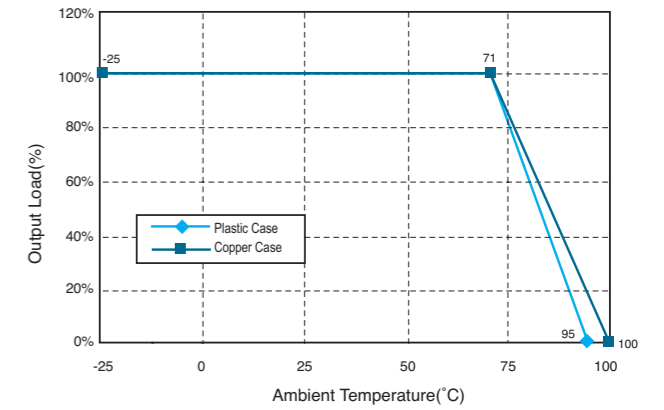
#### GENERAL SPECIFICATIONS:

Efficiency..... See Table  
Isolation Voltage.....500 VDC min.  
Isolation Resistance.....10<sup>9</sup>ohms  
Switching Frequency.....200KHz, typ.  
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>3</sup>) ..... 95°C max  
(Copper case<sup>3</sup>) ..... 100°C max  
Cooling ..... Natural Convection  
Storage Temperature Range.....-40°C to + 100°C  
Dimensions.....2.00 x 2.00 x 0.40 inches  
(50.8 x 50.8 x 10.2mm)  
Weight.....51g

#### CASE MATERIAL:

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

### EC4C Series Derating Curve

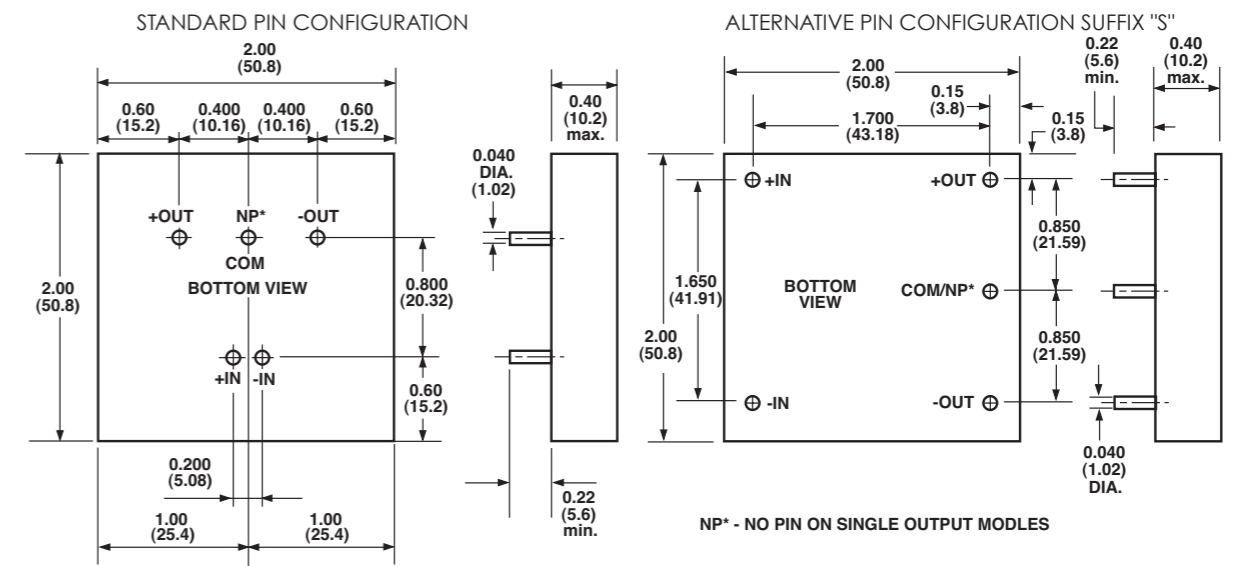


#### NOTE:

1. Measured From High Line to Low Line
2. Measured From Full Load to 1/4 Full Load
3. Determine the Correct Fuse Size by Calculating the Maximum DC Current Drain at Low Line Input, Maximum Load and Then Adding 20 to 25% to Get Desired Fuse Size.
4. Alternative Pin Configuration Suffix "S"
5. Maximum case temperature under any operating condition should not exceed 95°C (Plastic Case), 100°C (Copper Case).

### CASE C

All Dimensions In Inches(mm)  
Tolerance Inches: .xx= ±0.04, .xxx= ±0.10  
Millimeters: .x= ±1.0, .xx= ±0.25



All Specifications Typical At Nominal Line, Full Load and 25°C Unless Otherwise Noted.