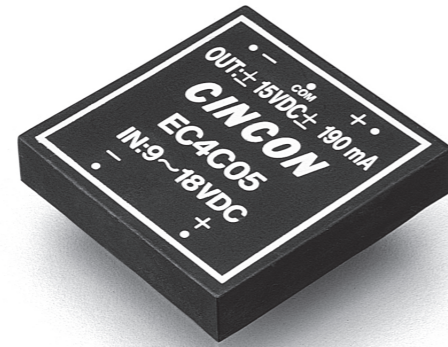


# EC4C

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.

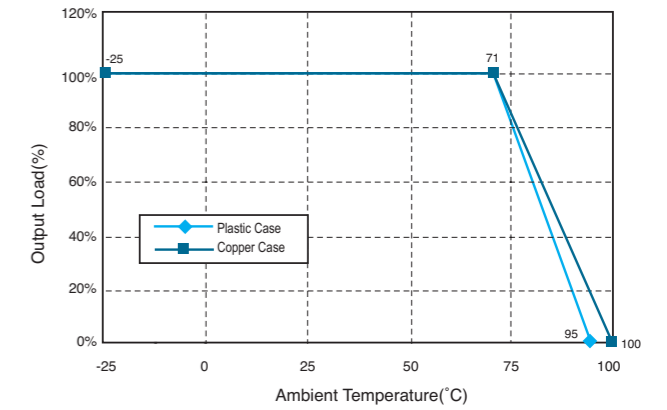
#### GENERAL SPECIFICATIONS:

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
Case Temperature (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

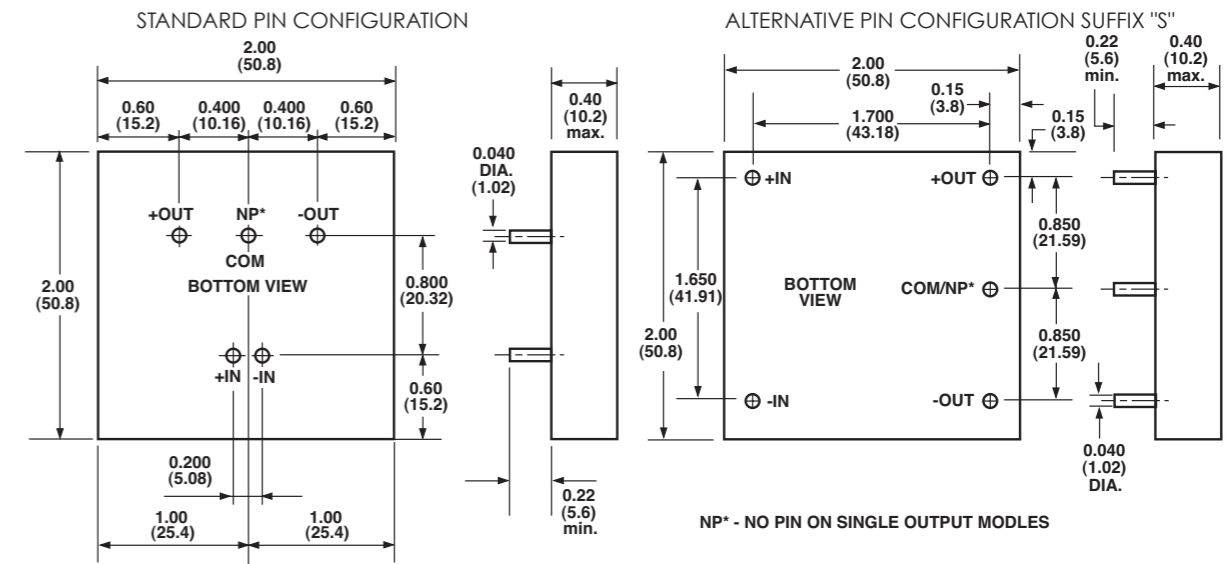


#### NOTE:

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.