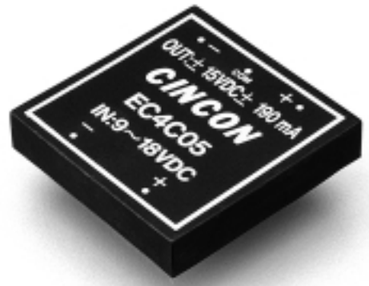
S E R I E S

EC4C

5-6 WATT WIDE INPUT DC-DC CONVERTERS



Features

- 5-6W Isolated Output
- 2:1 Input Range
- Efficiency to 79%
- 200 KHz Switching Frequency

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

Iinput 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[1] Single/Dual Output ..... ±0.2% max.
Load Regulation[2] Single/Dual Output ..... ±1.0% max.

GENERAL SPECIFICATIONS:

Efficiency ..... See Table
Isolation Voltage ..... 500 VDC min.
Isolation Resistance ..... 10^9 ohms.
Switching Frequency ..... 200KHz, typ.
Operating Temperature Range ..... -25˚C to + 71˚C
Case Temperature (Plastic case) ..... 95˚C max.
(Copper case) ..... 100˚C max.
Cooling ..... Free-Air Convection
Storage Temperature Range ..... -40˚C to + 100˚C
EMI/RFI ..... Six-Sided Continuous Shield
Dimensions ..... 2 x 2 x 0.4 inches
(50.8 x 50.8 x 10.2mm)

CASE MATERIAL:

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

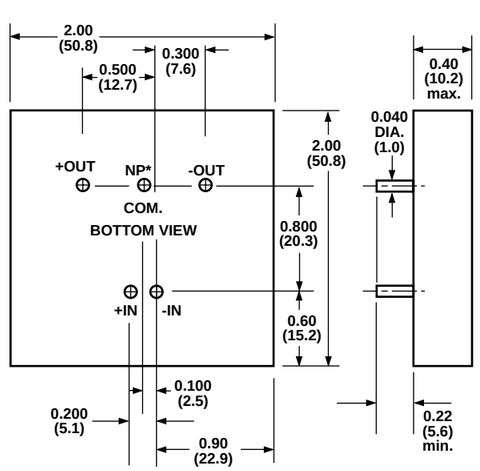
NOTE:

1. Measured From High Line to Low Line
2. Measured From Full Load to 1/4 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"

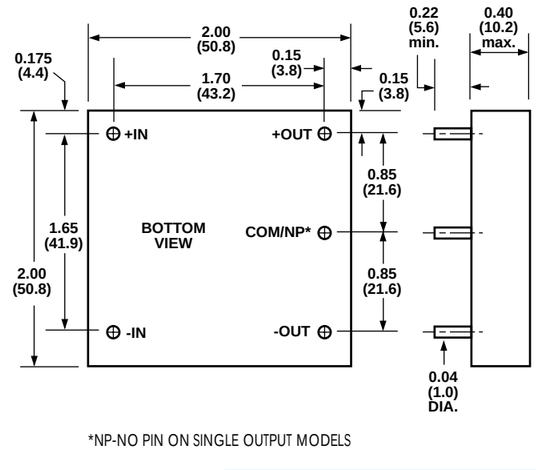
CASE C

All Dimensions In Inches(mm)
Tolerance .xx= ±.04, .xxx= ±.010

STANDARD PIN CONFIGURATION



ALTERNATIVE PIN CONFIGURATION SUFFIX "S"



*NP-NO PIN ON SINGLE OUTPUT MODELS

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