

# EC5C

## 15 WATT WIDE INPUT DC-DC CONVERTERS



### Feature

- 15W Isolated Output
- 4:1 Input Range
- Six-Sided Shield
- Remote ON/OFF Control
- Efficiency to 82%

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT CURRENT		% EFF.	CASE
				NO LOAD	FULL LOAD		
EC5C01		5 VDC	3000 mA	15 mA	810 mA	77	
EC5C02		12 VDC	1250 mA	15 mA	780 mA	80	
EC5C03		15 VDC	1000 mA	15 mA	780 mA	80	
EC5C04		±5 VDC	±1500 mA	20 mA	810 mA	77	
EC5C05	9-36 VDC	±12 VDC	±625 mA	20 mA	780 mA	80	C
EC5C06		±15 VDC	±500 mA	20 mA	780 mA	80	
EC5C07		5/±12 VDC	1500/±310 mA	20 mA	780 mA	80	
EC5C08		5/±15 VDC	1500/±250 mA	20 mA	780 mA	80	
EC5C09		3.3 VDC	3000 mA	15 mA	545 mA	76	
EC5C11		5 VDC	3000 mA	10 mA	410 mA	77	
EC5C12		12 VDC	1250 mA	10 mA	390 mA	80	
EC5C13		15 VDC	1000 mA	10 mA	390 mA	80	
EC5C14		±5 VDC	±1500 mA	15 mA	400 mA	79	
EC5C15	18-72 VDC	±12 VDC	±625 mA	15 mA	380 mA	82	C
EC5C16		±15 VDC	±500 mA	15 mA	380 mA	82	
EC5C17		5/±12 VDC	1500/±310 mA	15 mA	380 mA	82	
EC5C18		5/±15 VDC	1500/±250 mA	15 mA	380 mA	82	
EC5C19		3.3 VDC	3000 mA	10 mA	270 mA	76	

NOTE: 1. Nominal Input Voltage 24 or 48 VDC

# Specifications

## INPUT SPECIFICATIONS:

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

## OUTPUT SPECIFICATIONS:

Voltage Accuracy		
Single Output.....		±1.0% max.
Dual +Output.....		±1.0% max.
-Output.....		±3.0% max.
Triple, 5V.....		±2.0% max.
12V/15V.....		±3.0% max.
Voltage Balance (Dual).....		±1.0% max.
Transient Response:		
Single, 25% Step Load Change.....		<500µ sec.
Dual, FL-1/2L±1% Error Band.....		<500µ sec.
External Trim Adj. Range.....		±10%.
Ripple & Noise, 20MHz BW.....		10mV RMS, max. 75mV p-p max.
Temperature Coefficient.....		± 0.02%/°C
Short Circuit Protection.....		Continuous
Line Regulation <sup>1</sup> , Single/Dual.....		±0.2% max.
Triple.....		±1.0% max.
Load Regulation <sup>2</sup> , Single/Dual.....		±1.0% max.
Triple.....		±5.0% max.

## GENERAL SPECIFICATIONS:

Efficiency.....	See Table
Isolation Voltage.....	500 VDC min
Isolation Resistance.....	10 <sup>9</sup> ohms
Switching Frequency.....	300KHz, typ.
Case Grounding.....	Capacity Coupled to Input
Operating Temperature Range.....	-25°C to + 71°C
Case Temperature.....	100°C max.
Cooling.....	Free-Air Convection
Storage Temperature Range.....	-55°C to + 105°C
EMI/RFI.....	Six-Sided Continuous Shield
Dimensions.....	2 x 2 x 0.4 inches (50.8 x 50.8 x 10.2 mm)
Case Material.....	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

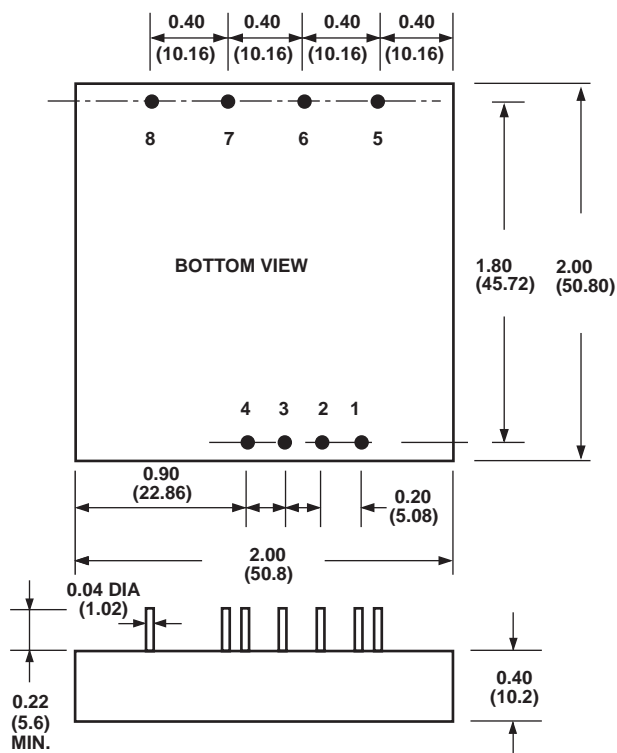
Output (Pin No.)	Voltage	Amperes	
		Min.(2)	Nom.
7	+5	0.25	1.5
8 & 5	+12 or -12	0.10	0.31
8 & 5	+15 or -15	0.10	0.25

### NOTE:

1. Maximum total power from all outputs is limited to 15 watts but no output should be allowed to exceed its maximum current.
2. Minimum current on each output is required to maintain specified regulation.

## CASE C

All Dimensions In Inches (mm) Tolerance: .xx= ±0.02 .xxx= ±0.010



### PIN CONNECTION

Pin	Single	Dual	Triple
1.	Remote On/Off Control		
2.	No Pin	No Pin	No Pin
3.	-Vin	-Vin	-Vin
4.	+Vin	+Vin	+Vin
5.	Trim	Trim	-Aux. Out
6.	-Vout	-Vout	Common
7.	+Vout	Common	+5V out
8.	No Pin	+Vout	+Aux. Out

### Remote On/Off Control

Logic Compatibility	CMOS or Open Collector TTL
EC-On	>+5.5VDC or Open Circuit
EC-Off	<1.8 VDC
Shutdown Idle Current	10 mA
Input Resistance	100K ohms (Ein 0 VDC to 9 VDC)
Control Common	Referenced to Input Minus

### External Output Trimming

Output may optionally be externally trimmed (±10%) with a fixed resistor or an external trimpot as shown.

