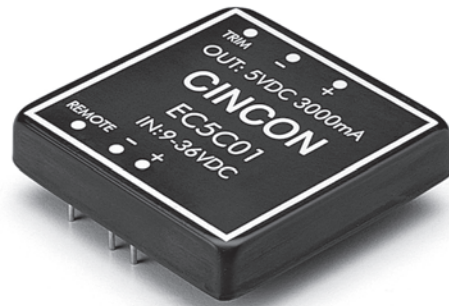


EC5C

S E R I E S



15 WATT 4 : 1 INPUT DC-DC CONVERTERS



Features

- 15W Isolated Output
- 2"x2" Six-Sided Shield Metal Case
- 4 : 1 Input Range
- Efficiency to 84%
- Remote ON/OFF Control
- Regulated Outputs
- Continuous Short Circuit Protection
- CE Mark Meets 2004/108/EC
- UL60950-1 Approval

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT		INPUT CURRENT		% EFF.	Capacitor Load max.
			MIN.	MAX.	NO LOAD	FULL LOAD		
EC5C01	9-36 VDC	5 VDC	0 mA	3000 mA	15 mA	770 mA	81	T.B.D
EC5C02		12 VDC	0 mA	1250 mA	15 mA	745 mA	84	
EC5C03		15 VDC	0 mA	1000 mA	15 mA	760 mA	82	
EC5C04		±5 VDC	±0 mA	±1500 mA	20 mA	770 mA	81	
EC5C05		±12 VDC	±0 mA	±625 mA	20 mA	760 mA	82	
EC5C06		±15 VDC	±0 mA	±500 mA	20 mA	750 mA	83	
EC5C07		5/±12 VDC	250/±100 mA	1500/±310 mA	20 mA	780 mA	80	
EC5C08		5/±15 VDC	250/±100 mA	1500/±250 mA	20 mA	780 mA	80	
EC5C09		3.3 VDC	0 mA	3000 mA	15 mA	530 mA	78	
EC5C11	18-72 VDC	5 VDC	0 mA	3000 mA	10 mA	385 mA	81	T.B.D
EC5C12		12 VDC	0 mA	1250 mA	10 mA	375 mA	83	
EC5C13		15 VDC	0 mA	1000 mA	10 mA	380 mA	82	
EC5C14		±5 VDC	±0 mA	±1500 mA	15 mA	385 mA	81	
EC5C15		±12 VDC	±0 mA	±625 mA	15 mA	375 mA	83	
EC5C16		±15 VDC	±0 mA	±500 mA	15 mA	385 mA	81	
EC5C17		5/±12 VDC	250/±100 mA	1500/±310 mA	15 mA	385 mA	81	
EC5C18		5/±15 VDC	250/±100 mA	1500/±250 mA	15 mA	390 mA	80	
EC5C19		3.3 VDC	0 mA	3000 mA	10 mA	270 mA	77	

NOTE: 1. Nominal Input Voltage 24 or 48 VDC

Specifications

INPUT SPECIFICATIONS:

Input Voltage Range.....	24V.....	9-36V
	48V.....	18-72V
Input Surge Voltage(100ms max.).....	24V.....	50Vdc max.
	48V.....	100Vdc max.
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.....		< 500µs
Dual-FL-1/2L ±1% Error Band.....		< 500µs
External Trim Adj. Range.....		±10%
Ripple & Noise, 20MHz BW.....		10mV RMS max.
		75mV pk-pk max.
Temperature Coefficient.....		± 0.02%/°C
Short Circuit Protection..... Continuous		
Line Regulation ¹ Single/Dual.....		±0.2% max.
Triple.....		±1.0% max.
Load Regulation ² Single/Dual.....		±1.0% max.
Triple.....		±5.0% max.
Start up time		300ms typ.

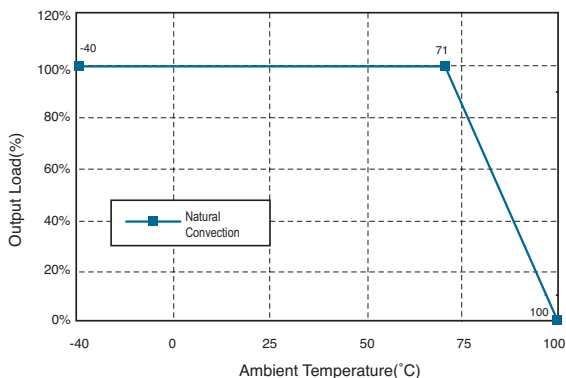
GENERAL SPECIFICATIONS:

Efficiency.....		See Table
Isolation Voltage.....		500 VDC min.
Isolation Resistance.....		10 ⁹ ohm min.
Isolation Capacitance		1000pF typ.
Switching Frequency.....		300KHz typ.
Case Grounding.....		Connected to Output Common
Operating Ambient Temperature Range		-25°C to +71°C
De-rating, Above 71°C		Linearly to Zero power at 100°C
Case Temperature ³		100°C max.
Cooling		Natural Convection
Storage Temperature Range.....		-55°C to + 105°C
Humidity		95% RH max. Non condensing
MTBF		MIL-STD-217F, GB, 25°C, Full Load 1300Khrs typ.
EMI/RFI.....		Six-Sided Continuous Shield
Dimensions.....		2.00x2.00x0.40 inches (50.8x50.8x10.2 mm)
Case Material.....		Black Coated Copper with Non-Conductive Base
Weight.....		59g

NOTE:

1. Measured From High Line to Low Line
2. Measured From Full Load to 1/4 Load
3. Maximum case temperature under any operating condition should not be exceeded 100°C.

EC5C Series Derating Curve

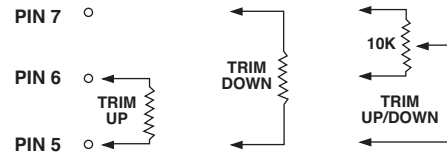


Remote On/Off Control

Logic Compatibility	CMOS or Open Collector TTL
Ec-On	>+5.5 VDC to 75VDC or Open Circuit
Ec-Off	<1.8 VDC
Shutdown Idle Current	10mA
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.



PIN CONNECTION

Pin	Single	Dual	Tripe
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

TRIPLE OUTPUT LOADING TABLE (1)

Output (Pin No.)	Voltage	Amperes	
		Min.(2)	Nom.
7	+5	0.25	1.5
8 & 5	+12 & -12	0.10	0.31
8 & 5	+15 & -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 Inches: x.xx= ±0.04, x.xxx= ±0.010
Millimeters: x.x= ±1.0, x.xx= ±0.25

