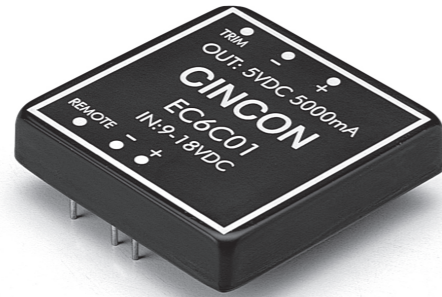


# EC6C

S E R I E S

## 25-30 WATT DC-DC CONVERTERS



### Features

- 25-30W Isolated Output
- Efficiency to 85%
- 2" x 2" Six-Sided Shield Metal Case
- Remote On/Off Control
- Regulated Outputs
- External Output Trimming function

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT CURRENT		% EFF.	SIZE
				NO LOAD	FULL LOAD		
EC6C01	9-18 VDC	5 VDC	5000 mA	30 mA	2675 mA	78	2" x 2"
EC6C02		12 VDC	2500 mA	30 mA	3050 mA	82	
EC6C03		15 VDC	2000 mA	30 mA	3050 mA	82	
EC6C04		±5 VDC	±2500 mA	35 mA	2675 mA	78	
EC6C05		±12 VDC	±1250 mA	35 mA	3050 mA	82	
EC6C06		±15 VDC	±1000 mA	35 mA	3050 mA	82	
EC6C07		5/±12 VDC	3500/±310 mA	35 mA	2640 mA	79	
EC6C08		5/±15 VDC	3500/±250 mA	35 mA	2640 mA	79	
EC6C09		3.3 VDC	5000 mA	30 mA	1860 mA	74	
EC6C11	18-36 VDC	5 VDC	5000 mA	30 mA	1336 mA	79	2" x 2"
EC6C12		12 VDC	2500 mA	30 mA	1525 mA	82	
EC6C13		15 VDC	2000 mA	30 mA	1525 mA	82	
EC6C14		±5 VDC	±2500 mA	30 mA	1336 mA	79	
EC6C15		±12 VDC	±1250 mA	30 mA	1470 mA	85	
EC6C16		±15 VDC	±1000 mA	30 mA	1470 mA	85	
EC6C17		5/±12 VDC	3500/±310 mA	30 mA	1320 mA	80	
EC6C18		5/±15 VDC	3500/±250 mA	30 mA	1320 mA	80	
EC6C19		3.3 VDC	5000 mA	30 mA	920 mA	75	
EC6C21	36-72 VDC	5 VDC	5000 mA	20 mA	660 mA	79	2" x 2"
EC6C22		12 VDC	2500 mA	20 mA	765 mA	82	
EC6C23		15 VDC	2000 mA	20 mA	765 mA	82	
EC6C24		±5 VDC	±2500 mA	25 mA	660 mA	79	
EC6C25		±12 VDC	±1250 mA	25 mA	735 mA	85	
EC6C26		±15 VDC	±1000 mA	25 mA	735 mA	85	
EC6C27		5/±12 VDC	3500/±310 mA	25 mA	655 mA	80	
EC6C28		5/±15 VDC	3500/±250 mA	25 mA	655 mA	80	
EC6C29		3.3 VDC	5000 mA	20 mA	460 mA	75	

NOTE: 1. Nominal Input Voltage 12, 24 or 48 VDC

### 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.....		±2.0% max.
Dual +Output.....		±2.0% max.
-Output.....		±3.0% max.
Triple, 5V.....		±2.0% max.
12V/15V.....		±5.0% 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.....		±0.5% max.
Triple.....		±1.0% max.
Load Regulation <sup>2</sup> , Single/Dual.....		±1.0% max.
Triple.....		±5.0% max.

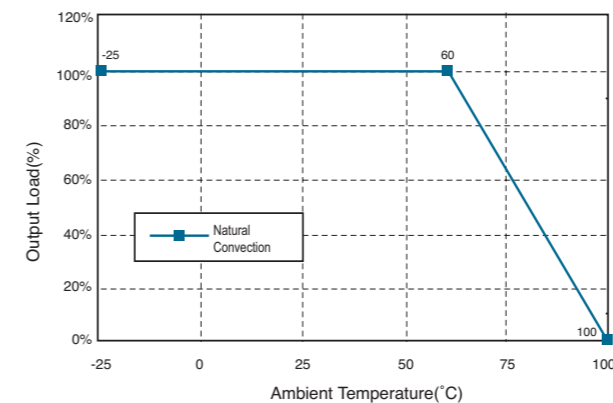
#### GENERAL SPECIFICATIONS:

Efficiency.....See Table  
 Isolation Voltage.....500 VDC min.  
 Isolation Resistance.....10<sup>9</sup>ohms  
 Switching Frequency.....300KHz, typ.  
 Case Grounding.....Connected to Output Common  
 Operating Ambient Temperature Range .....-25°C to +71°C  
 De-rating, Above 60°C .....Linearly to Zero power at 100°C  
 Case Temperature<sup>3</sup>.....100°C max  
 Cooling .....Natural Convection  
 Storage Temperature Range.....-55°C to + 105°C  
 EMI/RFI.....Six-Sided Continuous Shield  
 Dimensions.....2.00 x 2.00 x 0.40 inches  
 (50.8 x 50.8 x 10.2 mm)  
 Case Material.....Black Coated Copper with  
 Non-Conductive Base  
 Weight.....65g

#### 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 exceed 100°C.

### EC6C Series Derating Curve

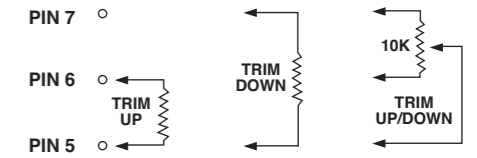


### Remote On/Off Control

Logic Compatibility	CMOS or Open Collector TTL
Ec-On	>+5.5 VDC 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

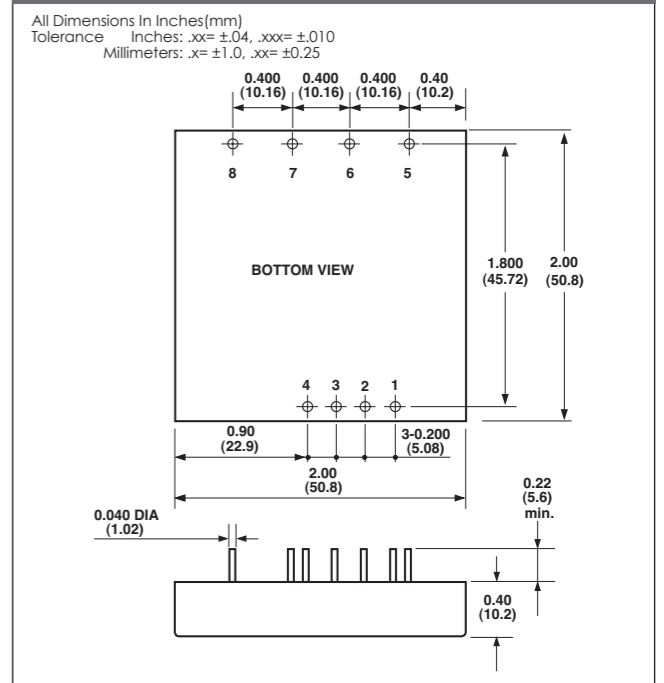
### TRIPLE OUTPUT LOADING TABLE (1)

Output (Pin No.)	Voltage	Amperes	
		Min. (2)	Nom.
7	+5	0.50	3.5
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 25 watts but no output should exceed its maximum current.
2. Minimum current on each output is required to maintain specified regulation.

### CASE C



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