6C Series — 25 ~ 30W DC-DC Converters

Features

- 25W Isolation Output
- 2:1 Input Range
- Six-Sided Shield
- Remote On/Off Control
- Efficiency To 85%

Model Number	Input Voltage	Output Voltage	Output Current	Input Current No Load	Input Current Full Load	% Efficiency	Case
6C-01		5 VDC	5000 mA	30 mA	2675 mA	78	
6C-02		12 VDC	2500 mA	30 mA	3050 mA	82	
6C-03		15 VDC	2000 mA	30 mA	3050 mA	82	
6C-04	9-18 VDC	±5 VDC	±2500 mA	35 mA	2675 mA	78	
6C-05		±12 VDC	±1250 mA	35 mA	3050 mA	82	C
6C-06		±15 VDC	±1000 mA	35 mA	3050 mA	82	
6C-07		5/±12 VDC	3500/±310 mA	35 mA	2640 mA	79	
6C-08		5/±15 VDC	3500/±250 mA	35 mA	2640 mA	79	
6C-09		3.3 VDC	5000 mA	30 mA	1860 mA	74	
6C-11		5 VDC	5000 mA	30 mA	1336 mA	79	
6C-12		12 VDC	2500 mA	30 mA	1525 mA	82	
6C-13		15 VDC	2000 mA	30 mA	1525 mA	82	
6C-14	18-36 VDC	±5 VDC	±2500 mA	30 mA	1336 mA	79	
6C-15		±12 VDC	±1250 mA	30 mA	1470 mA	85	C
6C-16		±15 VDC	±1000 mA	30 mA	1470 mA	85	
6C-17		5/±12 VDC	3500/±310 mA	30 mA	1320 mA	80	
6C-18		5/±15 VDC	3500/±250 mA	30 mA	1320 mA	80	
6C-19		3.3 VDC	5000 mA	30 mA	920 mA	75	
6C-21		5 VDC	5000 mA	20 mA	660 mA	79	
6C-22		12 VDC	2500 mA	20 mA	765 mA	82	
6C-23		15 VDC	2000 mA	20 mA	765 mA	82	
6C-24	36-72 VDC	±5 VDC	±2500 mA	25 mA	660 mA	79	
6C-25		±12 VDC	±1250 mA	25 mA	735 mA	85	C
6C-26		±15 VDC	±1000 mA	25 mA	735 mA	85	
6C-27		5/±12 VDC	3500/±310 mA	25 mA	655 mA	80	
6C-28		5/±15 VDC	3500/±250 mA	25 mA	655 mA	80	
6C-29		3.3 VDC	5000mA	20 mA	460 mA	75	

Note: Nominal Input Voltage 12, 24 or 48VDC

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.
Daul + output……..+/- 2.0 % max.
Daul - output……..+/- 3.0 % max.
Triple, 5V……+/- 2.0 % max.
12V/15V……..……+/- 5.0 % max.
Voltage Balance (Dual)……..+/- 1.0 % max.
External trim Adj. Range……..……+/- 10%
Transient Response
Single 25% Step Load Change……<500ì sec.
Dual FL. 1/2L+/-1% Error Band……<500ì sec.
Ripple & Noise, 20 MHz BW…….... 10mV RMS max.
75 mV p-p max.
Temperature Coeffcient…… +/- 0.02 % /º C max.
Short Circuit Protection……..……Continuous
Line Regulation ¹ Single / Dual Output……..+/- 0.5 % max.
Triple……..+/- 1.0% max.
Load Regulation ² Single / Dual Output……+/- 1.0 % max.
Triple……..……+/- 5.0 % max.

General Specifications:

Efficiency……..……..see table
Isolation Resistance……..100Mohm
Switching Frequency……..300 KHz, min.
Case Grounding……Capacity coupled to input
Operating Temperature Range……-25º C ~ +71º C
Case Temperature……100 º C max.
Cooling……Free air convection
Storage Temperature Range……..…..-40 º C ~ +100º C
Isolation Voltage……..……..500VDC min.
EMI/RFI……....Six-sided continus shield
Dimensions……2” x 2” x 0.4 “(50.8 x 50.8 x 10.2 mm)
Case Material……..Black Coated Copper with Non-conducted base

Note: 1. Measured from high lin to low line
2. Measured from full load to ¼load

Triple output loading table			
Ouput (pin no.)	Voltage (V)	Amperes	
		Min. (2)	Nom.
7	5	0.5	3.5
8 & 5	+12 or -12	0.1	0.31
8 & 5	+15 or -15	0.1	0.25

Note:
1. Maximum total power from all outputs is limited to 25W but no output should be allowed to exceed its maximum current
2. Minmum current on each output is required to maintain specified regulation

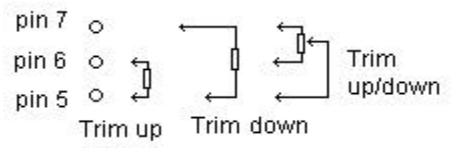
Outline Information and Pin-out

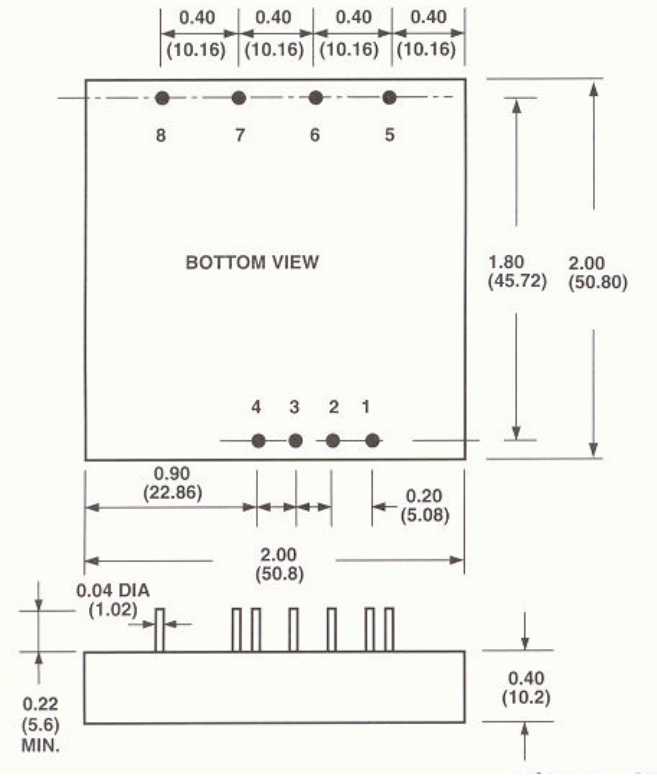
Pin Connection			
Pin	Single	Dual	Triple
1	Remote On/Off Control		
2	No pin	No pin	No pin
3	-Vin	-Vin	-Vin
4	+Vin	+Vin	+Vin
5	Trim	Trim	-Aux.out
6	-Vout	-Vout	Common
7	+Vout	Common	+5Vout
8	No pin	+Vout	+Aux.out

Remote On/Off Control	
Logic compatibility	CMOS or Open collector TTL
Ec-0n	>5.5 Vdc or open circuit
Ec-Off	<1.8 Vdc
Shutdown Idle current	10mA
Input resistance	100K ohms (Ein 0Vdc to 9Vdc)
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.





All dimentions in inches(mm)

The information and specifications contained in this brief are believed to be accurate and reliable at the time of publication. Specifications are subject to change without notice. Refer to product specification sheet for performance characteristics and application guidelines.