

EC5A

S E R I E S

6-24 WATT DC-DC CONVERTERS



Features

- 6-24W Non-Isolated Output
- Efficiency to 94%
- DIP-24 / SMD Package
- Input LC Filter
- Regulated Outputs

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT CURRENT		% EFF.	CASE
				NO LOAD	FULL LOAD		
EC5A-05S33	4.7-6 VDC	3.3 VDC	2000 mA	15 mA	1553 mA	85	DIP-24
EC5A-12S33	9-32 VDC	3.3 VDC	2000 mA	15 mA	655 mA	84	DIP-24
EC5A-12S05	9-32 VDC	5 VDC	2000 mA	15 mA	947 mA	88	DIP-24
EC5A-12S12	9-32 VDC	12 VDC	830 mA	15 mA	954 mA	87	DIP-24
EC5A-12S15	9-32 VDC	15 VDC	666 mA	15 mA	957 mA	87	DIP-24
EC5A-24S12	16-32 VDC	12 VDC	1600 mA	15 mA	860 mA	93	DIP-24
EC5A-24S15	19-32 VDC	15 VDC	1600 mA	15 mA	1064 mA	94	DIP-24

NOTE: 1. Nominal Input Voltage 5, 12 or 24 VDC

Specifications

INPUT SPECIFICATIONS:

Input Voltage Range.....	5.0V.....	4.7-6V
	12V.....	9-32V
	24V.....	16-32V
	24V.....	19-32V
Input Filter.....	LC Type	

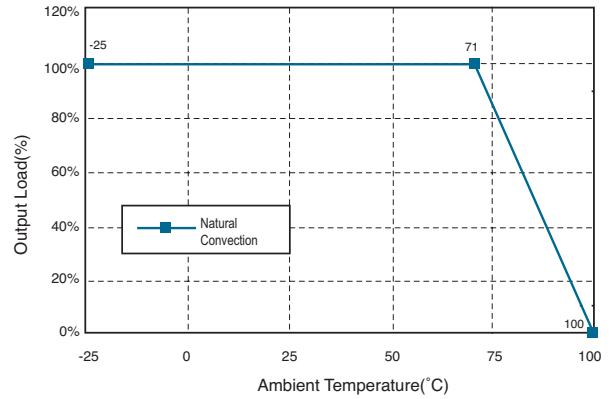
OUTPUT SPECIFICATIONS:

Voltage Accuracy.....	±2.0% max.	
Temperature Coefficient.....	±0.05%/°C	
Ripple and Noise, 20MHz BW.....	3.3V/5V.....	100mV pk-pk max.
	12V/15V.....	1% pk-pk max.
Over Current Protection.....	120%~160%	
Line Regulation ¹	± 0.5% max.	
Load Regulation ²	± 0.5% max.	

GENERAL SPECIFICATIONS:

Efficiency.....	See Table	
Switching Frequency.....	150KHz, typ.	
Isolation Voltage (Input/Output).....	Non-Isolation	
Operating Ambient Temperature Range	-25°C to +71°C	
De-rating, Above 71°C	Linearly to Zero power at 100°C	
Case Temperature ⁴	100°C max.	
Cooling	Natural Convection	
Storage Temperature Range.....	-40°C to + 100°C	
Dimensions.....DIP.....	1.25x0.80x0.40 inches(31.8x20.3x10.2 mm)	
	SMD.....	1.25x0.80x0.45 inches(31.8x20.3x11.4 mm)
Weight.....	17.8g	
Case Material	Black Coated Copper with Non-Conductive Base	

EC5A Series Derating Curve



NOTE:

1. Measured From High Line to Low Line.
2. Measured From Full Load to 10% Load.
3. Suffix "S" to the Model Number with SMD package.
4. Maximum case temperature under any operating condition should not be exceeded 100°C.

PIN CONNECTION

Pin	Function	
	DIP	SMD
1, 24	NP	NC
2, 3	-V Input	
4, 5	NP	NC
9, 16	-V Output	
10, 15	NC	
11, 14	+V Output	
12, 13	NP	NC
20, 21	NP	NC
22, 23	+V Input	

*NP-NO PIN *NC-NO CONNECTION WITH PIN

CASE A

NOTE: Pin Size is 0.02" Inch (0.5mm) DIA ±0.05
 All Dimensions In Inches(mm)
 Tolerance Inches: x.xx= ±0.02, x.xxx= ±0.010
 Millimeters: x.x= ±0.5, x.xx= ±0.25

