

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
- LC Input 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

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 p-p max.
	12V/15V.....	1% p-p max.
Over Current Protection.....		120%~160%
Line Regulation ¹		± 0.5% max.
Load Regulation ²		± 0.5% max.

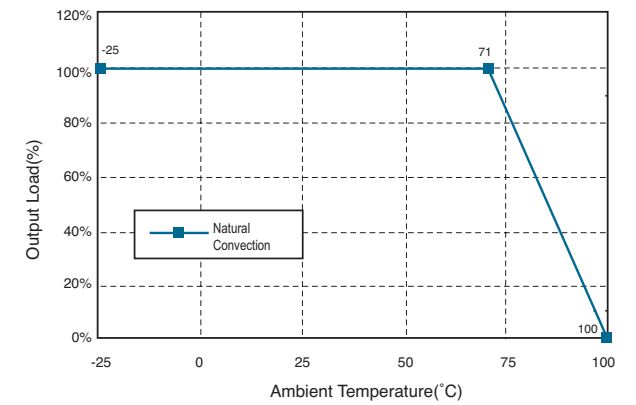
GENERAL SPECIFICATIONS:

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.....	1.25 x 0.80 x 0.40 inches(31.8 x 20.3 x 10.2mm)	
	SMD.....	1.25 x 0.80 x 0.45 inches(31.8 x 20.3 x 11.4mm)
Weight.....		17.8g

CASE MATERIAL:

Standard Models.....	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 packages
4. Maximum case temperature under any operating condition should not be exceeded 100°C

PIN CONNECTION

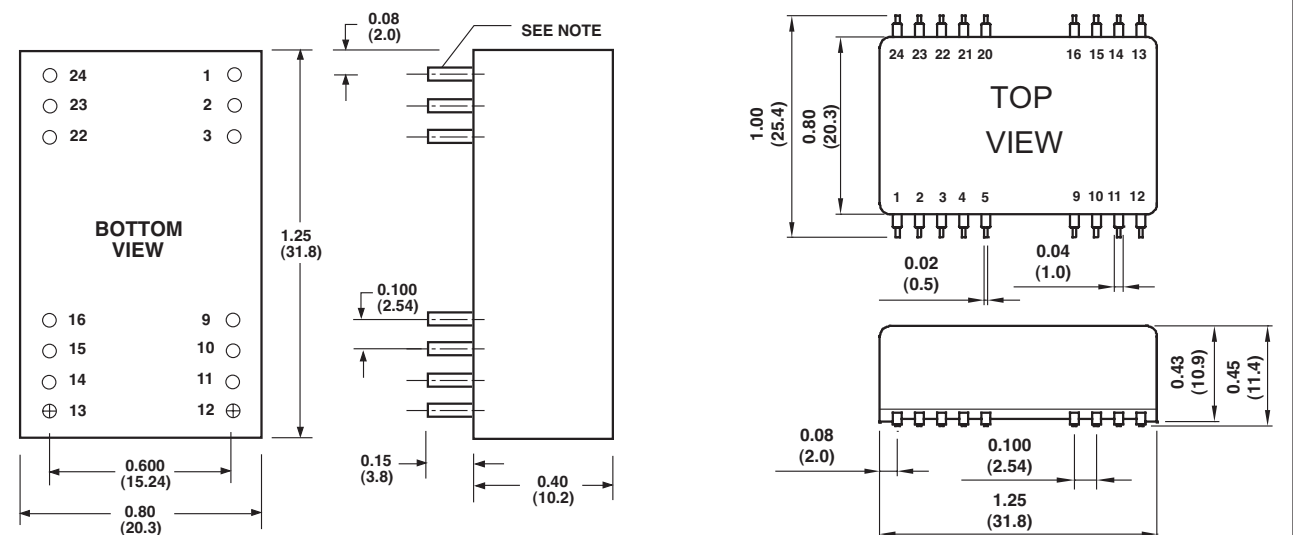
Pin	Function	
	DIP	SMD
1, 24	NP	NC
2, 3	-V Input	
4, 5	NP	NC
9, 16	-V Output	
10, 15	NC	
11, 14	+V Output	
12, 13	NP	NC
20, 21	NP	NC
22, 23	+V Input	

*NP-NO PIN

*NC-NO CONNECTION WITH PIN

CASE A

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



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