

DC-DC Converter

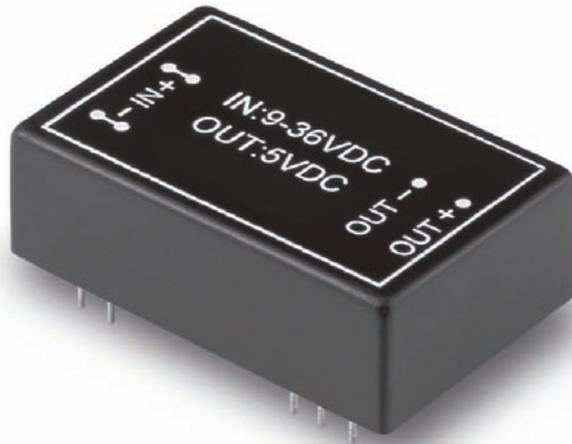
**POWER
SOLVE**

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PS5 Series
5 - 6 Watt Wide Input
PCB Mounting
Single & Dual Outputs

Features

- 5 - 6 W Isolated Output
- 4 : 1 Input Range
- Regulated Outputs
- Continuous short circuit protection
- Efficiency to 80%
- Pi Input Filter
- DIP-24 package



Electrical Specification

INPUT

Input Voltage Range	9 - 36V (PS5-24-xxx versions) 18 - 72V (PS5-48-xxx versions)
Input Filter	Pi Type

OUTPUT

Voltage Accuracy	±2.0% max.
Voltage Balance (Dual)	±1.0% max.
Temperature Coefficient	±0.05% / °C
Short Circuit Protection	Continuous

GENERAL

Efficiency	See Table
Isolation Resistance	10 ⁹ Ohms
Switching Frequency	200KHz min.
Operating Temperature Range	-25°C to +71°C
Case Temperature (Plastic Case)	+95°C max.
(Copper Case)	+100°C max.
Cooling	Natural Convection
Storage Temperature Range	-40°C to 100°C
Dimensions	1.25 x 0.80 x 0.40 Inches 31.8 x 20.3 x 10.2 mm
Weight	12.5g

ISOLATION VOLTAGE

1.5KVDC min.	Standard or suffix "HM" Models
3KVDC min. [4]	Suffix "H" Models

CASE MATERIALS

Standard Models	Non-conductive Black Plastic
Suffix "HM" Models [5]	Black Coated Copper with Non-conductive Base

NOTE:

1. Line regulation measured from High Line to Low Line.
2. Single output load regulation measured from Full Load to 10% Load.
3. Dual output load regulation measured from Full Load to 25% Load.
4. Non-conductive Black Plastic only.
5. Suffix "HM" 1.5K VDC instead of 3K VDC Isolation.

Typical at nominal line, full load & 25°C unless otherwise stated.

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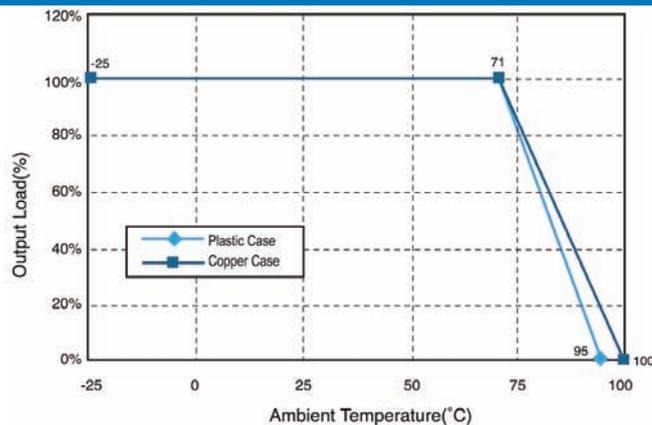


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Output Voltage and Current Ratings

MODEL	INPUT VOLTAGE	INPUT CURRENT		OUTPUT VOLTAGE	OUTPUT CURRENT	RIPPLE & NOISE	LINE REG.	LOAD REG.	% EFF.	
		No Load	Full Load							
PS5-24-33S	9 - 36VDC	15mA	191mA	3.3V	1000mA	100mV pk-pk max.	0.5%	0.5%	72%	
PS5-24-05S		15mA	267mA	5V	1000mA	100mV pk-pk max.	0.5%	0.5%	78%	
PS5-24-12S		15mA	294mA	12V	470mA	120mV pk-pk max.	0.5%	0.5%	80%	
PS5-24-15S		15mA	313mA	15V	400mA	150mV pk-pk max.	0.5%	0.5%	80%	
PS5-24-05D		25mA	267mA	±5V	±500mA	100mV pk-pk max.	0.5%	1.0%	78%	
PS5-24-12D		25mA	288mA	±12V	±230mA	120mV pk-pk max.	0.5%	1.0%	80%	
PS5-24-15D		25mA	297mA	±15V	±190mA	150mV pk-pk max.	0.5%	1.0%	80%	
PS5-48-33S		18 - 72VDC	7.5mA	100mA	3.3V	1000mA	100mV pk-pk max.	0.5%	0.5%	70%
PS5-48-05S			7.5mA	134mA	5V	1000mA	100mV pk-pk max.	0.5%	0.5%	78%
PS5-48-12S			7.5mA	149mA	12V	470mA	120mV pk-pk max.	0.5%	0.5%	79%
PS5-48-15S	7.5mA		157mA	15V	400mA	150mV pk-pk max.	0.5%	0.5%	80%	
PS5-48-05D	12mA		135mA	±5V	±500mA	100mV pk-pk max.	0.5%	1.0%	77%	
PS5-48-12D	12mA		146mA	±12V	±230mA	120mV pk-pk max.	0.5%	1.0%	79%	
PS5-48-15D	12mA		149mA	±15V	±190mA	150mV pk-pk max.	0.5%	1.0%	80%	

Derating Curve



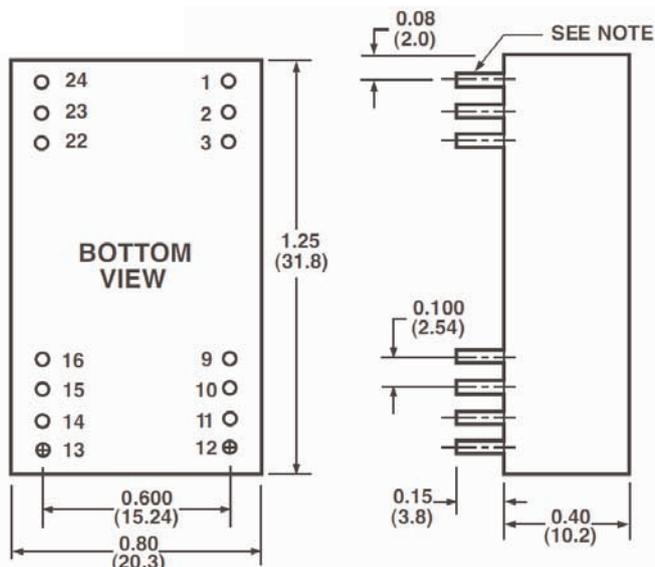
Mechanical and Connection Details

Note: Pin 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



Pin	Single Output	Dual Output
1	No Pin	No Pin
2	-Vin	-Vin
3	-Vin	-Vin
9	No Conn.	Common
10	No Conn.	No Conn.
11	No Conn.	-Vout
12	No Pin	No Pin
13	No Pin	No Pin
14	+Vout	+Vout
15	No Conn.	No Conn.
16	-Vout	Common
22	+Vin	+Vin
23	+Vin	+Vin
24	No Pin	No Pin