

POWERLINE - DC/DC-Converter

A-Series, 1.5 Watt DIP24, Regulated Outputs (Single & Dual Output)

RECOM

Features

- 50% Efficiency
- Pi Input Filter
- 500 VDC Isolation
- Low Ripple and Noise
- Five-Sided EMI Shield
- 2 Year Warranty
- Regulated Outputs
- MTBF 7.460 x 10⁶ Hours
- Standard and SMT-Pinning



Selection Guide 5V, 12V and 48V Input Types

Part Number	Input Range	Output Voltage	Output Current	Efficiency (%)
RP1P5-0505SA	4.5-5.5 VDC	5 VDC	300 mA	54
RP1P5-0512SA	4.5-5.5 VDC	12 VDC	125 mA	52
RP1P5-0515SA	4.5-5.5 VDC	15 VDC	100 mA	55
RP1P5-0505DA	4.5-5.5 VDC	±5 VDC	±150 mA	54
RP1P5-0512DA	4.5-5.5 VDC	±12 VDC	±60 mA	51
RP1P5-0515DA	4.5-5.5 VDC	±15 VDC	±50 mA	54
RP1P5-1205SA	10.8-13.2 VDC	5 VDC	300 mA	55
RP1P5-1212SA	10.8-13.2 VDC	12 VDC	125 mA	52
RP1P5-1215SA	10.8-13.2 VDC	15 VDC	100 mA	55
RP1P5-1205DA	10.8-13.2 VDC	±5 VDC	±150 mA	55
RP1P5-1212DA	10.8-13.2 VDC	±12 VDC	±60 mA	51
RP1P5-1215DA	10.8-13.2 VDC	±15 VDC	±50 mA	54
RP1P5-2405SA	21.6-26.4 VDC	5 VDC	300 mA	54
RP1P5-2412SA	21.6-26.4 VDC	12 VDC	125 mA	52
RP1P5-2415SA	21.6-26.4 VDC	15 VDC	100 mA	55
RP1P5-2405DA	21.6-26.4 VDC	±5 VDC	±150 mA	54
RP1P5-2412DA	21.6-26.4 VDC	±12 VDC	±60 mA	51
RP1P5-2415DA	21.6-26.4 VDC	±15 VDC	±50 mA	54
RP1P5-4805SA	43.2-52.8 VDC	5 VDC	300 mA	55
RP1P5-4812SA	43.2-52.8 VDC	12 VDC	125 mA	52
RP1P5-4815SA	43.2-52.8 VDC	15 VDC	100 mA	52
RP1P5-4812DA	43.2-52.8 VDC	±12 VDC	±60 mA	51
RP1P5-4815DA	43.2-52.8 VDC	±15 VDC	±50 mA	54

Specials

RP2P0-2015DAA-M1	19-21 VDC	±15 V	±66 mA	2 W output
RP2P0-0508SAA	4.5-5.5 VDC	8 VDC	200 mA	3 kV DC Isolation
RP1P5-1206SAA	10-15 VDC	6 V	167 mA	1 kV AC Isolation

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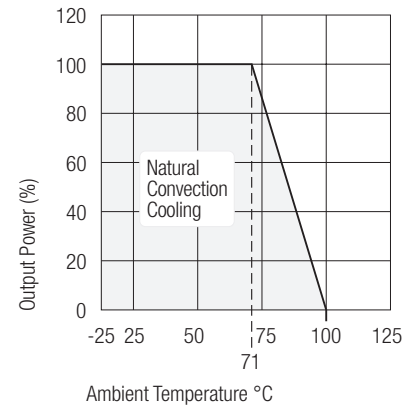
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Maximum Capacitive Load

RPIP5-xx05SA	470 μ F
RPIP5-xx12SA	330 μ F
RPIP5-xx15SA	330 μ F
RPIP5-xx05DA	330 μ F
RPIP5-xx12DA	110 μ F
RPIP5-xx15DA	110 μ F

Specifications (typical at nominal input and 25°C unless otherwise noted)

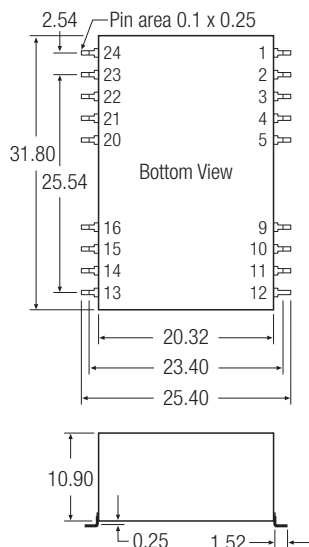
Input Voltage Range	$\pm 10\%$
Input Filter	Pi Type
Voltage Accuracy	$\pm 4\%$ max.
Ripple and Noise, 20MHz BW	50mVp-p max.
Line Regulation	$\pm 0.3\%$
Load Regulation	$\pm 0.5\%$
Temperature Coefficient	$\pm 0.02\%/^{\circ}\text{C}$
Short Circuit Protection	Short Term
Switching Frequency	20kHz, min.
Isolation Voltage	500VDC, min.
Isolation Resistance	$10^9 \Omega$ min.
Isolation Capacitance	30pF max.
Operating Temperature Range	-25°C to +71°C
Storage Temperature Range	-55°C to +125°C
Cooling	Free-air Convection
EMI/RFI	Five-sided Shield
Case Material	Nickel-Coated Copper with Non-Conductive Base
Dimensions	31.8 x 20.3 x 10.2 mm
MTBF (MIL-HDBK-217F TA = 25°C full load)	7.460×10^6 Hours



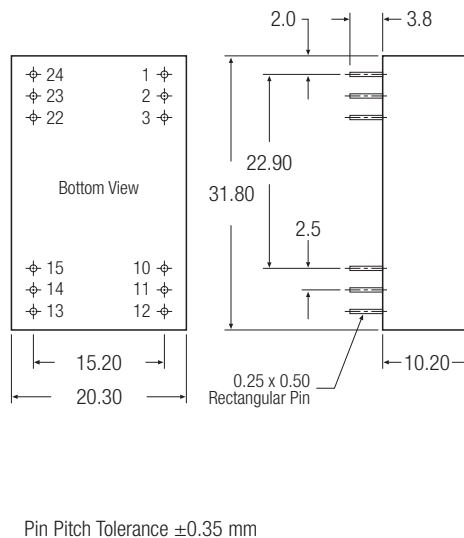
Package Style and Pinning (mm)

SMD Package Style

Same spec. as the original DIP spec. and pin definition, excl. of the SMD type pin.



DIP24 Package Style



Pin Connections

Pin #	Single	Dual
1	+ Vin	+ Vin
2	NC	- Vout
3	NC	Common
10	- Vout	Common
11	+ Vout	+ Vout
12	- Vin	- Vin
13	- Vin	- Vin
14	+ Vout	+ Vout
15	- Vout	Common
22	NC	Common
23	NC	- Vout
24	+ Vin	+ Vin

NC = No Connection