

# 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 10<sup>6</sup> 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

# POWERLINE - DC/DC-Converter

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

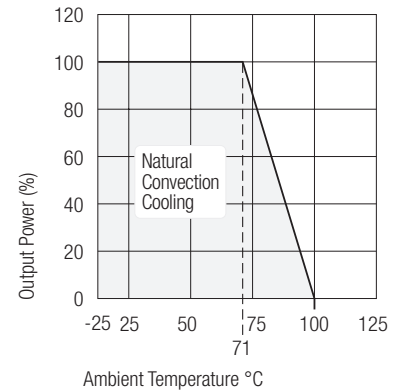
# RECOM

## Maximum Capacitive Load

RPIP5-xx05SA	470µF
RPIP5-xx12SA	330µF
RPIP5-xx15SA	330µF
RPIP5-xx05DA	330µF
RPIP5-xx12DA	110µF
RPIP5-xx15DA	110µF

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

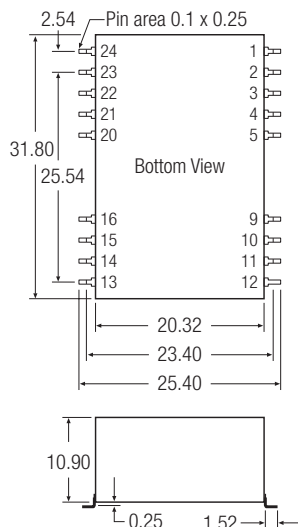
Input Voltage Range	±10%
Input Filter	Pi Type
Voltage Accuracy	±4% max.
Ripple and Noise, 20MHz BW	50mVp-p max.
Line Regulation	±0.3%
Load Regulation	±0.5%
Temperature Coefficient	±0.02%/°C
Short Circuit Protection	Short Term
Switching Frequency	20kHz, min.
Isolation Voltage	500VDC, min.
Isolation Resistance	10 <sup>9</sup> Ω 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 x 10 <sup>6</sup> Hours



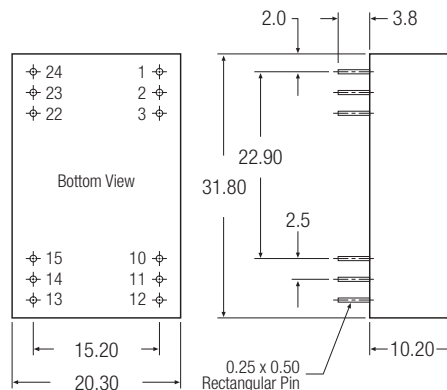
## Package Style and Pinning (mm)

### 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

Pin Pitch Tolerance ±0.35 mm