

Features

Regulated Converters

- DIP24 Miniature Package
- 2:1 Wide Range Voltage Input
- 1kVDC Isolation
- UL94V-0 Package Material
- Continuous Short Circuit Protection
- Less than 7mm Height
- Cost Effective
- Short Lead Time
- No External Capacitor needed
- Efficiency to 88%

ECONOLINE

DC/DC-Converter

RW Series

Selection Guide

| Part Number | Input Voltage (VDC) | Output Voltage (VDC) | Output Current (mA) |
|-----------------|---------------------|----------------------|---------------------|
| DIP24 Miniature | (VDC) | (VDC) | (mA) |
| RW-053.3S | 4.5 – 9 | 3.3 | 650 |
| RW-0505S | 4.5 – 9 | 5 | 600 |
| RW-0509S | 4.5 – 9 | 9 | 333 |
| RW-0512S | 4.5 – 9 | 12 | 250 |
| RW-0515S | 4.5 – 9 | 15 | 200 |
| RW-123.3S | 9 – 18 | 3.3 | 650 |
| RW-1205S | 9 – 18 | 5 | 600 |
| RW-1209S | 9 – 18 | 9 | 333 |
| RW-1212S | 9 – 18 | 12 | 250 |
| RW-1215S | 9 – 18 | 15 | 200 |
| RW-243.3S | 18 – 36 | 3.3 | 650 |
| RW-2405S | 18 – 36 | 5 | 600 |
| RW-2409S | 18 – 36 | 9 | 333 |
| RW-2412S | 18 – 36 | 12 | 250 |
| RW-2415S | 18 – 36 | 15 | 200 |
| RW-483.3S | 36 – 72 | 3.3 | 650 |
| RW-4805S | 36 – 72 | 5 | 600 |
| RW-4809S | 36 – 72 | 9 | 333 |
| RW-4812S | 36 – 72 | 12 | 250 |
| RW-4815S | 36 – 72 | 15 | 200 |

**3 Watt
DIP24/SMD low
Profile package
Single Output**



RECOM

Description

The RW series with 2:1 input voltage ranges and max. height of 7,0 mm has been designed for the telecom - and industrial automation markets. They are particularly aimed at applications where pcb-space is at a premium, still requiring industrial standard pinning. Also an optional SMD pinning is available. The converters supply the full 3 Watts without additional heat-sinks over the temperature range -40°C to +80°C.

Specifications (Core Operating Area)

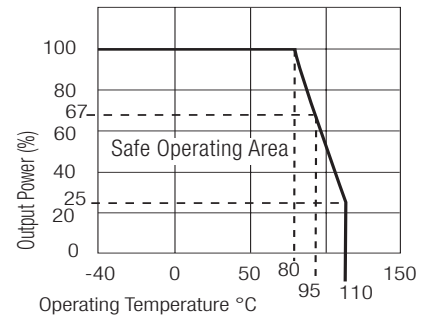
| | |
|---|--------------------------|
| Input Voltage Range | 2:1 |
| Output Voltage Accuracy | ±2% max. |
| Line Voltage Regulation | ±0.2% typ. |
| Load Voltage Regulation (10% to 100% full load) | ±0.5% max. |
| Output Ripple and Noise (20MHz limited) | 70mVp-p max. |
| Operating Frequency | 85kHz min. / 100kHz typ. |

continued on next page

Specifications (Core Operating Area)

| | | |
|---|--|--|
| Efficiency at Full Load | | 65% min. |
| Isolation Voltage | (tested for 1 second) | 1.000VDC min. |
| Rated Working Voltage | (long term isolation) | see Application Notes |
| Isolation Capacitance | | 40pF min. / 60pF max. |
| Isolation Resistance | | 1 GΩ min. |
| Short Circuit Protection | | Continuous |
| Operating Temperature Range (free air convection) | | -40°C to +80°C (see Graph) |
| Storage Temperature Range | | -55°C to +125°C |
| Relative Humidity | MSL Level 1 | 95% RH |
| Package Weight | | 7g |
| MTBF (+25°C) | } Detailed Information see Application Notes chapter "MTBF" | using MIL-HDBK 217F 1034 x 10 ³ hours |
| (+80°C) | | using MIL-HDBK 217F 186 x 10 ³ hours |

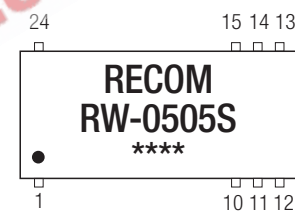
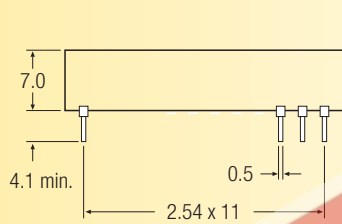
Derating-Graph
(Ambient Temperature)



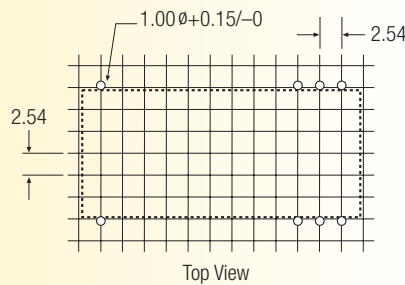
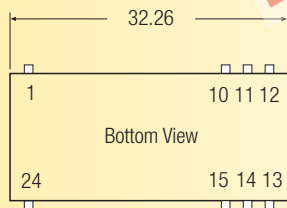
Package Style and Pinning (mm)

24 PIN DIP Miniature Package Style

3rd angle projection



Recommended Footprint Details

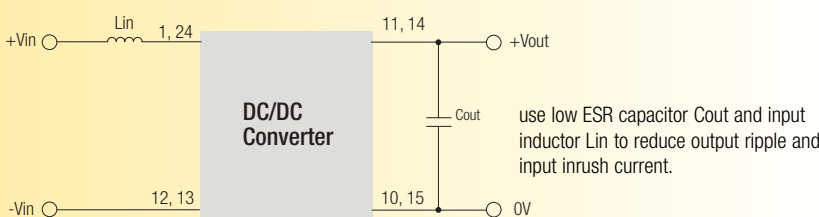


Pin Connections

| Pin # | Single |
|---------|--------|
| 1 & 24 | +Vin |
| 10 & 15 | -Vout |
| 11 & 14 | +Vout |
| 12 & 13 | -Vin |

NC = No Connection
XX.X ± 0.5 mm
XX.XX ± 0.25 mm

| | | |
|-------------|-----------|------------------|
| Lin | RW- types | 4.7uH ~ 100uH |
| Cout | RW- types | 22uF ~ 100uF/25V |



RW-types

