

## Features

### Regulated Converters

- DIP24 Miniature Package
- 2:1 Wide Range Voltage Input
- 3kVDC Isolation
- UL94V-0 Package Material
- Continuous Short Circuit Protection
- Low profile 7mm Height
- Cost Effective
- Short Lead Time
- No External Capacitor needed
- Full SMD Construction
- 100% Burned In
- Efficiency to 85%

### Selection Guide

Part Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency (%)
DIP24 Miniature	(VDC)	(VDC)	(mA)	%
RW-1205D	9 – 18	±5	±300	76
RW-1209D	9 – 18	±9	±167	80
RW-1212D	9 – 18	±12	±125	83
RW-1215D	9 – 18	±15	±100	83
RW-2405D	18 – 36	±5	±300	78
RW-2409D	18 – 36	±9	±167	81
RW-2412D	18 – 36	±12	±125	85
RW-2415D	18 – 36	±15	±100	85
RW-4805D	36 – 72	±5	±300	78
RW-4809D	36 – 72	±9	±167	82
RW-4812D	36 – 72	±12	±125	84
RW-4815D	36 – 72	±15	±100	84

### 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. The converters supply the full 3 Watts without additional heat-sinks over the temperature range -40°C to +85°C.

### Specifications (Core Operating Area)

Input Voltage Range	2:1	
Output Voltage Accuracy	±1% typ. / ±2% max.	
Line Voltage Regulation	0.1% typ. / 0.2% max.	
Load Voltage Regulation (10% to 100% full load)	0.2% typ. / 0.5% max.	
Output Ripple and Noise (20MHz limited)	50mVp-p max.	
Operating Frequency	100KHz min. / 150kHz typ.	
Efficiency at Full Load	See above	
Isolation Voltage	(tested for 1 second)	3.000VDC min.
Rated Working Voltage	(long term isolation)	see Application Notes
Isolation Capacitance	20pF min. / 40pF typ. / 60pF max.	
Isolation Resistance	1 GΩ min.	
Short Circuit Protection	Continuous	
Operating Temperature Range (free air convection)	-40°C to +85°C (see Graph)	
Storage Temperature Range	-55°C to +125°C	

continued on next page

## ECONOLINE

DC/DC-Converter

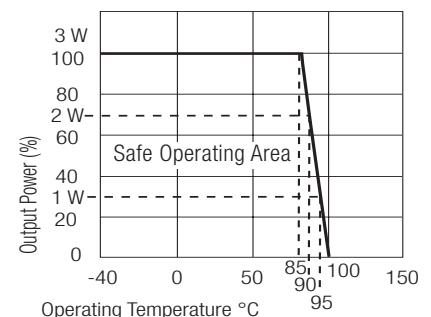
# RW-xxxxD Series

**3 Watt  
DIP24 low  
Profile package  
Dual Regulated  
Output**



**RECOM**

## Derating-Graph (Ambient Temperature)

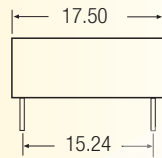
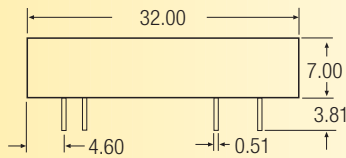


**Specifications (Core Operating Area)**

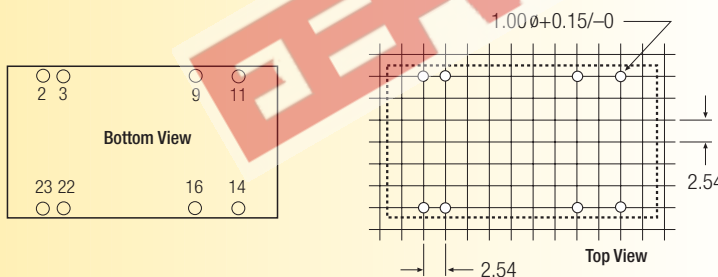
Case Material	Non-Conductive Black Plastic		
Potting Material	Epoxy ( UL94V-0 )		
Relative Humidity	MSL Level 1	95% RH	
Package Weight	7g		
MTBF (+25°C)	} Detailed Information see Application Notes chapter "MTBF"	using MIL-HDBK 217F	1636 x 10 <sup>3</sup> hours
(+85°C)		using MIL-HDBK 217F	303 x 10 <sup>3</sup> hours

**Package Style and Pinning (mm)**

24 PIN DIP Miniature Package Style



**Recommended Footprint Details**



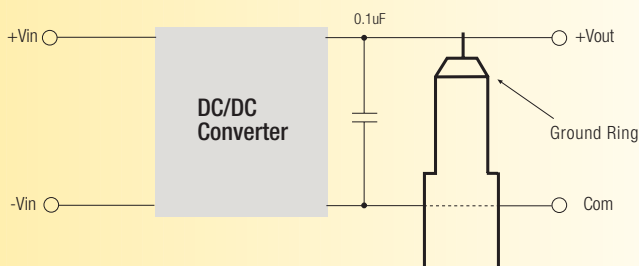
**Pin Connections**

Pin	Dual
2 & 3	-Vin
9 & 16	Com
11	-Vout
14	+Vout
22 & 23	+Vin

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

**Note:** pinout is the same like REC-series, A-pinout

To measure the output ripple & noise with short runs by 0.1uF/50V @ 20MHz nominal input and full load. Please see as below:



**RW-xx15D**

Efficiency / Load

