Features

Regulated Converters

- DIP24 Low Profile Package
- Dual Outputs from a Single Supply
- 2:1 Wide Range Voltage Input
- 3kVDC Isolation
- UL94V-O Package Material
- Continuous Short Circuit Protection
- Low profile 7mm Height
- Approved for Medical Applications
- Efficiency to 85%

Description

The RW_D series with 2:1 input voltage ranges and maximum height of 7,0 mm has been designed for industrial automation and medical markets where a dual output rail needs to be generated from a single rail source. The converters supply the full 3 Watts without additional heat-sinks over the temperature range -40°C to +85°C.

Selection Guide

Part Number	Input Voltage	Output Voltage	Output Current	Efficiency	Max Capacitive
DIP24 Miniature	(VDC)	(VDC)	(mA)	%	Load ⁽¹⁾
RW-0505D	4.5 - 9	±5	±300	71	±2200µF
RW-0509D	4.5 - 9	±9	±167	73	±1000μF
RW-0512D	4.5 – 9	±12	±125	74	±1000µF
RW-0515D	4.5 – 9	±15	±100	75	±1000µF
RW-1205D	9 – 18	±5	±300	76	±2200µF
RW-1209D	9 – 18	±9	±167	80	±1000µF
RW-1212D	9 – 18	±12	±125	83	±1000µF
RW-1215D	9 – 18	±15	±100	83	±1000µF
RW-2405D	18 – 36	±5	±300	78	±2200µF
RW-2409D	18 – 36	±9	±167	81	±1000µF
RW-2412D	18 – 36	±12	±125	85	±1000µF
RW-2415D	18 – 36	±15	±100	85	±1000µF
RW-4805D	36 – 72	±5	±300	78	±2200μF
RW-4809D	36 – 72	±9	±167	82	±1000µF
RW-4812D	36 – 72	±12	±125	84	±1000µF
RW-4815D	36 – 72	±15	±100	84	±1000μF

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.
Minimum Load		10% (2)
Output Ripple and Noise (20MHz limited)		50mVp-p max.
Operating Frequency		100KHz min. / 150kHz typ.
Efficiency at Full Load		See above
No Load Power Consumption		250mW max.
Isolation Voltage	(tested for 1 second)	3000VDC
	(rated for 1 minute*)	1500VAC / 60Hz
Isolation Capacitance		20pF min. / 40pF typ. / 60pF max.
Isolation Resistance		1 GΩ min.
Short Circuit Protection	Continuous	
Operating Temperature Range (free air conve	-40°C to +85°C (see Graph)	
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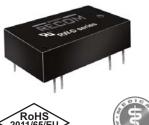
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ECONOLINE

DC/DC-Converter with 3 year Warranty



3 Watt DIP24 Low Profile Regulated **Dual Output**





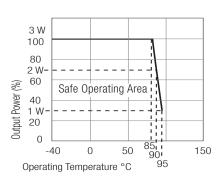


EN-60950-1 Certified EN-60601-1 Certified

RW-D

Derating-Graph

(Ambient Temperature)



*Any data referred to in this datasheet are of indicative nature and based on our practical experience only. For further details, please refer to our Application Notes.

Refer to Application Notes

ECONOLINE

DC/DC-Converter

RW-xxxxD Series

Specification	s (Core	Operating Area)

Storage Temperature Range		-55°C to +125°C
Case Material		Non-Conductive Black Plastic
Potting Material		Epoxy (UL94V-0)
Relative Humidity		95% RH
Package Weight		7.7g
Packing Quantity		15pcs per Tube
MTBF (+25°C) Detailed Information see Application Notes chapter "MTBF"	using MIL-HDBK 217F	1636 x 10 ³ hours
	using MIL-HDBK 217F	303 x 10 ³ hours
Certifications		

EN General Safety Report: SPCLVD1212007 EN60950-1:2006 + A11:2009+A1:2010+A12:2011

EN Medical Safety Report: MDD1205098-3 + RM1205098-3 IEC/EN 60601-1 3rd Edition Medical Report + IS014971 Risk Assessment

Notes

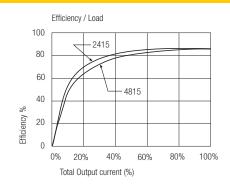
Note 1: Maximum capacitive load is defined as the capacitive load that will allow start up in under 1 second without damage to the converter

Note 2: The RW-D series requires a minimum of 10% load on the output to maintain specified regulation. Operating under no-load conditions

will not damage these devices; however, they may not meet all listed specifications.

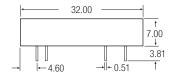
Typical Performance

RW-xx15D



Package Style and Pinning (mm)

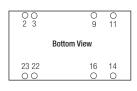
24 PIN DIP Miniature Package Style

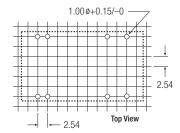






Recommended Footprint Details





Pin Connections

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

NC = No Connection

 $\begin{array}{ll} \text{XX.X} & \pm \ 0.5 \ \text{mm} \\ \text{XX.XX} & \pm \ 0.25 \ \text{mm} \end{array}$

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