

Features

Regulated Converters

- 2:1 Wide Range Voltage Input
- 1kVDC, 2kVDC and 3kVDC Isolation
- UL94V-0 Package Material
- Continuous Short Circuit Protection
- Low Ripple and Noise
- DIP16 and SMD Versions Available
- Efficiency to 83%

Selection Guide

Part Number	Input Voltage Range (VDC)	Rated Output Voltage (VDC)	Output Current Full Load (mA)	Efficiency typ./nom Vin (%)	Capacitive Load max. μ F
DIP16					
RW2-053.3S (H2/H3)	4.5 - 9	3.3	500	68	1000
RW2-0505S (H2/H3)	4.5 - 9	5	400	73	1000
RW2-0509S (H2/H3)	4.5 - 9	9	222	74	470
RW2-0512S (H2/H3)	4.5 - 9	12	166	75	220
RW2-0515S (H2/H3)	4.5 - 9	15	134	75	100
RW2-123.3S (H2/H3)	9 - 18	3.3	500	69	1000
RW2-1205S (H2/H3)	9 - 18	5	400	75	1000
RW2-1209S (H2/H3)	9 - 18	9	222	78	470
RW2-1212S (H2/H3)	9 - 18	12	166	80	220
RW2-1215S (H2/H3)	9 - 18	15	134	80	100
RW2-243.3S (H2/H3)	18 - 36	3.3	500	70	1000
RW2-2405S (H2/H3)	18 - 36	5	400	78	1000
RW2-2409S (H2/H3)	18 - 36	9	222	81	470
RW2-2412S (H2/H3)	18 - 36	12	166	83	220
RW2-2415S (H2/H3)	18 - 36	15	134	83	100
RW2-483.3S (H2/H3)	36 - 72	3.3	500	73	1000
RW2-4805S (H2/H3)	36 - 72	5	400	76	1000
RW2-4809S (H2/H3)	36 - 72	9	222	79	470
RW2-4812S (H2/H3)	36 - 72	12	166	81	220
RW2-4815S (H2/H3)	36 - 72	15	134	81	100
RW2-053.3D (H2/H3)	4.5 - 9	$\pm$ 3.3	$\pm$ 250	68	$\pm$ 470
RW2-0505D (H2/H3)	4.5 - 9	$\pm$ 5	$\pm$ 200	73	$\pm$ 470
RW2-0509D (H2/H3)	4.5 - 9	$\pm$ 9	$\pm$ 111	74	$\pm$ 220
RW2-0512D (H2/H3)	4.5 - 9	$\pm$ 12	$\pm$ 83	75	$\pm$ 100
RW2-0515D (H2/H3)	4.5 - 9	$\pm$ 15	$\pm$ 67	75	$\pm$ 47
RW2-123.3D (H2/H3)	9 - 18	$\pm$ 3.3	$\pm$ 250	69	$\pm$ 470
RW2-1205D (H2/H3)	9 - 18	$\pm$ 5	$\pm$ 200	75	$\pm$ 470
RW2-1209D (H2/H3)	9 - 18	$\pm$ 9	$\pm$ 111	78	$\pm$ 220
RW2-1212D (H2/H3)	9 - 18	$\pm$ 12	$\pm$ 83	80	$\pm$ 100
RW2-1215D (H2/H3)	9 - 18	$\pm$ 15	$\pm$ 67	80	$\pm$ 47
RW2-243.3D (H2/H3)	18 - 36	$\pm$ 3.3	$\pm$ 250	70	$\pm$ 470
RW2-2405D (H2/H3)	18 - 36	$\pm$ 5	$\pm$ 200	78	$\pm$ 470
RW2-2409D (H2/H3)	18 - 36	$\pm$ 9	$\pm$ 111	81	$\pm$ 220
RW2-2412D (H2/H3)	18 - 36	$\pm$ 12	$\pm$ 83	83	$\pm$ 100
RW2-2415D (H2/H3)	18 - 36	$\pm$ 15	$\pm$ 67	83	$\pm$ 47
RW2-483.3D (H2/H3)	36 - 72	$\pm$ 3.3	$\pm$ 250	73	$\pm$ 470
RW2-4805D (H2/H3)	36 - 72	$\pm$ 5	$\pm$ 200	78	$\pm$ 470
RW2-4809D (H2/H3)	36 - 72	$\pm$ 9	$\pm$ 111	81	$\pm$ 220
RW2-4812D (H2/H3)	36 - 72	$\pm$ 12	$\pm$ 83	83	$\pm$ 100
RW2-4815D (H2/H3)	36 - 72	$\pm$ 15	$\pm$ 67	83	$\pm$ 47

Standard Isolation is 1kVDC. Add suffix **/H2** for 2kVDC Isolation, **/H3** for 3kVDC Isolation.

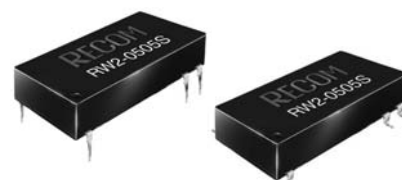
Add suffix **"/SMD"** for SMD Package e.g. RW2-0505S/H3/SMD

ECONOLINE

DC/DC-Converter

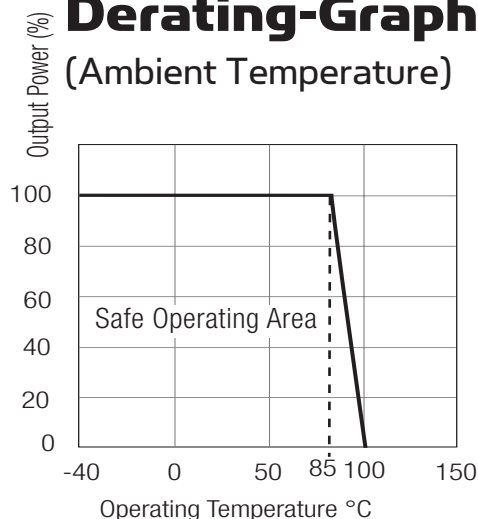
RW2 Series

2 Watt DIP16 & SMD Single & Dual Output



RECOM

Derating-Graph (Ambient Temperature)



Description

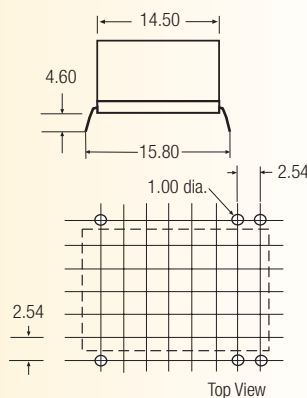
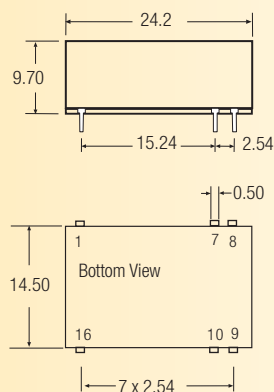
High power-density, 2:1 input voltage range and a wide temperature range of -40°C to +85°C are just some of the characteristics of this versatile surface mount converter, ideal for highly sophisticated industrial designs where space is at a premium.

Electrical Specifications (measured at $T_A = 25^\circ\text{C}$, at nominal input voltage and rated output current unless otherwise specified)

Input Voltage Range		2:1
Output Accuracy		$\pm 2\%$ typ.
Line Voltage Regulation		$\pm 0.5\%$ max.
Load Voltage Regulation	(20% to 100% full load)	$\pm 0.5\%$ typ.
Output Ripple and Noise (20MHz limited)		50mVp-p max.
Switching Frequency (at full Load)		100kHz min.
Efficiency at Full Load		70% min. / 80% typ.
Isolation Voltage	(tested for 1 second)	1000VDC min.
	H2	2000VDC min.
	H3	3000VDC min.
Rated Working Voltage	(long term isolation)	see Application Notes
Isolation Capacitance		30pF max.
Isolation Resistance		1G Ω min.
Short Circuit Protection		Continuous
Operating Temperature Range		-40°C to +85°C
Storage Temperature Range		-55°C to +125°C
Relative Humidity		95% RH
Package Weight		6.4g
MTBF (+25°C)	} Detailed Information see Application Notes chapter "MTBF"	using MIL-HDBK 217F 4366 x10 ³ hours
(+85°C)		using MIL-HDBK 217F 658 x10 ³ hours

Package Style and Pinning (mm)

16 Pin DIP Package



Pin Connections

Pin #	Single	Dual
1	-Vin	-Vin
7	NC	NC
8	NC	Com
9	+Vout	+Vout
10	-Vout	-Vout
16	+Vin	+Vin

NC = No Connection
XX.X ± 0.5 mm
XX.XX ± 0.35 mm

Recommended Footprint Details

16 Pin SMD Package

