

ECONOLINE - DC/DC-Converter

RV-Ser., 2W, DIP24 Miniature, 6kVDC Isolation, EN 60950 certified (Single & Dual Output)



RECOM

Features

- Safety standards and approvals:
EN 60950 certified, rated for
250VAC (LVD test report)
- 6kVDC Isolation
- Efficiency to 70% min.
- UL 94V-0 Package Material
- Internal SMD Construction
- Fully Encapsulated



Selection Guide 3.3, 5V, 9V, 12V, 15V, 24V Input Types

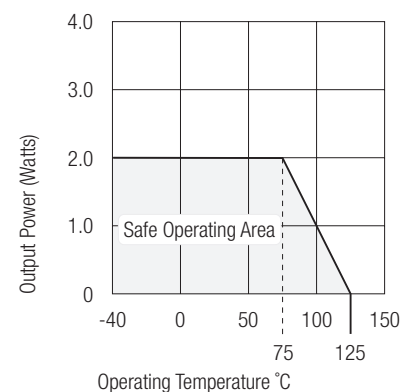
Part Number DIP24 Miniature	Nom. Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)
RV-XX3.3S	3.3, 5, 9, 12, 15, 24	3.3	600
RV-XX05S	3.3, 5, 9, 12, 15, 24	5	400
RV-XX09S	3.3, 5, 9, 12, 15, 24	9	222
RV-XX12S	3.3, 5, 9, 12, 15, 24	12	167
RV-XX15S	3.3, 5, 9, 12, 15, 24	15	133
RV-XX24S	3.3, 5, 9, 12, 15, 24	24	83
RV-XX3.3D	3.3, 5, 12, 15, 24	±3.3	±300
RV-XX05D	3.3, 5, 12, 15, 24	±5	±200
RV-XX09D	3.3, 5, 12, 15, 24	±9	±111
RV-XX12D	3.3, 5, 12, 15, 24	±12	±83
RV-XX15D	3.3, 5, 12, 15, 24	±15	±67
RV-XX24D	3.3, 5, 12, 15, 24	±24	±42

Description

The RV Series of DC/DC Converters are fully certified to EN 60950: 2000. This makes them ideal for all Telecom and safety applications where approved isolation is required. EN 60950 is derived from IEC 950 and is equivalent to UL 1950 and CSA 950 standards.

Specifications (Core Operating Area) and Operating Temperature / Derating-Graph

Input Voltage Range	±10%	
Output Voltage Accuracy	±5%	
Rated Power	2W	
Efficiency at Full Load	70% min.	
Operating Frequency	50kHz min.	
Ripple and Noise (20MHz, BW)	100mVp-p max.	
Line Voltage Regulation	1.2% typ./1.0% of V_{in}	
Load Voltage Regulation (10% to 100% load)	3.3V output types	20% max.
	5V output types	15% max.
	9 - 24V output types	10% max.
Isolation Voltage	6kVDC min.	
Isolation Resistance (Viso = 500VDC)	15 GΩ min.	
Isolation Capacitance	2pF min./12pF max.	
Short Circuit Protection	1s	
Operating Temperature Range	-40°C to +75°C	
Storage Temperature Range	-55°C to +125°C	
Package Weight	9.0g	



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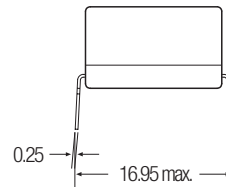
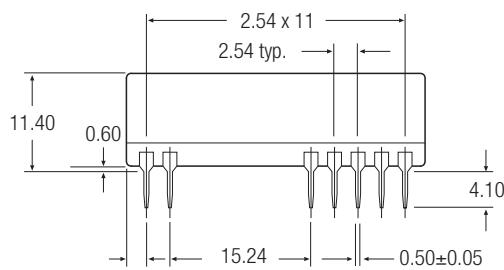
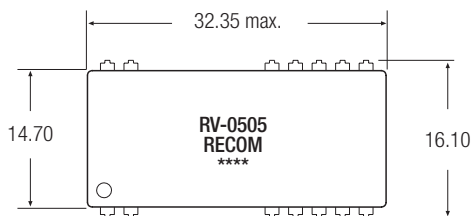
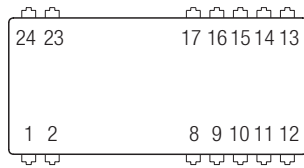
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Package Style and Pinning (mm)

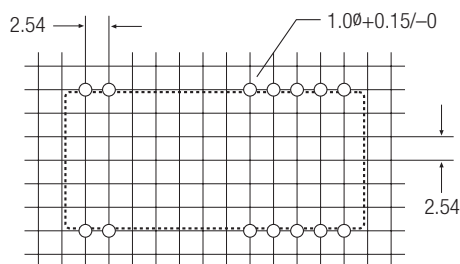
24 PIN DIP Miniature Package Style



Pin Connections – Single Output

Pin #	Connection
1	+Vin
2	-Vin
8, 9, 11, 14,	NC
10 & 15	-Vout
12 & 13	+Vout
16, 17, 23 & 24	NC

Recommended Footprint Details



Pin Connections – Double Output

Pin #	Connection
1	+Vin
2	-Vin
8 & 17	-Vout
9, 11, 14, 16, 23 & 24	NC
10 & 15	Com
12 & 13	+Vout

Tolerance: ±0.25 mm