

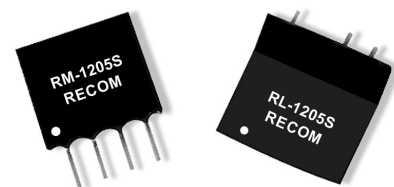
ECONOLINE - DC/DC-Converter

RM and RL Series, 0.25 Watt, SIP4/DIP8 (Single Output)

RECOM

Features

- High Efficiency for Low Power Applications
- Pin Compatible with Industry Standard
- Single Output Rail
- UL 94V-0 Package Material
- Toroidal Magnetics
- Fully Encapsulated

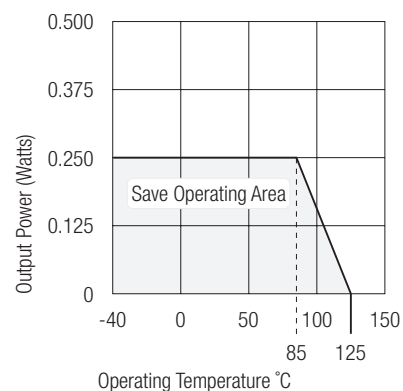


Selection Guide

| Part Number | Part Number | Input Voltage (VDC) | Output Voltage (VDC) | Output Current (mA) | Efficiency (%) |
|-------------|---------------|----------------------------|----------------------|---------------------|----------------|
| RM-XX1.8S | RL-XX1.8S (H) | 1.8, 3.3, 5, 9, 12, 15, 24 | 1.8 | 139 | 70 |
| RM-XX3.3S | RL-XX3.3S (H) | 1.8, 3.3, 5, 9, 12, 15, 24 | 3.3 | 76 | 65-70 |
| RM-XX05S | RL-XX05S (H) | 1.8, 3.3, 5, 9, 12, 15, 24 | 5 | 50 | 66-72 |
| RM-XX09S | RL-XX09S (H) | 1.8, 3.3, 5, 9, 12, 15, 24 | 9 | 28 | 70-72 |
| RM-XX12S | RL-XX12S (H) | 1.8, 3.3, 5, 9, 12, 15, 24 | 12 | 21 | 70-72 |
| RM-XX15S | RL-XX15S (H) | 1.8, 3.3, 5, 9, 12, 15, 24 | 15 | 17 | 70-76 |
| RM-XX24S | RL-XX24S (H) | 1.8, 3.3, 5, 9, 12, 15, 24 | 24 | 10 | 70-80 |

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

| | | |
|---|---|----------|
| Input Voltage | ±10% | |
| Input Filter | Capacitor Type | |
| Output Voltage Accuracy | ±5% | |
| Line Voltage Regulation | 1,2%/1% V Input | |
| Load Voltage Regulation (10% to 100% full load) | 1.8V, 3.3V output types | 20% max. |
| | 5V output types | 15% max. |
| | other output types | 10% max. |
| Ripple and Noise (20MHz limited) | 50mVp-p max. | |
| Efficiency at Full Load | 65% min. | |
| Isolation Voltage | 1.000VDC min. (Typ RL available with 2.000VDC, Suffix 'H') | |
| Isolation Resistance (Viso = 500VDC) | 10 GΩ min. | |
| Short Circuit Protection | 1 Second | |
| Switching Frequency at Full Load | 50kHz min. / 90kHz typ. | |
| Isolation Capacitance | 25pF min./82pF max. | |
| Operating Temperature | -40°C to +85°C (see Graph) | |
| Storage Temperature | -55°C to +125°C | |
| Package Weight | RM types | 1.4g |
| | RL types | 1.8g |



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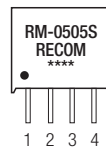
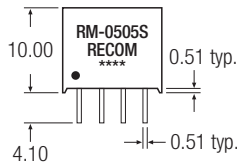
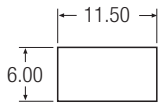
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Package Style and Pinning (mm)

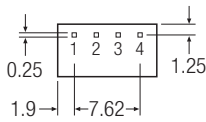
4 PIN SIP Package

3rd angle projection 

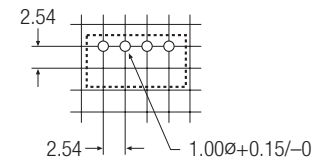


RM Pin Connections

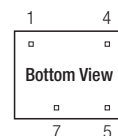
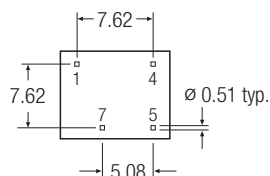
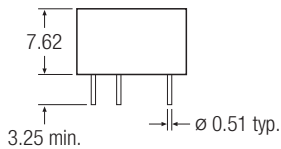
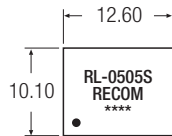
| Pin # | Single |
|-------|--------|
| 1 | -Vin |
| 2 | +Vin |
| 3 | -Vout |
| 4 | +Vout |



Recommended Footprint Details



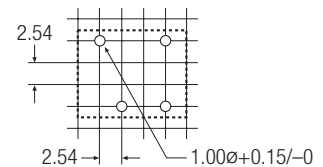
8 PIN DIP Package



RL Pin Connections

| Pin # | Single |
|-------|--------|
| 1 | -Vin |
| 4 | +Vin |
| 5 | +Vout |
| 7 | -Vout |

Recommended Footprint Details



XX.X ± 0.5 mm
XX.XX ± 0.25 mm