

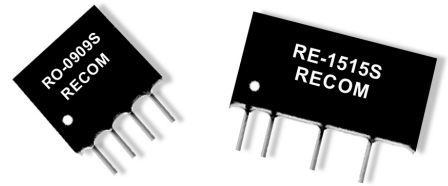
ECONOLINE - DC/DC-Converter

RO and RE Series, 1 Watt, SIP4/SIP7 (Single Output)

RECOM

Features

- Industry Standard Pinout
- 1kVDC Isolation
- UL 94V-0 Package Material
- Toroidal Magnetics
- Fully Encapsulated
- Custom Solutions Available

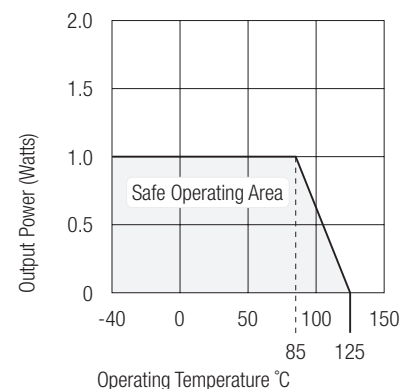


Selection Guide

| Part Number | Part Number | Input Voltage (VDC) | Output Voltage (VDC) | Output Current (mA) | Efficiency (%) |
|-------------|---------------|----------------------------|----------------------|---------------------|----------------|
| SIP4 | SIP7 | 2kV | | | |
| RO-XX1.8S | RE-XX1.8S (H) | 1.8, 3.3, 5, 9, 12, 15, 24 | 1.8 V | 555 | 70 |
| RO-XX3.3S | RE-XX3.3S (H) | 1.8, 3.3, 5, 9, 12, 15, 24 | 3.3 V | 303 | 75 |
| RO-XX05S | RE-XX05S (H) | 1.8, 3.3, 5, 9, 12, 15, 24 | 5 V | 200 | 70-78 |
| RO-XX09S | RE-XX09S (H) | 1.8, 3.3, 5, 9, 12, 15, 24 | 9 V | 111 | 70-78 |
| RO-XX12S | RE-XX12S (H) | 1.8, 3.3, 5, 9, 12, 15, 24 | 12 V | 84 | 78-82 |
| RO-XX15S | RE-XX15S (H) | 1.8, 3.3, 5, 9, 12, 15, 24 | 15 V | 66 | 80-84 |
| RO-XX24S | RE-XX24S (H) | 1.8, 3.3, 5, 9, 12, 15, 24 | 24 V | 42 | 74-85 |

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 types 5V type 9V, 12V, 15V, 24V types | 20% max. 15% max. 10% max. |
| Efficiency at Full Load | 70% min. | |
| Isolation Voltage | 1.000VDC min. (Typ RE available with 2.000VDC, Suffix „H“) | |
| Isolation Resistance (Viso = 500VDC) | 10 GΩ min. | |
| Isolation Capacitance | 20pF min./75pF max. | |
| Ripple and Noise | 100mVp-p max. | |
| Short Circuit Protection | 1 Second | |
| Switching Frequency at Full Load | 50kHz min. / 100kHz typ. | |
| Operating Temperature | -40°C to +85°C (see Graph) | |
| Storage Temperature | -55°C to +125°C | |
| Package Weight | RO types RE types | 1.4g 2.2g |



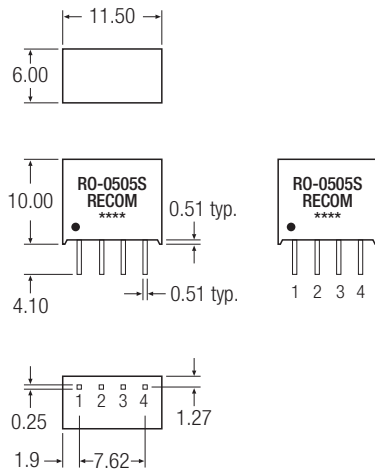
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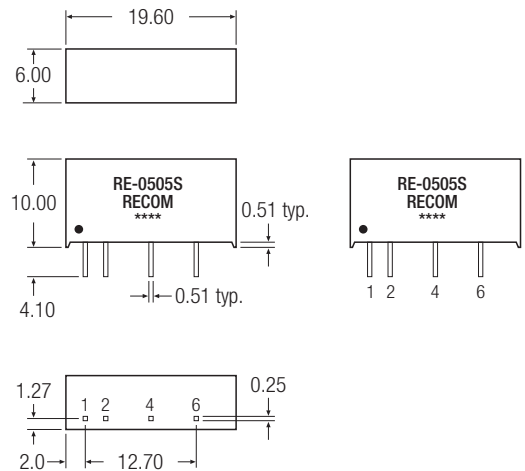
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Package Style and Pinning (mm)

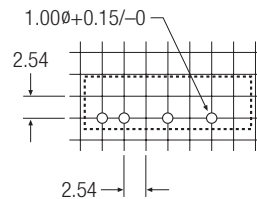
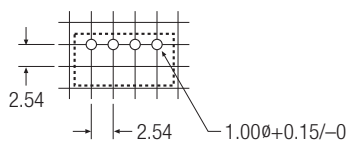
4 PIN SIP Package



7 PIN SIP Package



Recommended Footprint Details



Pin Connections

| Pin # | RO | RE |
|-------|--------|--------|
| 1 | -Vin | +Vin |
| 2 | +Vin | -Vin |
| 3 | -Vout | No Pin |
| 4 | +Vout | -Vout |
| 6 | No Pin | +Vout |

XX.X ± 0.5 mm
XX.XX ± 0.25 mm