

ECONOLINE - DC/DC-Converter

RTS/RTD Series, 2 Watt, SMD (Single & Dual Output)



RECOM

Features

- 1kVDC Isolation
- Efficiency to 70%
- UL 94V-0 Package Material
- Toroidal Magnetics
- Internal SMD Construction



Selection Guide

| Part | Input Number (VDC) | Output Voltage (VDC) | Output Voltage (mA) | Efficiency Current (%) |
|-----------|--------------------|----------------------|---------------------|------------------------|
| RTS-XX3.3 | 5, 9, 12, 15, 24 | 3.3 | 606 | 70 |
| RTS-XX05 | 5, 9, 12, 15, 24 | 5 | 400 | 70 |
| RTS-XX09 | 5, 9, 12, 15, 24 | 9 | 222 | 75 |
| RTS-XX12 | 5, 9, 12, 15, 24 | 12 | 167 | 75 |
| RTS-XX15 | 5, 9, 12, 15, 24 | 15 | 133 | 75 |
| RTS-XX24 | 5, 9, 12, 15, 24 | 24 | 83 | 78 |
| RTD-XX3.3 | 5, 9, 12, 15, 24 | ±3.3 | ±303 | 70 |
| RTD-XX05 | 5, 9, 12, 15, 24 | ±5 | ±200 | 70 |
| RTD-XX09 | 5, 9, 12, 15, 24 | ±9 | ±111 | 75 |
| RTD-XX12 | 5, 9, 12, 15, 24 | ±12 | ±83 | 75 |
| RTD-XX15 | 5, 9, 12, 15, 24 | ±15 | ±66 | 75 |
| RTD-XX24 | 5, 9, 12, 15, 24 | ±24 | ±42 | 78 |

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

| | | |
|-------------------------------------------------|------------------------------------------------------------------------------------|----------------------------------------------|
| Input Voltage Range | | ±10% |
| Output Voltage Accuracy | | ±5% |
| Rated Power | | 2W |
| Isolation Voltage | | 1000VDC min. |
| Isolation Resistance (Viso = 500VDC) | | 10 GΩ min. |
| Isolation Capacitance | | 40pF min./115pF max. |
| Ripple and Noise (20MHz BW) | | 150mVp-p max. |
| Line Voltage Regulation | | 1.2%/1% of Vin |
| Load Voltage Regulation (10% to 100% full load) | 3.3V output type 5V output type 9V, 12V, 15V output types 24V output type | 20% max. 15% max. 10% max. 10% max. |
| Efficiency at Full Load | | 70% min. |
| Short Circuit Protection | | 1 Second |
| Operating Temperature Range | | -40°C to +71°C |
| Storage Temperature Range | | -55°C to +125°C |
| Package Weight | Single output types Dual output types | 2.1g 2.5g |

ECONOLINE - DC/DC-Converter

RTS/RTD Series, 2 Watt, SMD (Single & Dual Output)



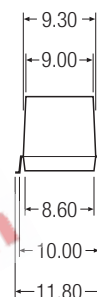
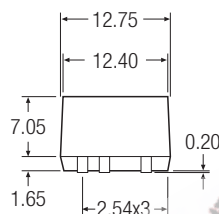
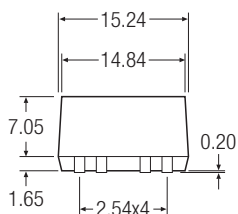
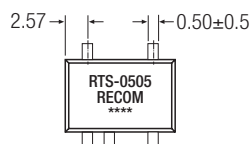
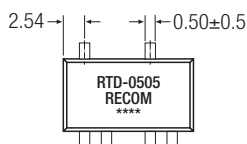
RECOM

Package Style and Pinning (mm)

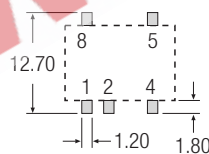
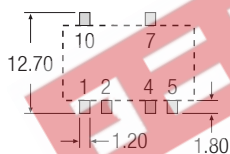
Dual Output

Single Output

3rd angle projection



Recommended Footprint Details



Pin Connections

| Pin # | Single | Dual |
|-------|--------|--------|
| 1 | -Vin | -Vin |
| 2 | +Vin | +Vin |
| 4 | -Vout | Com |
| 5 | +Vout | -Vout |
| 7 | No Pin | +Vout |
| 8 | NC | No Pin |
| 10 | No Pin | NC |

NC = No Connection

XX.X ± 0.5 mm
XX.XX ± 0.25 mm