

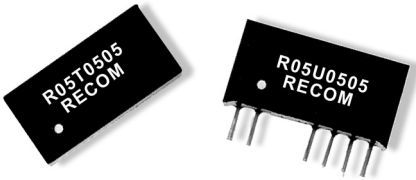
# EUROLINE - DC/DC-Converter

RxxT and RxxU Series, 1 Watt, DIP14/SIP7, Isolated (Twin Independent Output)

RECOM

## Features

- Output / Output Isolation 1kVDC
  - Input / Output Isolation 1kVDC
  - Efficiency to 808%
  - UL 94V-O Package Material
- Internal SMD Construction
  - Toroidal Magnetics
  - MTTF up to 1.9 Million Hours
  - Power Sharing on Outputs



## Selection Guide 5V and 12V input types

Part Number	Output Voltage 1 (VDC)	Output Voltage 2 (VDC)	Output Current 1 (mA)	Output Current 2 (mA)	Package Style
RxxT0503	5	3.3	100	152	DIP14
RxxT0505	5	5	100	100	
RxxT0509	5	9	100	56	
RxxT0512	5	12	100	42	
RxxT0515	5	15	100	34	
RxxU0503	5	3.3	100	152	SIP7
RxxU0505	5	5	100	100	
RxxU0509	5	9	100	56	
RxxU0512	5	12	100	42	
RxxU0515	5	15	100	34	

## Absolute Maximum Ratings Over Operating Free Air Temperature Range

Input Voltage $V_{IN}$	5V types	7V
	12V types	15V
Output Power Total		1W
Short Circuit Duration <sup>1)</sup>		1s
Input to Output Isolation Voltage (flash tested for 1 second)		1000VDC
Output to Output Isolation Voltage (flash tested for 1 second)		1000VDC
Operating Free Air Temperature Range (requires a minimum of 10 mm air space around the component)	0°C to +70°C (see derating Curve)	
Storage Temperature Range	-55°C to 150°C	
Lead Temperature (1.5 mm from case for 10 seconds)	300 °C	

<sup>1)</sup>- Supply voltage must be discontinued at the end of the short circuit duration.

# EUROLINE - DC/DC-Converter

RxxT and RxxU Series, 1 Watt, SIP7/DIP14, Isolated (Dual Output)

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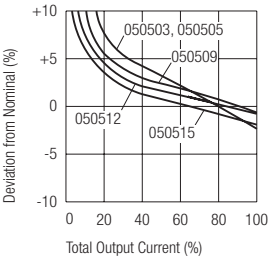
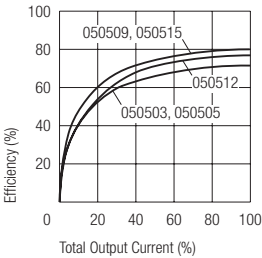
## Electrical Specifications (measured at T<sub>A</sub> = 25°C, at nominal input voltage and rated output current unless otherwise specified)

Input Voltage Range V <sub>IN</sub> (continuous operation)	5V types 12V input types	5V±10% 12V±10%
Load Voltage Regulation (10% load to 100% full load)	3.3V and 5V output types 9V, 12V and 15V output types	15% max. 10% max.
Line Voltage Regulation		1.2% / 1.0% of V <sub>IN</sub>
Output Voltage Accuracy		See Tolerance Envelope
Input Reflected Ripple (20MHz band limited)		80mVp-p max.
Ouput Ripple (20MHz band limited)		75mVp-p max.
Insulation Resistance (at 500VDC)		1000MΩ min.
Efficiency (at full load)	3.3V and 5V output types 9V, 12V and 15V ouput types	65% min. / 70% typ. 70% min. / 80% typ.
Temperature Drift (V <sub>OUT</sub> )		0.03% per °C max.
Temperature Rise above Ambient (at full load)		8°C max.
Switching Frequency at Full Load (depending on the type)		100kHz typ.
Package Weight		2.3 g
MTTF <sup>1)</sup> (depending on the type)	-25°C +25°C +70°C	170kHrs min. / 1900kHrs max. 148kHrs min. / 1615kHrs max. 130kHrs min. / 1350kHrs max.

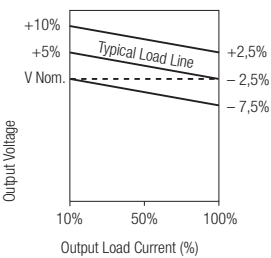
<sup>1)</sup> Calculated using MIL-HDBK-217F with nominal input voltage at full load.  
Please contact us, if you need exact parameters for the converter you have selected.

## Typical Characteristics, Tolerance Envelope and Temperature Derating Graph

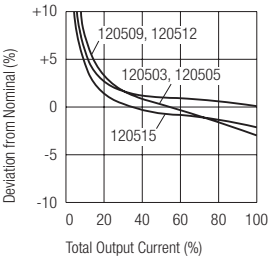
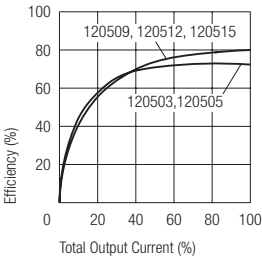
R05T/Uxx



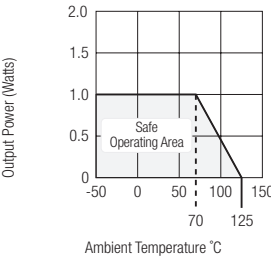
Tolerance Envelope



R12T/Uxx

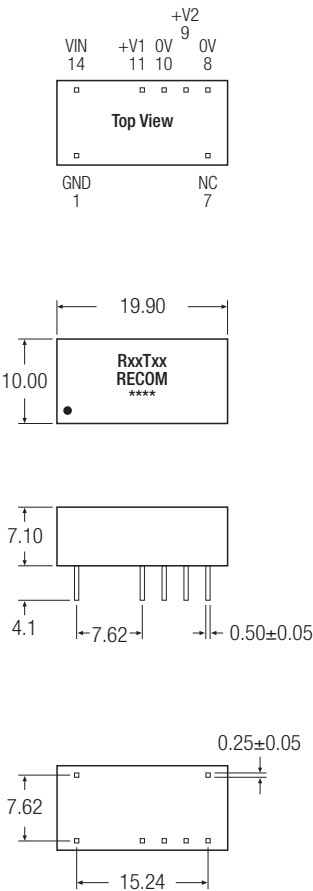


Temperature Derating Graph

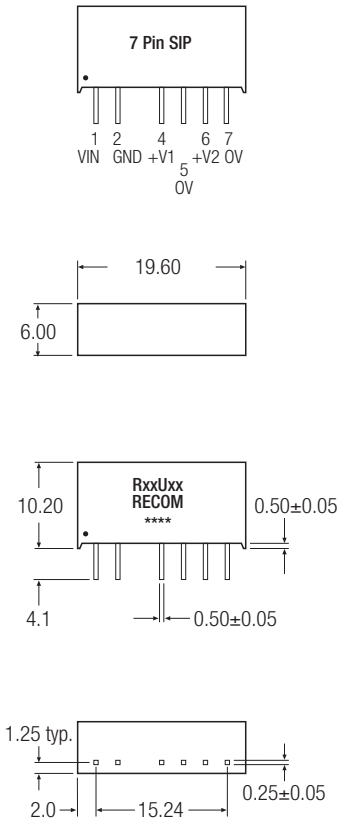


Package Style and Pinning (mm)

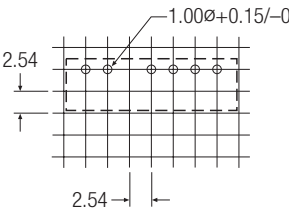
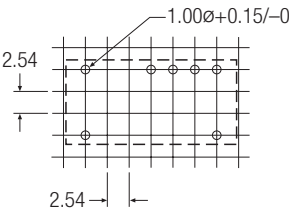
14 Pin DIP Package Style



7 Pin SIP Package Style



Recommended Footprint Details



XX.X ± 0.5 mm  
XX.XX ± 0.25 mm