

# Features

## Unregulated Converters

- 1:1 Input Range
- Low Cost 1W Converter
- Efficiency to 75%
- -40°C to +85°C Operating Temperature Range

# ECONOLINE

DC/DC-Converter



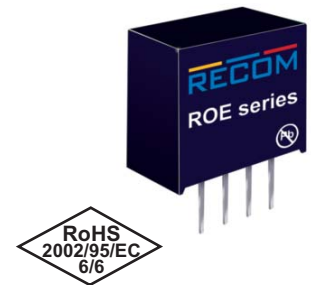
## 1 Watt SIP4 Single Output

### Selection Guide

Part Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency (typ.)
ROE-0505S	5	5	200	75%

### Specifications (measured at $T_A = 25^\circ\text{C}$ , nominal input voltage, full load and after warm-up)

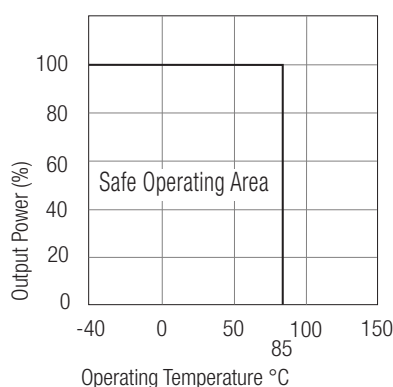
Input Voltage Range			$\pm 10\%$ max.
Output Voltage Accuracy			-2% typ., $\pm 5\%$ max.
Line Voltage Regulation	(low line to high line at max. load)	1.2% typ.	
	20% to 100% load (5V output)	10% max.	
Output Ripple and Noise (20MHz BW limited)			52mVp-p typ. / 100mVp-p max.
Operating Frequency ( $V_{in}$ =nominal input)			50kHz min. / 82kHz typ. / 105kHz max.
Efficiency			75% typ. / 70% min.
Isolation Test Voltage (tested for 1 second)			1000 VDC min.
Isolation Capacitance			75pF max.
Isolation Resistance (Viso=500V)			1G $\Omega$ min.
Short-Circuit Protection			1 sec.
Operating Temperature Range			-40°C to +85°C
Storage Temperature			-55°C to +125°C
Relative Humidity			95% RH
Package Weight			1.4g
MTBF (+25°C)	} Detailed Information see Application Notes chapter "MTBF"	using MIL-HDBK 217F	2400 x 10 <sup>3</sup> hours
MTBF (+85°C)		using MIL-HDBK 217F	650 x 10 <sup>3</sup> hours



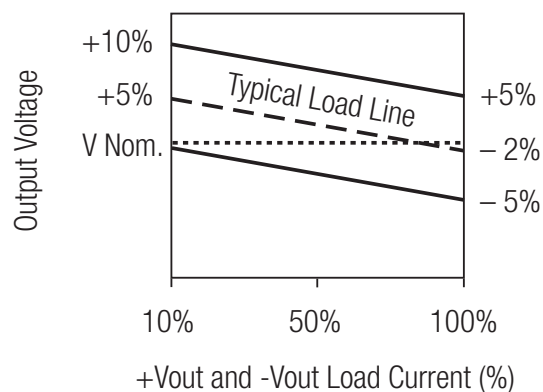
# ROE

### Typical Characteristics

#### Derating-Graph (Ambient Temperature)

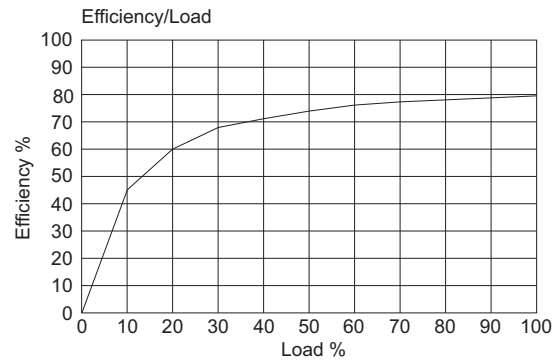
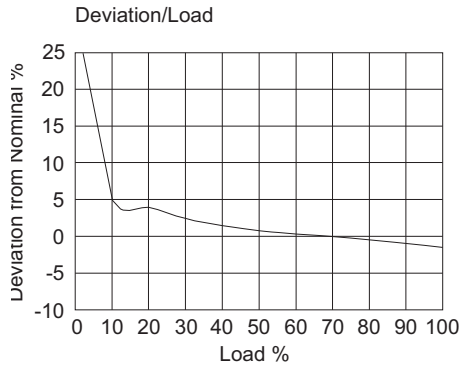


#### Tolerance Envelope



### Typical Characteristics

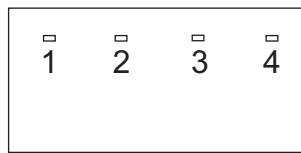
## ROE-0505S



### Package Style and Pinning

#### Single SIP 4PIN Package

3rd angle projection



BOTTOM VIEW

Pin Connections	
Pin #	Function
1	-Vin
2	+Vin
3	-Vout
4	+Vout

Unit: mm  
Tolerance: ± 0.25 mm

