

# Features

## Unregulated Converters

- 1:1 Input Range
- Low Cost 1W Converter
- Efficiency to 76%
- -40°C to +85°C Operating Temperature Range

# ECONOLINE

DC/DC-Converter



## 1 Watt SIP7 Single Output

### Selection Guide

Part Number SMD	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency (typ.)
RBE-0505S	5	5	200	76%

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

Input Voltage Range	±10% max.		
Output Voltage Accuracy	-2% typ., ±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	76% typ. / 70% min.		
Isolation Test Voltage (tested for 1 second)	1000 VDC min.		
Isolation Capacitance	75pF max.		
Isolation Resistance (Viso=500V)	1GΩ 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

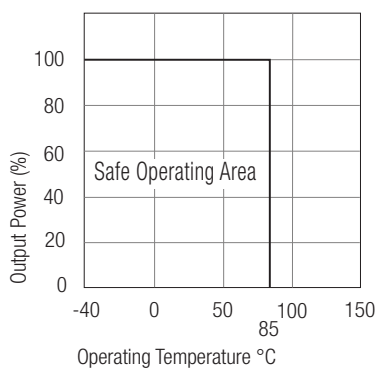


# RBE

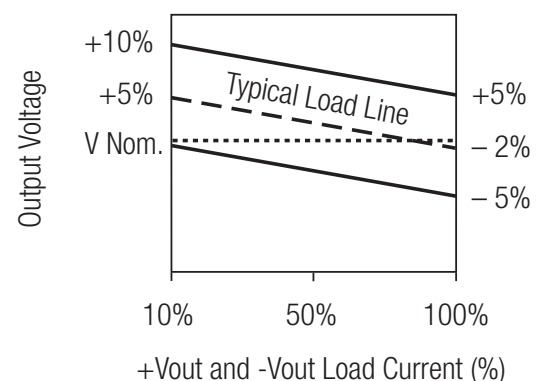
### Typical Characteristics

#### Derating-Graph

(Ambient Temperature)

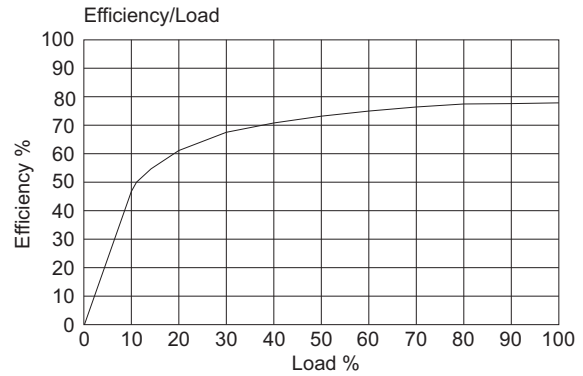
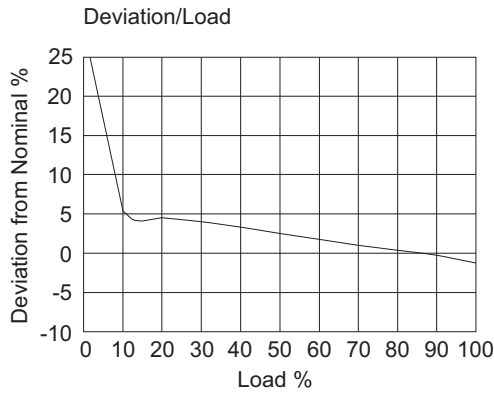


#### Tolerance Envelope



### Typical Characteristics

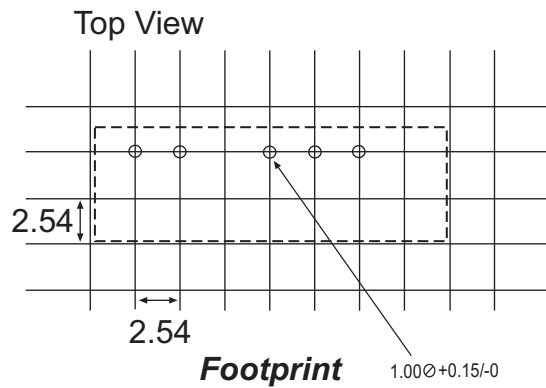
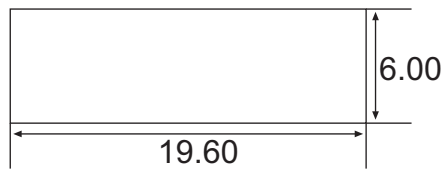
## RBE-0505S



### Package Style and Pinning

#### Single SIP 7PIN Package

3rd angle projection



**Pin Connections**

Pin #	Function
1	+Vin
2	-Vin
4	NC
5	-Vout
6	+Vout

NC = No Connection

Unit: mm  
Tolerance:  $\pm 0.25$  mm

