

Features

Unregulated Converters

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

Selection Guide

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

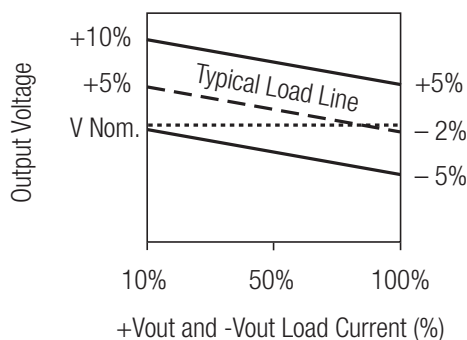
Specifications (measured at $T_A = 25^\circ\text{C}$, nominal input voltage, full load and after warm-up)

Input Voltage Range		$\pm 10\%$ 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		76% typ. / 70% min.	
Isolation Test Voltage	(tested for 1 second)	1000 VDC min.	
	(rated for 1 minute*)	500VAC / 60Hz	
Isolation Capacitance		75pF max.	
Isolation Resistance	(Viso=500V)	1G Ω 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		2.2g	
MTBF (+25°C)	} Detailed Information see Application Notes chapter "MTBF"	using MIL-HDBK 217F	2400 x 10 ³ hours
MTBF (+85°C)		using MIL-HDBK 217F	650 x 10 ³ hours
Certification			
UL General Safety	Report: E358085-A4		UL60950-1

*Any data referred to in this datasheet are of indicative nature and based on our practical experience only. For further details, please refer to our Application Notes.

Typical Characteristics

Tolerance Envelope



ECONOLINE

DC/DC-Converter

with 3 year Warranty

RECOM

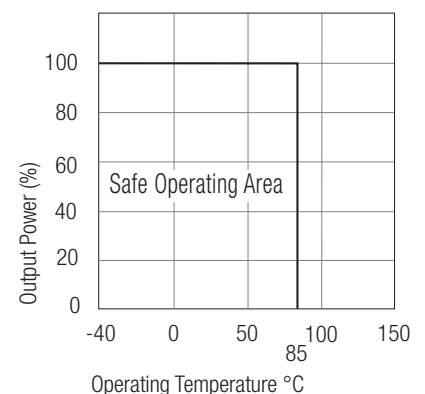
1 Watt SIP7 Single Output



UL-60950-1 Certified

RBE

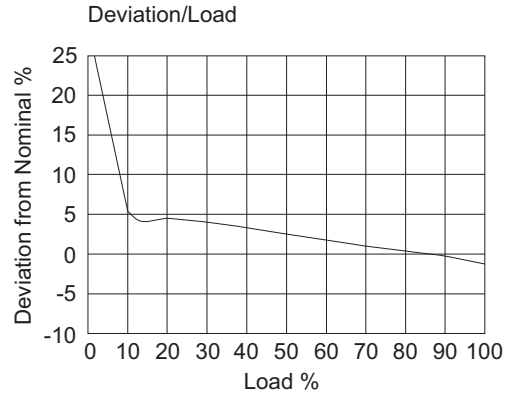
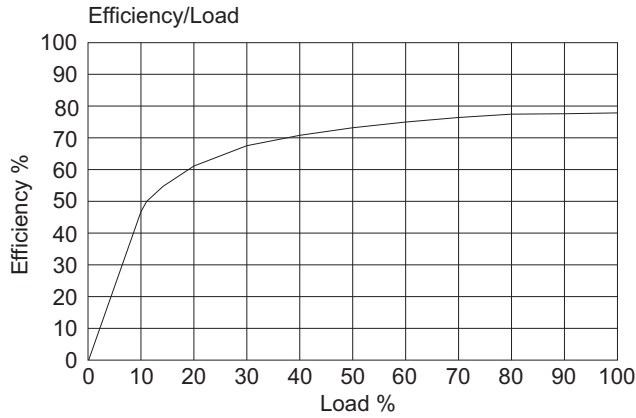
Derating-Graph (Ambient Temperature)



Refer to Application Notes

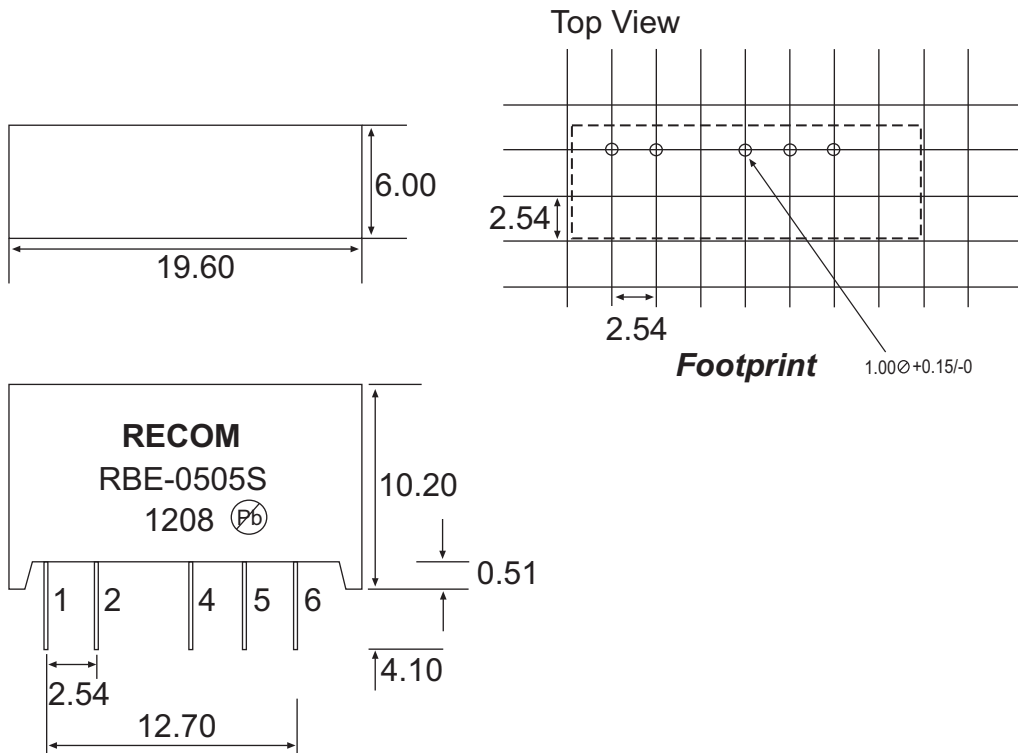
Typical Characteristics

RBE-0505S



Package Style and Pinning

Single SIP 7PIN Package



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

NC = No Connection
Unit: mm
Tolerance: ± 0.25 mm