

Features

Unregulated Converter

- Low Cost 1W Converter
- 4kVDC / 1 sec High Isolation
- Low Output Ripple
- Wide Operating Temperature Range of -40°C to +85°C
- Industry Standard Pinout
- UL Certified

Selection Guide

Part Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency (%)	Max Capacitive Load ⁽¹⁾
SIP 7					
RKE-0505S/H	5	5	200	70	1200µf

Specifications (measured at T_A = 25°C, nominal input voltage, full load and after warm-up)

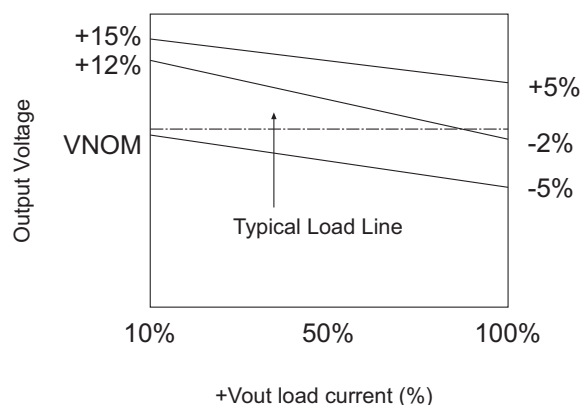
Input Voltage Range	±10%	
Output Voltage Accuracy	-2% typ. / ±5% max.	
Efficiency (@ Full Load)	65% min. / 70% typ.	
Operating Frequency	50kHz min / 65kHz typ. / 105kHz	
Output Ripple & Noise	55mVp-p typ. / 100mVp-p max.	
Line Voltage Regulation	Low Line to High Line @ max. Load	1.2% typ. of 1% V _{in}
Load Voltage Regulation	(10% to 100% Load)	12% typ. / 15% max.
Isolation Voltage	(tested for 1 minute)	3kVDC
	(rated for 1 second*)	4kVDC
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 Range	-55°C to 125°C	
Humidity	95% max.	
Size	19.60mm x 10.20mm x 7.05mm	
Weight	2.7g	
MTBF (25°C)	using MIL-HDBK 217F	850 x 10 ³ hours
(85°C)	using MIL-HDBK 217F	123 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.

Notes

Note1: Maximum capacitive load is defined as the capacitive load that will allow start up in under 1second without damage to the converter.

Tolerance Envelopes



ECONOLINE

DC/DC-Converter

with 3 year Warranty

RECOM

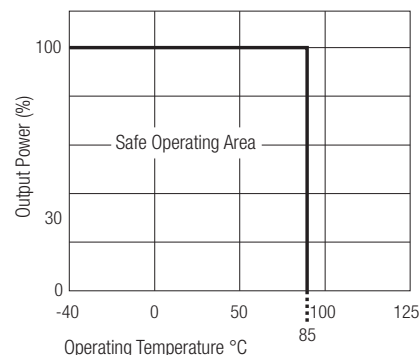
1 Watt SIP7 Single Output



UL-60950-1 Certified

RKE-0505S/H

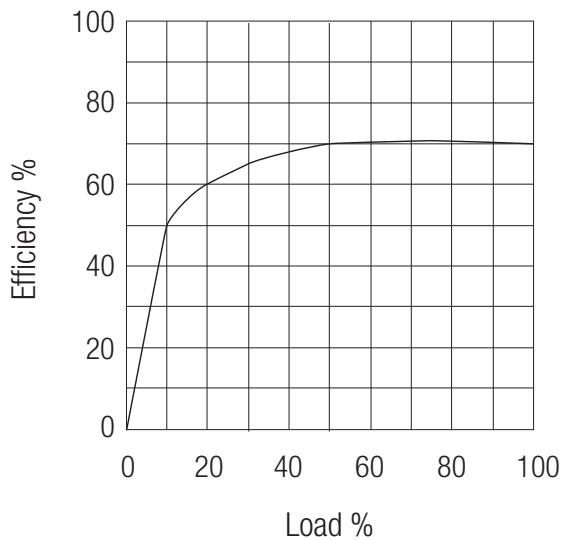
Derating-Graph (Ambient Temperature)



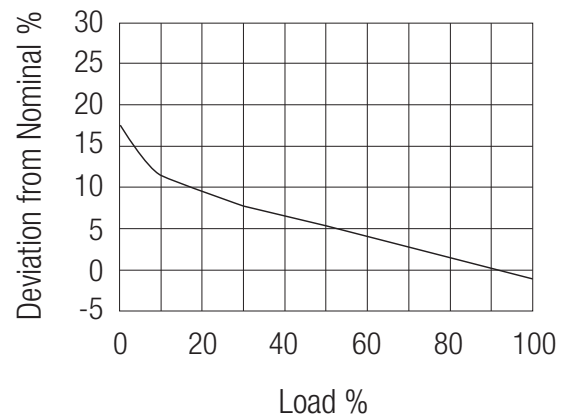
Refer to Application Notes

Typical Characteristics

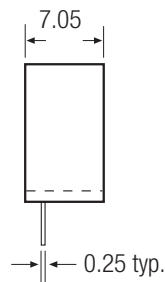
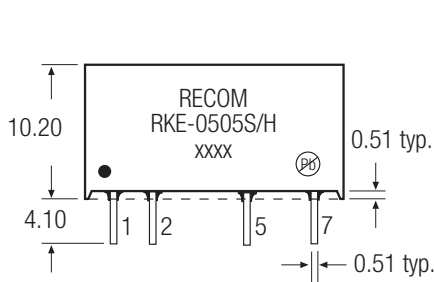
Efficiency vs Load



Deviation vs Load



Package Style and Pinning (mm)



Pin Connections
RKE-0505S/H

Pin #	Single
1	+Vin
2	-Vin
5	-Vout
7	+Vout

XX.X ± 0.5 mm
XX.XX ± 0.25 mm

Recommended Footprint Details

