

Features

Unregulated Converter

- Low Cost 1W Converter
- 3.75kVDC / 1 sec High Isolation
- Low Output Ripple
- Wide Operating Temperature Range of -40°C to +85°C
- Industry Standard Pinout

Selection Guide

Part Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency (%)
SIP 7				
RKE-0505S/H	5	5	200	70

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

Input Voltage Range	$\pm 10\%$	
Output Voltage Accuracy	-2% typ. / $\pm 5\%$ 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	3.75kVDC / 1 sec.	
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 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

ECONOLINE
DC/DC-Converter

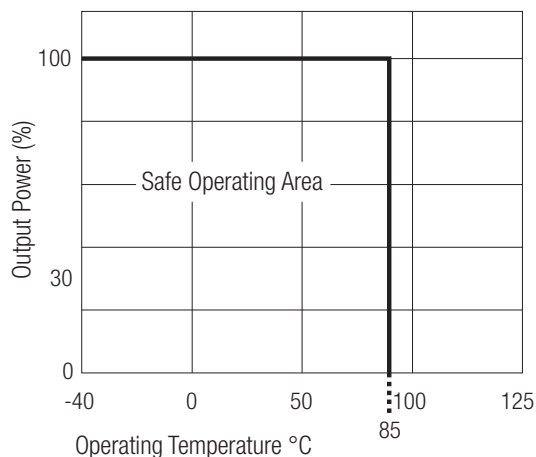
RECOM

1 Watt
SIP7 Single
Output

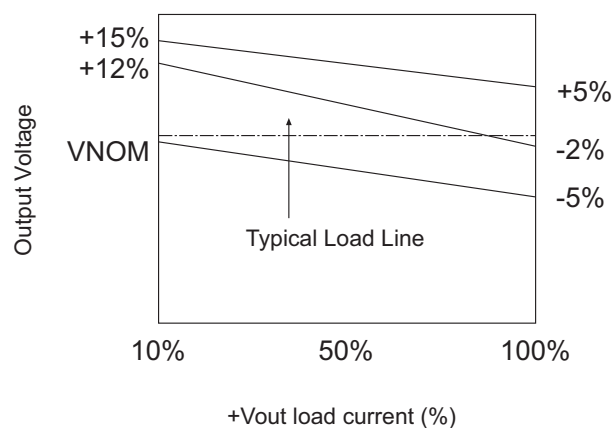


RKE-0505S/H

Derating Graph (Ambient Temperature)



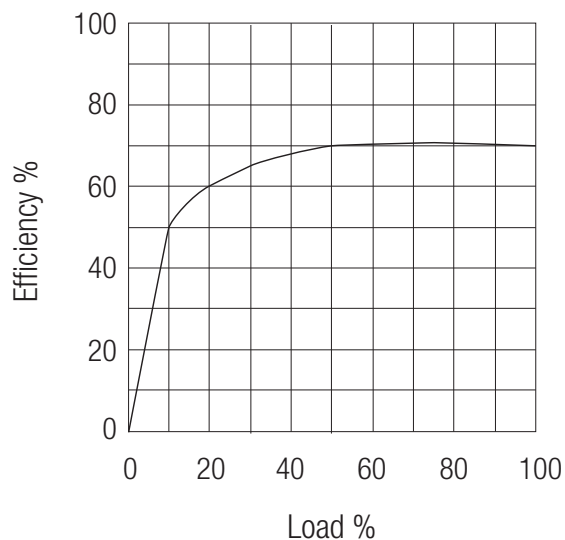
Tolerance Envelopes



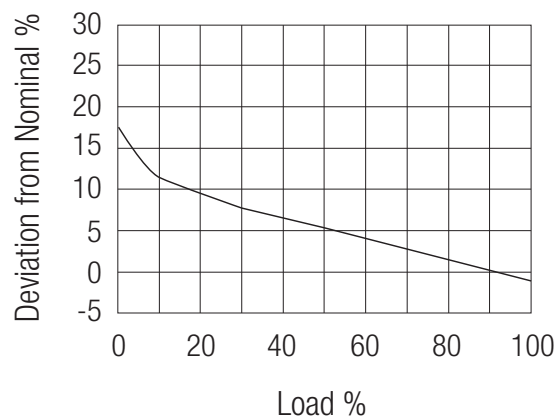
Refer to Application Notes

Typical Characteristics

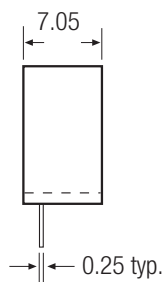
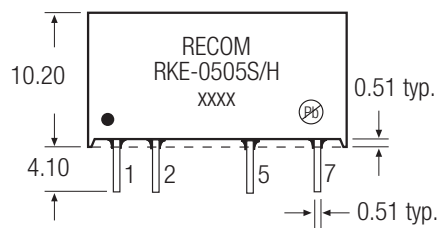
Efficiency vs Load



Deviation vs Load



Package Style and Pinning (mm)



3rd angle projection

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

