



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



# Features

## Unregulated Converter

- 1:1 Input Range
- SMD Package
- Efficiency up to 75%
- 1kVDC Isolation
- Operating Temperature from -40°C to +85°C
- UL Certified

### Selection Guide

tPart Number SMD	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency typ. (%)	Max. Capacitive Load
R1SE**-0505*	5	5	200	75	1000µF

\* add suffix -R for tape & reel packing

### Case and Pinning Options

\*\* without marking denotes 5 pins out of 8 fitted  
with marking 8 denotes 8 pins out of 8 fitted

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

Input Voltage Range		±10% max.
Voltage set Accuracy	100% Load/nominal Vin	-2% typ. / ±5% max.
Line Regulation	Low Line to High Line @ max. Load	1.2% typ.
Load Regulation	(10% to 100% Load)	10% typ. / 15% max.
Ripple & Noise @ 20MHz BW		68mVp-p typ. / 100mVp-p max.
Efficiency	100% Load	70% min. / 75% max.
Operating Temperature		-40°C to + 85°C
Storage Temperature		-55°C to +125°C
Isolation Test Voltage	(tested for 1 second) (rated for 1 minute***)	1000VDC 500VAC / 60Hz
Isolation Capacitance		75pF max.
Isolation Resistance	Viso = 500V	10 GΩ min.
Humidity		95% max.
Operating Frequency	Vin (nom.)	20kHz min. / 70 kHz max.
Short-Circuit Protection		1 Second
Weight		1.0g
MTBF	Using MIL-HDBK 217F (+90°C) Using MIL-HDBK 217F (+25°C)	172 x 10 <sup>3</sup> hours 1022 x 10 <sup>3</sup> hours

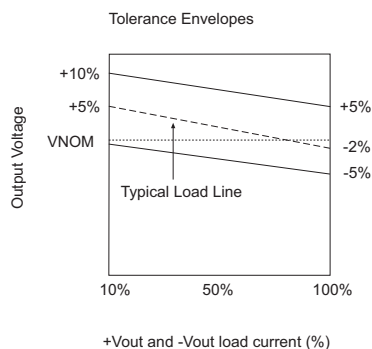
Detailed Information see Application Notes chapter „MTBF“

#### Certification

UL General Safety Report: E358085-A2 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.

### Tolerance Envelopes



## ECONOLINE

DC/DC-Converter

with 3 year Warranty

# RECOM

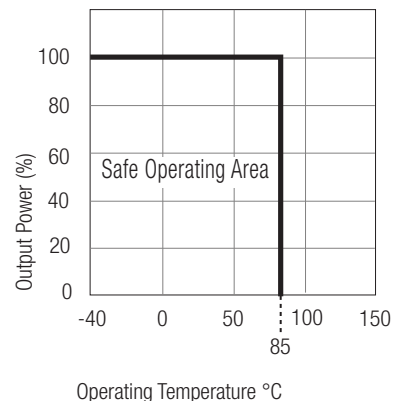
## 1 Watt SMD Isolated Single Output



UL-60950-1 Certified

# R1SE

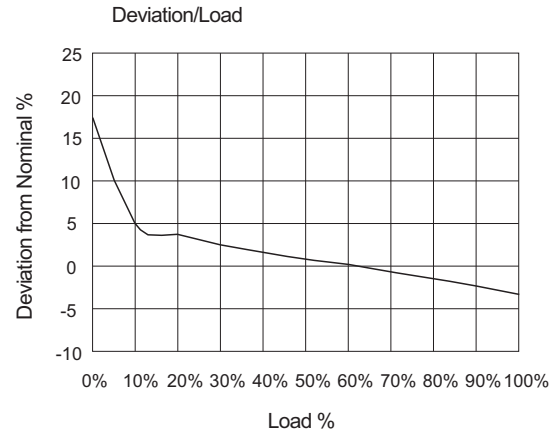
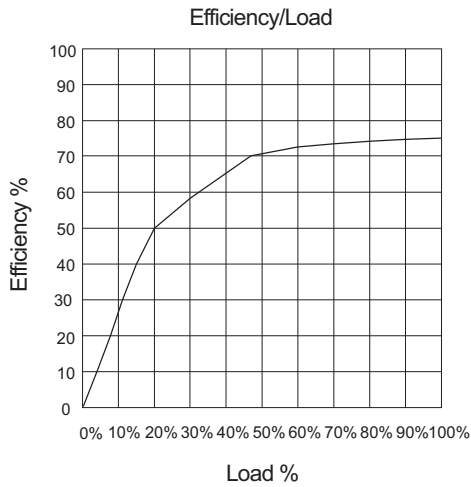
## Derating-Graph (Ambient Temperature)



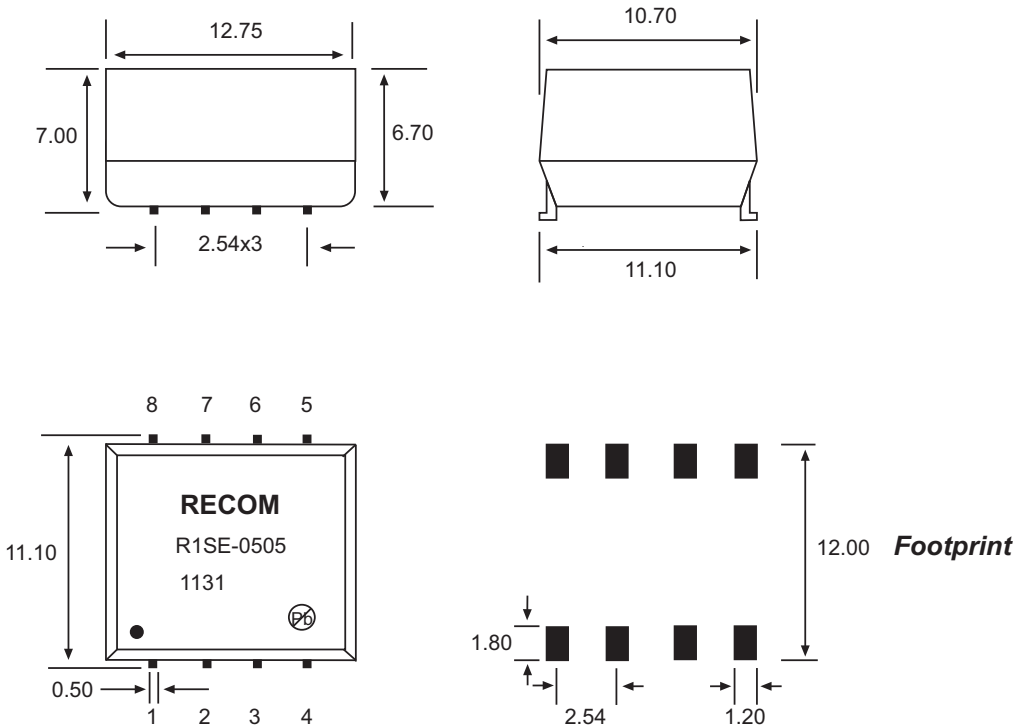
Refer to Application Notes

### Typical Characteristics

#### R1SE-0505



### Package Style and Pinning (mm)



#### Pin Connections

Pin #	Function for 5 Pins	Function for 8 Pins
1	-Vin	-Vin
2	+Vin	+Vin
4	-Vout	-Vout
5	+Vout	+Vout
3, 6, 7	No Pin	NC
8	NC	NC

NC= No Connection

UNIT: mm  
TOL.: ± 0.25 mm