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

Part Number SMD	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency typ. (%)
R1SE**-0505*	5	5	200	75

*add suffix -R for tape & reel packing

Case and Pinning Options

** without marking denotes 5 pins out of 8 fitted

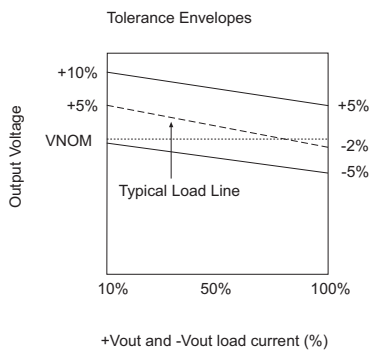
with marking 8 denotes 8 pins out of 8 fitted

Specifications (measured at T_A = 25°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)	1000VDC
	(rated for 1 minute***)	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)	172 x 10^3 hours
	Using MIL-HDBK 217F (+25°C)	1022 x 10^3 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

RoHS 2011/65/EU 6/6

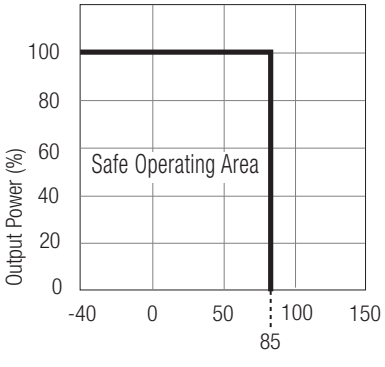
E358085

UL-60950-1 Certified

R1SE

Derating-Graph

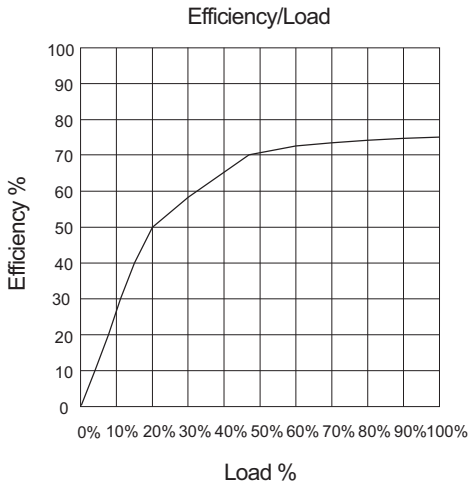
(Ambient Temperature)

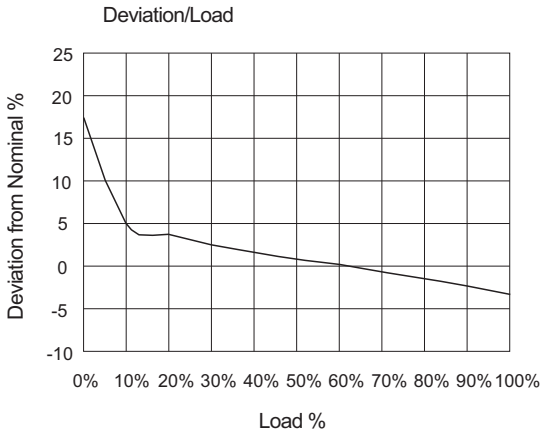


Refer to Application Notes

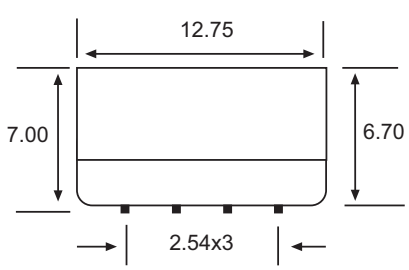
Typical Characteristics

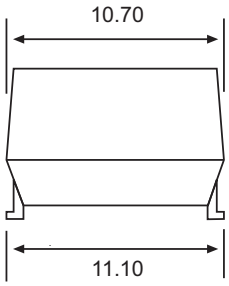
R1SE-0505

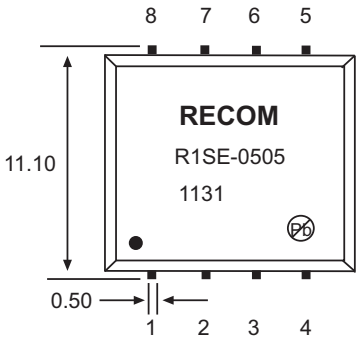


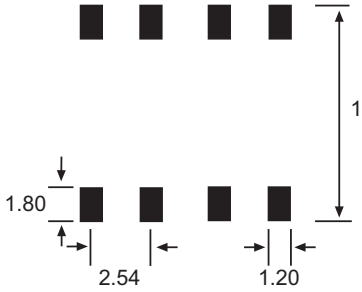


Package Style and Pinning (mm)









Footprint

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

R1SE

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