

Features

Unregulated Converter

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

ECONOLINE

DC/DC-Converter

with 3 year Warranty



1 Watt SMD Isolated Single Output

Selection Guide

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

R1SE*-0505: 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		$\pm 10\%$ max.
Voltage set accuracy	100% Load/nominal Vin	-2% typ. / $\pm 5\%$ 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
Isolation Capacitance		75pF max.
Isolation Resistance	Viso = 500V	10 G Ω min.
Humidity		95% max.
Operating Frequency	Vin (nom.)	20kHz min. / 70 kHz max.
Short-Circuit Protection		1 Second
MTBF	Using MIL-HDBK 217F (+90°C)	172 x 10 ³ hours
	Using MIL-HDBK 217F (+25°C)	1022 x 10 ³ hours

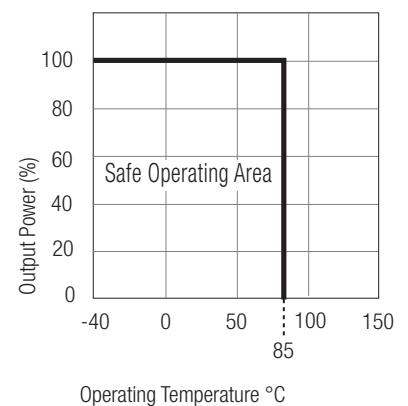
Detailed Information see Application Notes chapter „MTBF“

Weight 1.0g



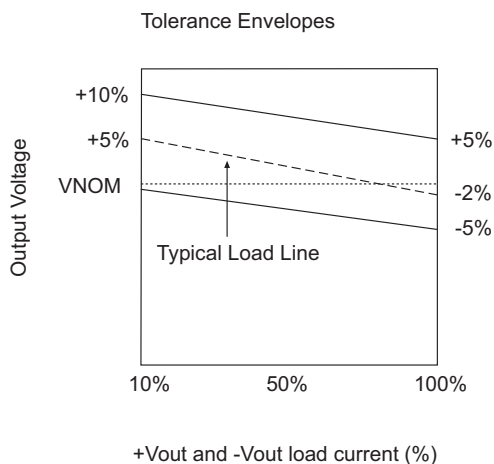
R1SE

Derating-Graph (Ambient Temperature)



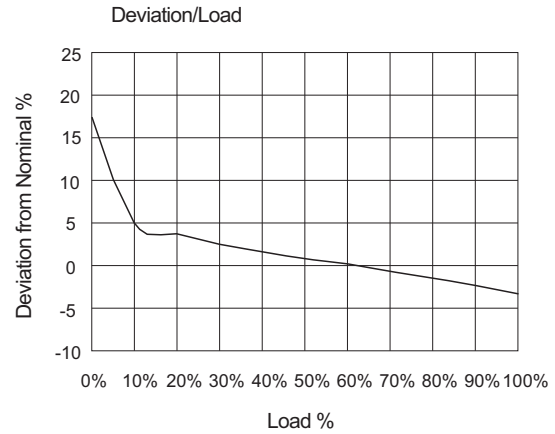
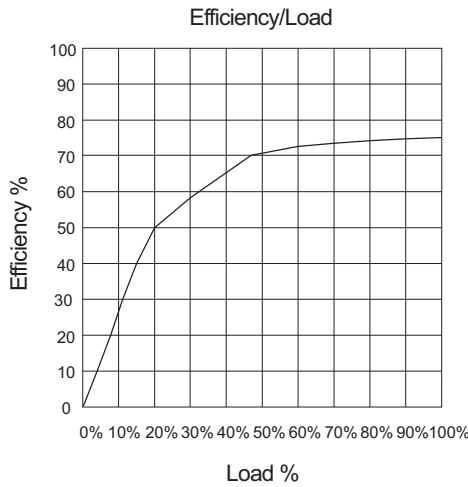
Refer to Application Notes

Typical Characteristics

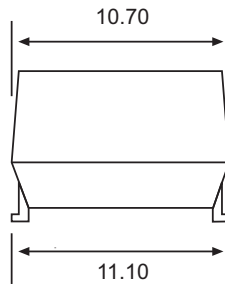
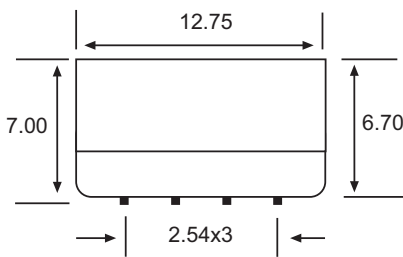


Typical Characteristics

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	NA	NC
8	NC	NC

NC= No Connection

NA= No Available Electrical Connection

UNIT: mm

TOL.: ± 0.25 mm

