

## Features

## Unregulated Converters

- Cost Effective
- 1kVDC & 2kVDC Isolation
- Custom Solutions Available
- Optional Continuous Short Circuit Protected
- No External Components Required
- UL94V-0 Package Material
- Efficiency to 85%

## ECONOLINE

DC/DC-Converter

# REZ Series

## 2 Watt SIP7 Single Output

### Selection Guide

Part Number		Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency (%)
SIP 7	(2kV)	(VDC)	(VDC)	(mA)	(%)
REZ-xx3.3S	(H)	5, 9, 12, 15, 24	3.3	606	70-75
REZ-xx05S	(H)	5, 9, 12, 15, 24	5	400	80-85
REZ-xx09S	(H)	5, 9, 12, 15, 24	9	222	78-84
REZ-xx12S	(H)	5, 9, 12, 15, 24	12	168	80-85
REZ-xx15S	(H)	5, 9, 12, 15, 24	15	132	82-85
REZ-xx24S	(H)	5, 9, 12, 15, 24	24	83	80-85

xx = Input Voltage

\* add Suffix "P" for Continuous Short Circuit Protection, e.g. REZ-0505S/P, REZ-0505S/HP

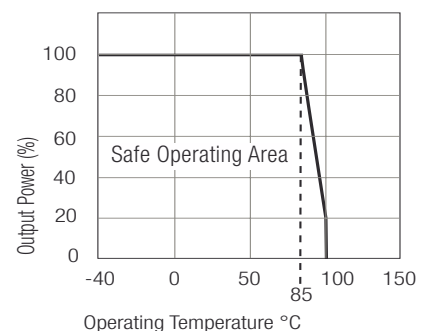


### Specifications (Core Operating Area)

Input Voltage Range				±10%
Output Voltage Accuracy				±5%
Line Voltage Regulation				1.2%/1% of Vin typ.
Load Voltage Regulation (10% to 100% full load)	3.3V output types			20% max.
	5V output type			15% max.
	9V, 12V, 15V, 24V output types			10% max.
Output Ripple and Noise (20MHz limited)				150mVp-p max.
Operating Frequency				35kHz min. / 50kHz typ. / 85kHz max.
Efficiency at Full Load				70% min. / 80% typ.
No Load Power Consumption				134mW min. / 202mW typ. / 260mW max.
Isolation Voltage	(tested for 1 second)			1000VDC min.
Rated Working Voltage	(long term isolation)			see Application Notes
Isolation Voltage	H-Suffix	(tested for 1 second)		2000VDC min.
Rated Working Voltage	H-Suffix	(long term isolation)		see Application Notes
Isolation Capacitance				40pF min. / 115pF max.
Isolation Resistance				10 GΩ min.
Short Circuit Protection				1 Second
P-Suffix				Continuous
Operating Temperature Range (free air convection)				-40°C to +85°C (see Graph)
Storage Temperature Range				-55°C to +125°C
Relative Humidity				95% RH
Package Weight				2.7g
MTBF (+25°C)	} Detailed Information see Application Notes chapter "MTBF"	using MIL-HDBK 217F		915 x 10 <sup>3</sup> hours
(+85°C)		using MIL-HDBK 217F		170 x 10 <sup>3</sup> hours

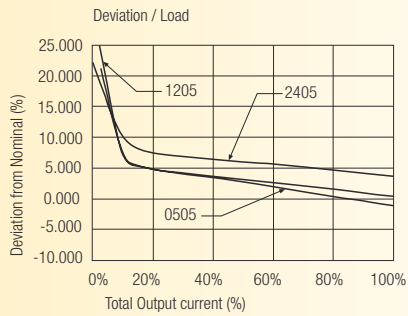
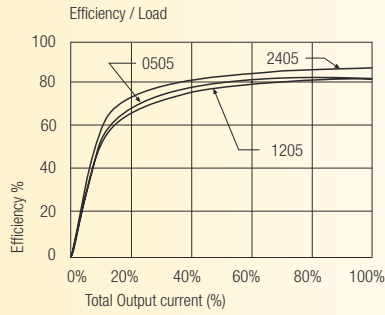


## Derating-Graph (Ambient Temperature)

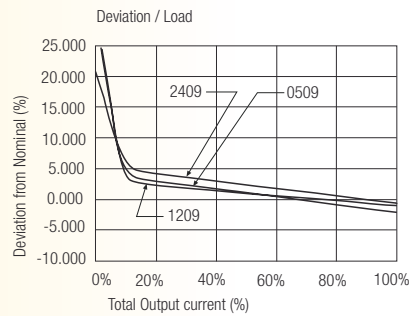
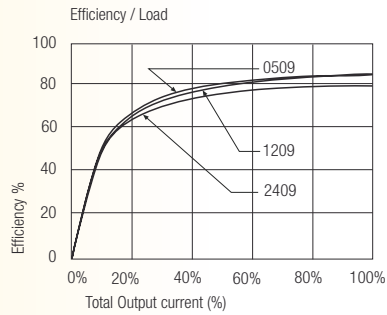


**Typical Characteristics**

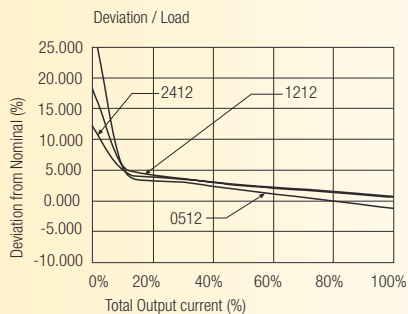
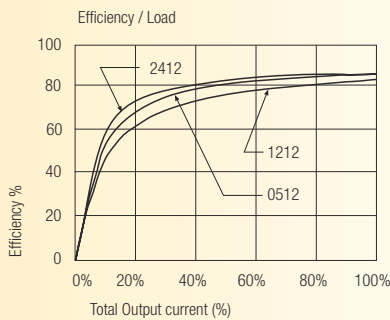
**REZ-xx05S**



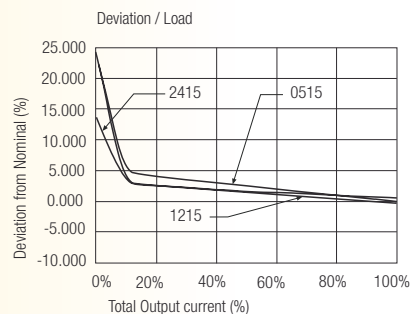
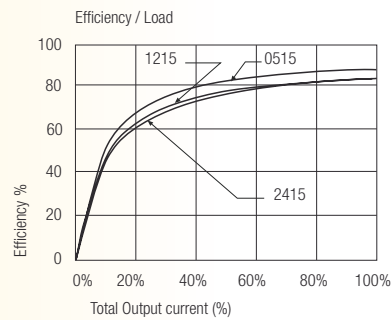
**REZ-xx09S**



**REZ-xx12S**

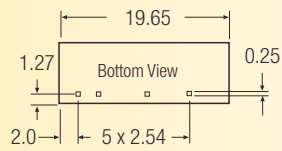
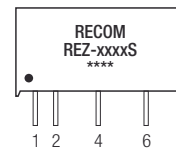
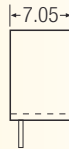
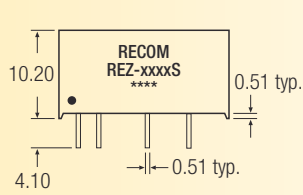


**REZ-xx15S**

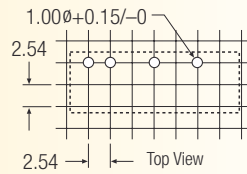


Package Style and Pinning (mm)

7 PIN SIP Package



Recommended Footprint Details



Pin Connections

Pin #	Single
1	+Vin
2	-Vin
4	-Vout
6	+Vout

XX.X  $\pm$  0.5 mm  
XX.XX  $\pm$  0.25 mm