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	Output Voltage	Output Current	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

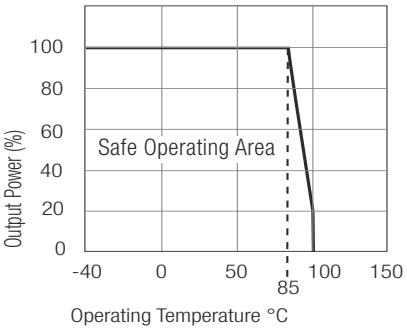
xx = Input Voltage
* add Suffix "P" for Continuous Short Circuit Protection, e.g. REZ-0505S/P, REZ-0505S/HP

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 10^3 hours
MTBF (+85°C) *Detailed Information see Application Notes chapter "MTBF"*		using MIL-HDBK 217F	170 x 10^3 hours

RECOM

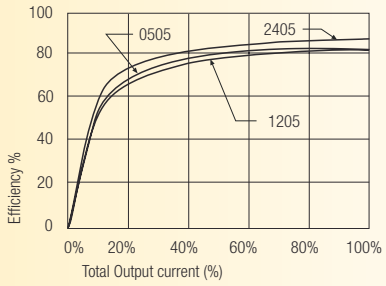
Derating-Graph
(Ambient Temperature)



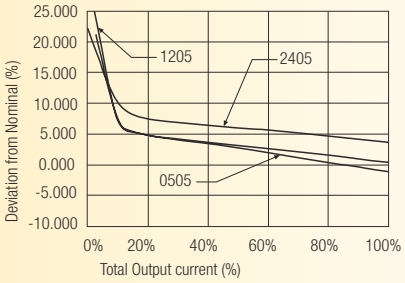
Typical Characteristics

REZ-xx05S

Efficiency / Load

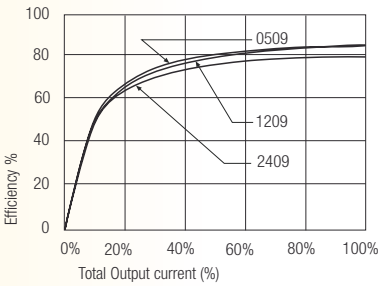


Deviation / Load

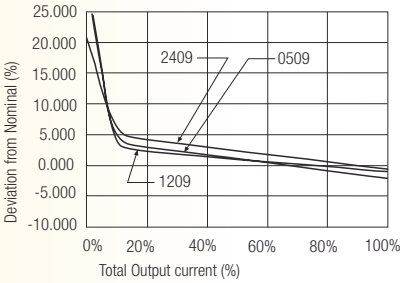


REZ-xx09S

Efficiency / Load

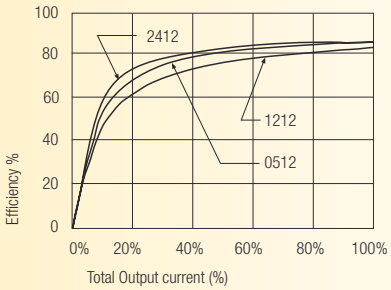


Deviation / Load

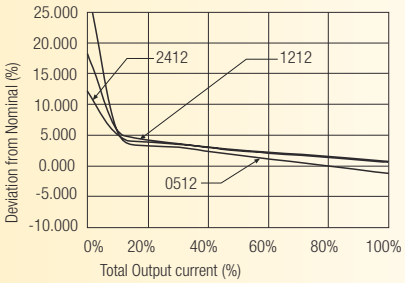


REZ-xx12S

Efficiency / Load

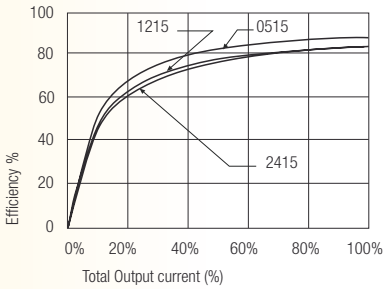


Deviation / Load

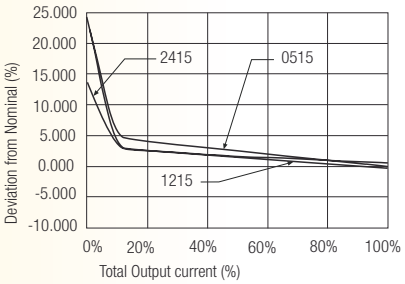


REZ-xx15S

Efficiency / Load



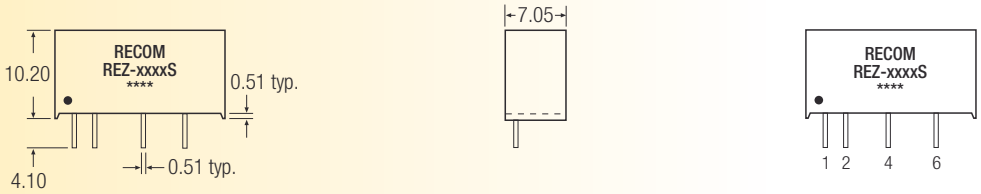
Deviation / Load

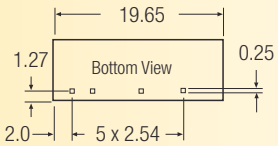


Package Style and Pinning (mm)

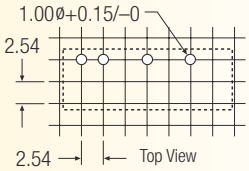
3rd angle projection

7 PIN SIP Package





Recommended Footprint Details



Pin Connections

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

XX.X ± 0.5 mm
XX.XX ± 0.25 mm