

Features

Unregulated Converters

- Cost Effective
- 1kVDC & 2kVDC Isolation
- Custom Solutions Available
- No Extern. Components Required
- UL94V-0 Package Material
- Efficiency to 85%

ECONOLINE

DC/DC-Converter

REZ Series

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

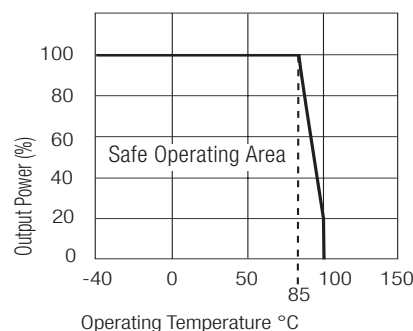
Specifications (Core Operating Area)

Input Voltage Range	±10%	
Output Voltage Accuracy	±5%	
Line Voltage Regulation	1.2%/1% of Vin max.	
Load Voltage Regulation	3.3V output types	20% max.
(10% to 100% full load)	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)	1.000VDC min.
Rated Working Voltage	(long term isolation)	see Application Notes
Isolation Voltage	H-Suffix (tested for 1 second)	2.000VDC 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	
Operating Temperature Range (free air convection)	-40°C to +85°C (see Graph)	
Storage Temperature Range	-55°C to +125°C	
Relative Humidity	MSL Level 1	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
(+85°C)		using MIL-HDBK 217F 170 x 10 ³ hours

2 Watt SIP7 Single Output

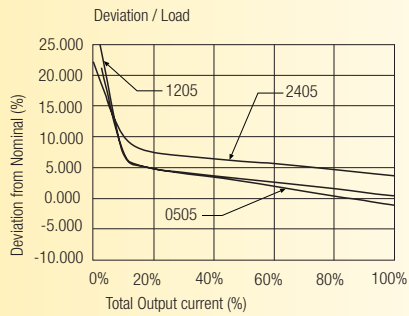
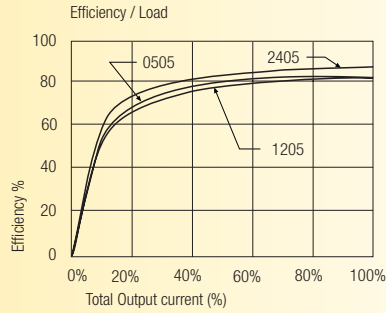


Derating-Graph (Ambient Temperature)

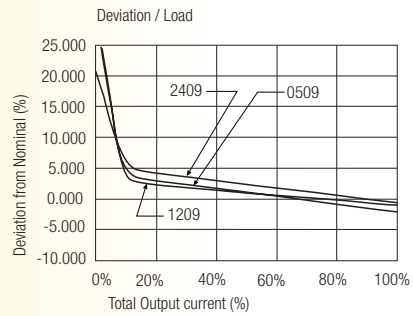
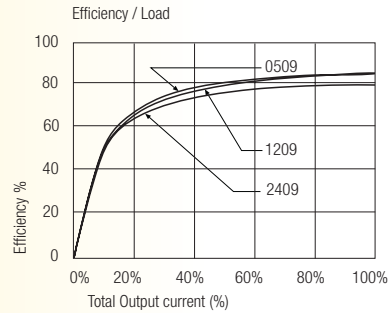


Typical Characteristics

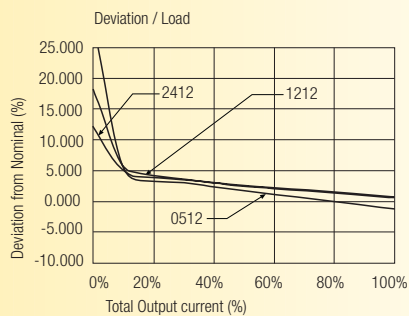
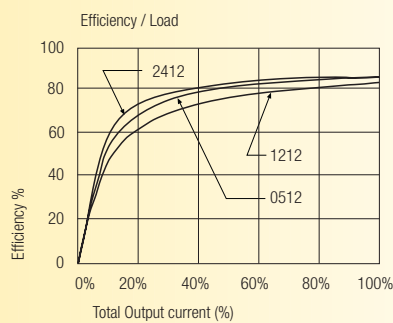
REZ-xx05S



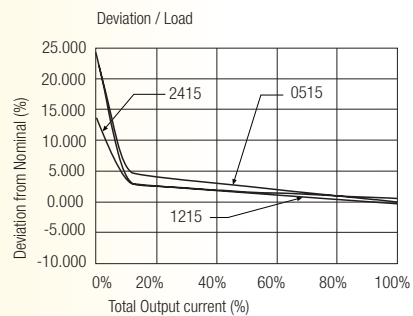
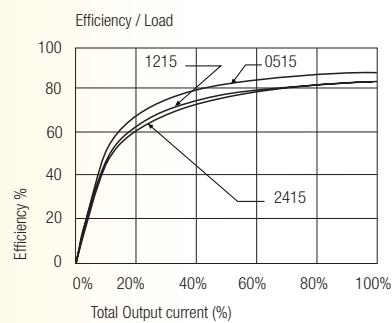
REZ-xx09S



REZ-xx12S

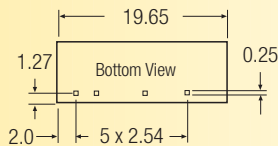
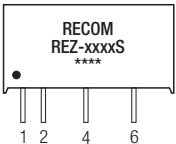
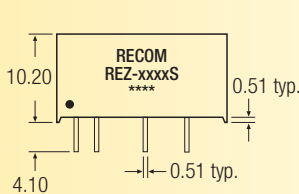


REZ-xx15S

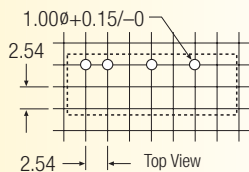


Package Style and Pinning (mm)

7 PIN SIP Package



Recommended Footprint Details



Pin Connections

Pin #	Single
1	+Vin
2	-Vin
4	-Vout
6	+Vout
XX.X ± 0.5 mm	
XX.XX ± 0.25 mm	