

Features

Unregulated Converters

- Custom Solutions Available
- 1kVDC Isolation
- No Extern. Components Required
- UL94V-O Package Material
- No Heatsink Required
- Efficiency to 87%

ECONOLINE

DC/DC-Converter

RI Series

Selection Guide

Part Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency (%)
SIP4				
RI-xx3.3	5, 9, 12, 15, 24	3.3	606	70-75
RI-xx05	5, 9, 12, 15, 24	5	400	78-83
RI-xx07	5, 9, 12, 15, 24	7	285	78-83
RI-xx09	5, 9, 12, 15, 24	9	222	78-83
RI-xx12	5, 9, 12, 15, 24	12	167	80-85
RI-xx15	5, 9, 12, 15, 24	15	133	80-85
RI-xx24	5, 9, 12, 15, 24	24	83	80-87

xx = Input Voltage

2 Watt
SIP4
Single Output

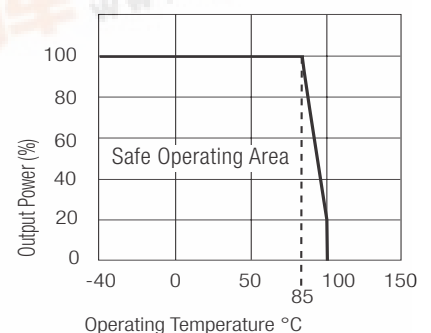


RECOM

Specifications (Core Operating Area)

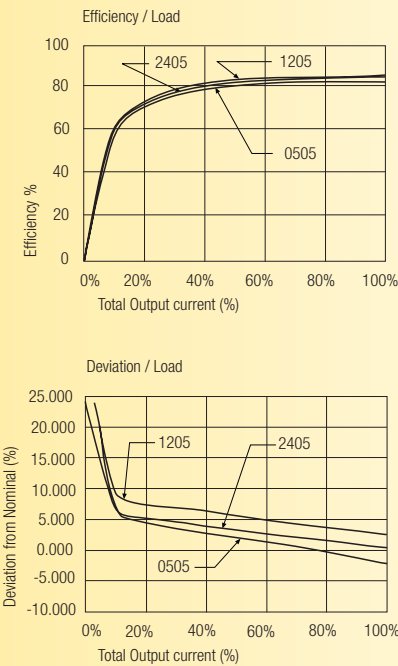
Input Voltage Range	±10%	
Output Voltage Accuracy	±5%	
Line Voltage Regulation	1.2%/1% of Vin max.	
Load Voltage Regulation (10% to 100% full load)	3.3V output types 5V, output type 9V, 12V, 15V, 24V output types	20% max. 15% max. 10% max.
Output Ripple and Noise (20MHz limited)	200mVp-p max.	
Operating Frequency	35kHz min. / 50kHz typ. / 85kHz max.	
Efficiency at Full Load	70% min. / 80% typ.	
No Load Power Consumption	142mW min. / 185mW typ. / 252mW max.	
Isolation Voltage (tested for 1 second)	1.000VDC min.	
Rated Working Voltage (long term isolation)	see Application Notes	
Isolation Capacitance	30pF min. / 85pF 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	1.4g	
MTBF (+25°C)	Detailed Information see	using MIL-HDBK 217F 845 x 10 ³ hours
MTBF (+85°C)	Application Notes chapter "MTBF"	using MIL-HDBK 217F 160 x 10 ³ hours

Derating-Graph (Ambient Temperature)

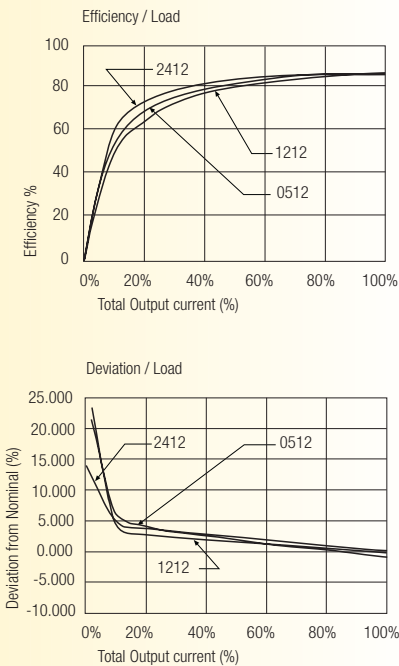


Typical Characteristics

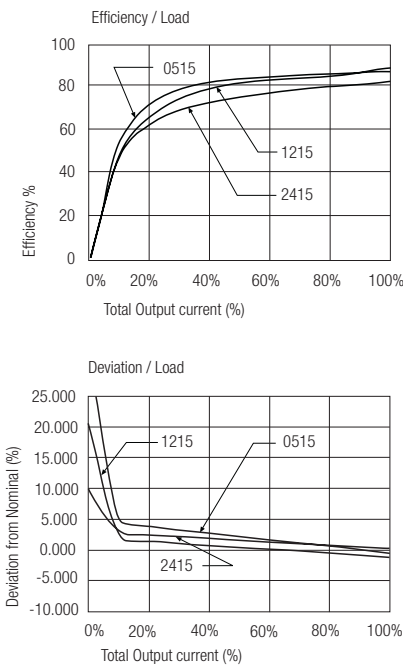
RI-xx05



RI-xx12

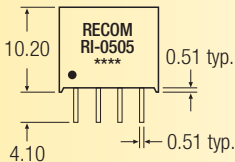


RI-xx15

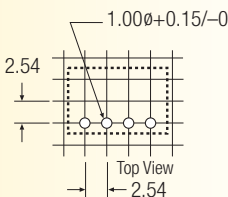
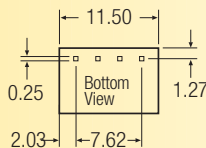


Package Style and Pinning (mm)

4 PIN SIP Package



Recommended Footprint Details



Pin Connections

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