

Features

Unregulated Converters

- Dual Output from a Single Input Rail
- 1kVDC & 2kVDC Isolation
- Power Sharing on Output
- Custom Solutions Available
- UL94V-0 Package Material
- Efficiency to 86%

ECONOLINE

DC/DC-Converter

RD & RC Series

Selection Guide

Part Number			Input Voltage	Output Voltage	Output Current	Efficiency
SIP 7	DIP 14	2kV	(VDC)	(VDC)	(mA)	(%)
RD-xx3.3D	RC-xx3.3D	(H)	5, 9, 12, 15, 24	±3.3	±303	70
RD-xx05D	RC-xx05D	(H)	5, 9, 12, 15, 24	±5	±200	70-82
RD-xx09D	RC-xx09D	(H)	5, 9, 12, 15, 24	±9	±111	80-84
RD-xx12D	RC-xx12D	(H)	5, 9, 12, 15, 24	±12	±84	80-84
RD-xx15D	RC-xx15D	(H)	5, 9, 12, 15, 24	±15	±66	82-86
RD-xx24D	RC-xx24D	(H)	5, 9, 12, 15, 24	±24	±42	82-86

xx = Input Voltage

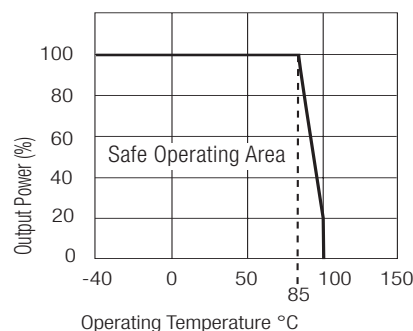
Specifications (Core Operating Area)

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		34kHz min. / 50kHz typ. / 85kHz max.
Efficiency at Full Load		70% min. / 80% typ.
No Load Power Consumption		163mW min. / 223mW typ. / 350mW 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		2.8g
MTBF (+25°C)	} Detailed Information see Application Notes chapter "MTBF"	using MIL-HDBK 217F 988 x 10 ³ hours
(+85°C)		using MIL-HDBK 217F 135 x 10 ³ hours

2 Watt SIP7 & DIP14 Dual Output

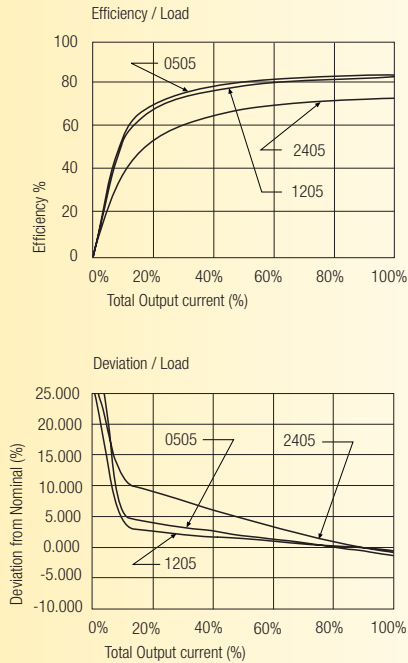


Derating-Graph (Ambient Temperature)

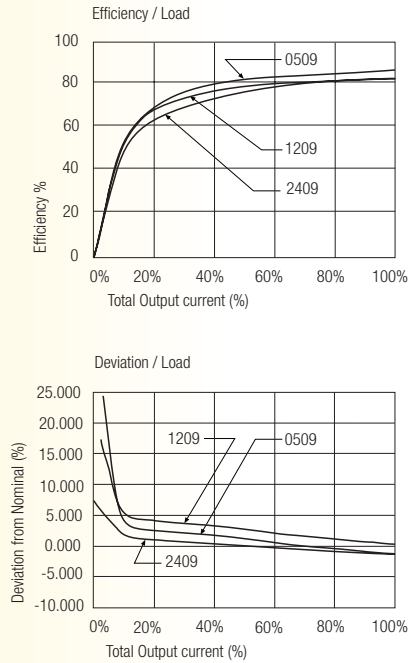


Typical Characteristics

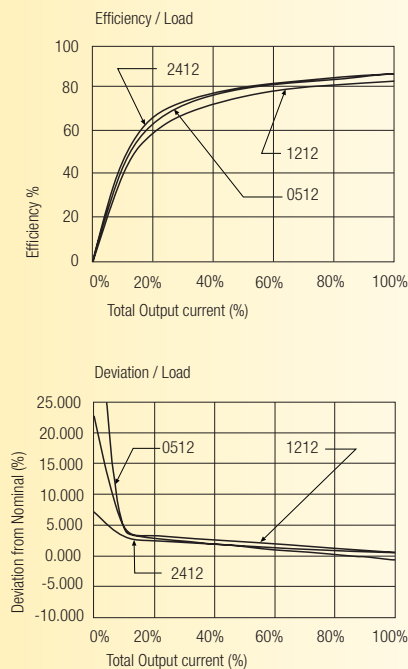
RD&RC-xx05D



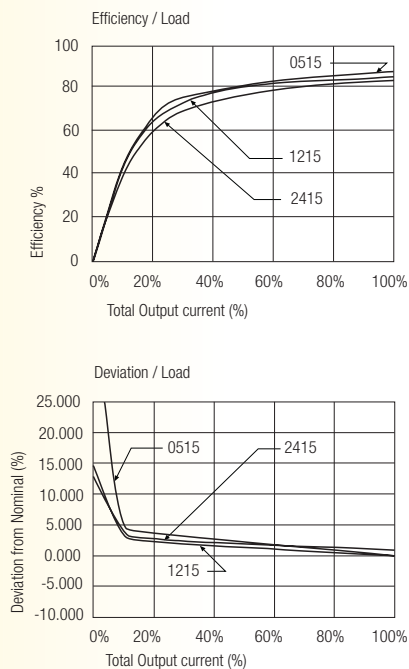
RD&RC-xx09D



RD&RC-xx12D

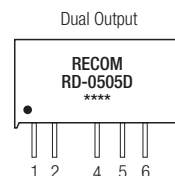
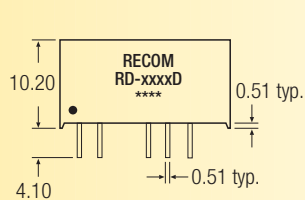


RD&RC-xx15D

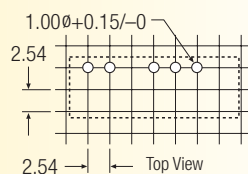
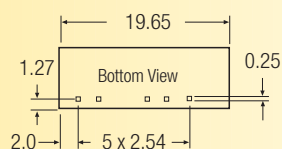


Package Style and Pinning (mm)

7 PIN SIP Package



Recommended Footprint Details

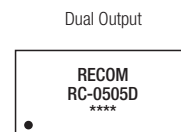
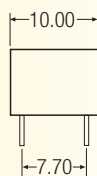
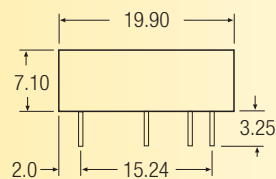


RX Pin Connections

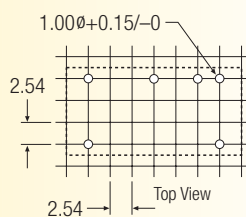
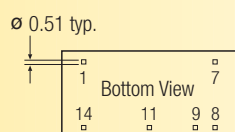
Pin #	Dual
1	+Vin
2	−Vin
4	−Vout
5	Com
6	+Vout

XX.X ± 0.5 mm
XX.XX ± 0.25 mm

14 PIN DIP Package



Recommended Footprint Details



Pin Connections

Pin #	RC
1	–Vin
7	NC
8	Com
9	+Vout
11	–Vout
14	+Vin

XX.X	± 0.5 mm
XX.XX	± 0.25 mm