

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 (VDC)	Output Voltage (VDC)	Output Current (mA)	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

2 Watt SIP7 & DIP14 Dual Output

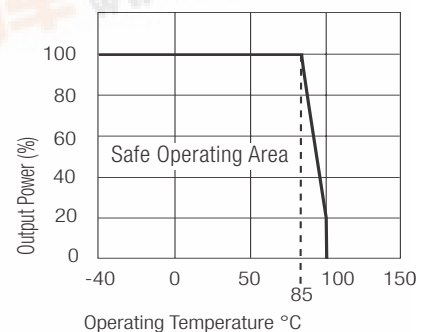


Specifications (Core Operating Area)

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	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	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 (tested for 1 second)	H-Suffix	2.000VDC min.
Rated Working Voltage (long term isolation)	H-Suffix	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	using MIL-HDBK 217F
MTBF (+85°C)	Application Notes chapter "MTBF"	using MIL-HDBK 217F
		988 x 10 ³ hours
		135 x 10 ³ hours

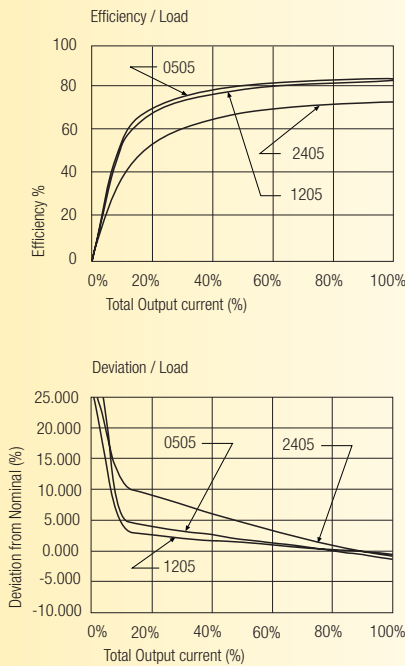


Derating-Graph (Ambient Temperature)

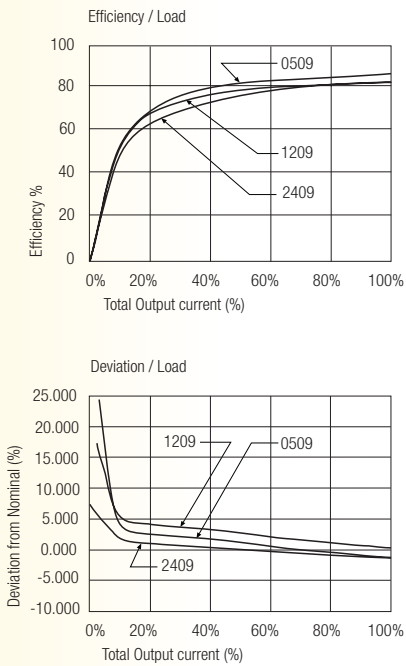


Typical Characteristics

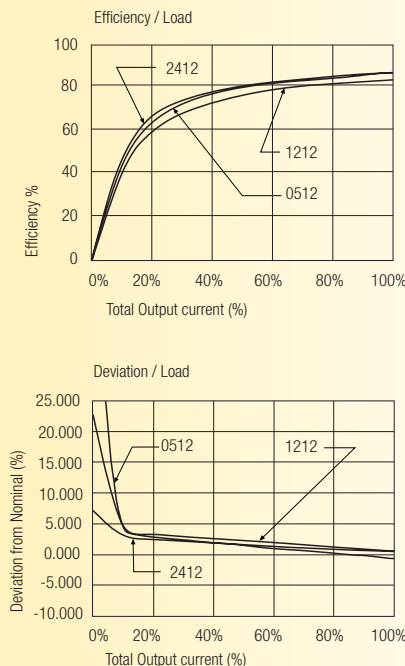
RD&RC-xx05D



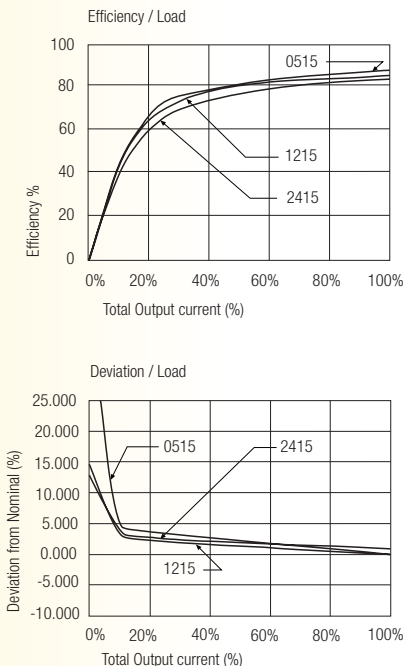
RD&RC-xx09D



RD&RC-xx12D

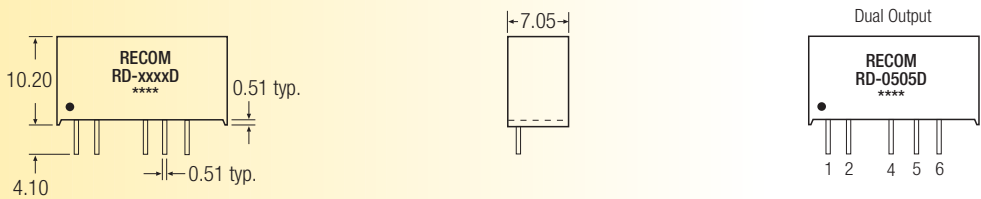


RD&RC-xx15D

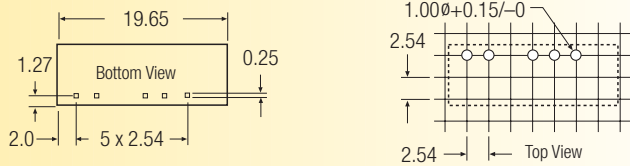


Package Style and Pinning (mm)

7 PIN SIP Package



Recommended Footprint Details

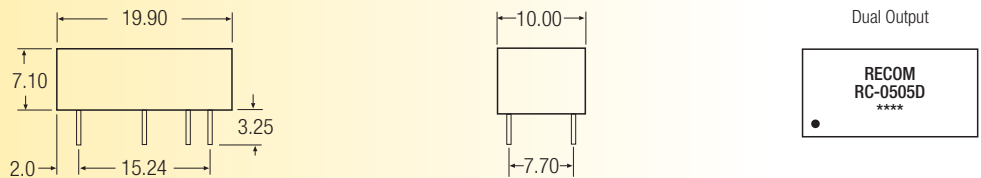


RX Pin Connections

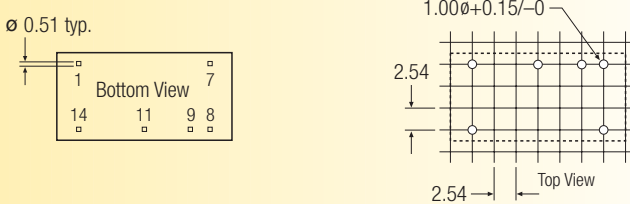
Pin #	Dual
1	+Vin
2	-Vin
4	-Vout
5	Com
6	+Vout

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