

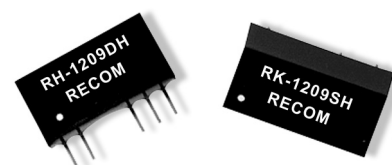
ECONOLINE - DC/DC-Converter

RK and RH Series, 1 Watt, SIP7, 3kV/4kV (Single & Dual Output)

RECOM

Features

- 3kVDC (4kVDC Option) Isolation
- Power Sharing on Dual Output
- Efficiency to 78%
- 1.8, 3.3, 5V, 9V, 12V, 15V and 24V
- Output
- Custom Solutions Available
- UL94V-0 Package Material

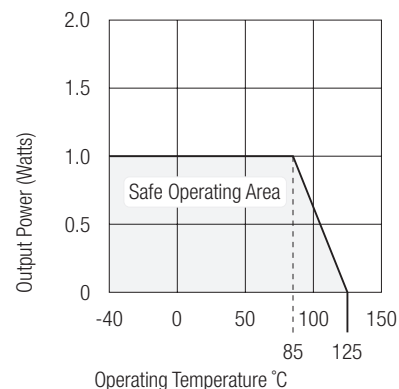


Selection Guide

Part Number	(4kV)	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency (%)
RK-XX1.8S	(H)	1.8, 3.3, 5, 9, 12, 15, 24	1.8	555	70
RK-XX3.3S	(H)	1.8, 3.3, 5, 9, 12, 15, 24	3.3	303	75
RK-XX05S	(H)	1.8, 3.3, 5, 9, 12, 15, 24	5	200	70-78
RK-XX09S	(H)	1.8, 3.3, 5, 9, 12, 15, 24	9	111	70-80
RK-XX12S	(H)	1.8, 3.3, 5, 9, 12, 15, 24	12	84	78-82
RK-XX15S	(H)	1.8, 3.3, 5, 9, 12, 15, 24	15	66	78-82
RK-XX24S	(H)	1.8, 3.3, 5, 9, 12, 15, 24	24	42	74-83
RH-XX1.8D	(H)	1.8, 3.3, 5, 9, 12, 15, 24	±1.8	±278	70
RH-XX3.3D	(H)	1.8, 3.3, 5, 9, 12, 15, 24	±3.3	±152	70
RH-XX05D	(H)	1.8, 3.3, 5, 9, 12, 15, 24	±5	±100	70-78
RH-XX09D	(H)	1.8, 3.3, 5, 9, 12, 15, 24	±9	±56	75-80
RH-XX12D	(H)	1.8, 3.3, 5, 9, 12, 15, 24	±12	±42	78-84
RH-XX15D	(H)	1.8, 3.3, 5, 9, 12, 15, 24	±15	±33	80-84
RH-XX24D	(H)	1.8, 3.3, 5, 9, 12, 15, 24	±24	±21	80-84

Specifications (Core Operating Area) and Operating Temperature / Derating-Graph

Input Voltage	±10%	
Input Filter	Capacitor Type	
Output Voltage Accuracy	±5%	
Line Voltage Regulation	1,2%/1% V Input	
Load Voltage Regulation (10% to 100% full load)	1.8V, 3.3V output types	20% max.
	5V output type	15% max.
	9V, 12V, 15V, 24V output types	10% max.
Ripple and Noise (20MHz limited)	Single output types	100mVp-p max.
	Dual output types	±75mVp-p max.
Efficiency at Full Load	70% min.	
Isolation Voltage	3.000VDC min. (also available with 4.000VDC, Suffix 'H')	
Isolation Resistance (Viso = 500VDC)	15 GΩ min.	
Isolation Capacitance	20pF min./65pF max.	
Short Circuit Protection	1 Second	
Switching Frequency at Full Load	57kHz min. / 105kHz max.	
Operating Temperature	-40°C to +85°C (see Graph)	
Storage Temperature	-55°C to +125°C	
Package Weight	2.8g	



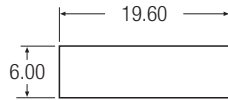
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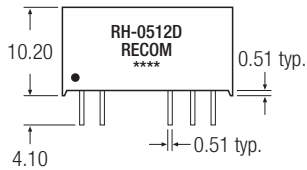
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Package Style and Pinning (mm)

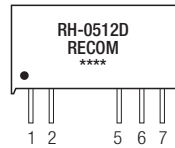
7 PIN SIP Package, RK-xxxx & RH-xxxx Converters with 3kV Isolation Voltage



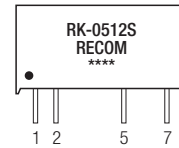
RK & RH Converters with 3kV Isolation



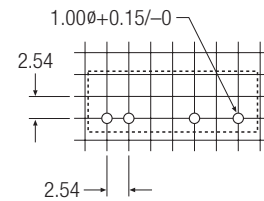
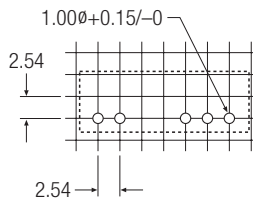
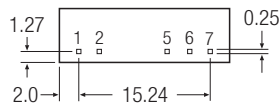
Dual Output



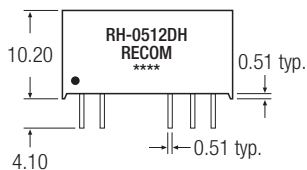
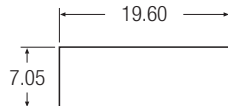
Single Output



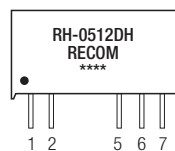
Footprint Details



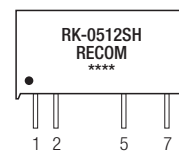
7 PIN SIP Package, RK-xxxxH & RH-xxxxH Converters with 4kV Isolation Voltage



Dual Output



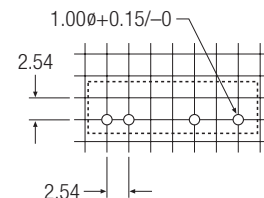
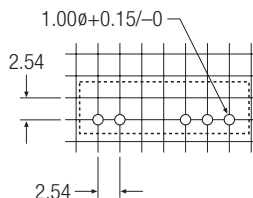
Single Output



Pin Connections

Pin #	Single	Dual
1	+Vin	+Vin
2	-Vin	-Vin
5	-Vout	-Vout
6	No Pin	Com
7	+Vout	+Vout

Footprint Details



XX.X ± 0.5 mm
XX.XX ± 0.25 mm