

Features

- Safety standards and approvals: EN 60950, EN 60601 certified

Unregulated Converters

- Custom Solutions Available
- 4kVDC Isolation
- UL94V-0 Package Material
- Efficiency to 84%

Selection Guide

Part Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency (%)
	4kV			
RKZ-xx3.3S/H	5,12,24	3.3	606	70
RKZ-xx05S/H	5,12,24	5	400	82-84
RKZ-xx12S/H	5,12,24	12	168	82-84
RKZ-xx15S/H	5,12,24	15	132	82-84
RKZ-xx24S/H	5,12,24	24	83	82-84
RKZ-xx3.3D/H	5,12,24	±3.3	±303	70-82
RKZ-xx05D/H	5,12,24	±5	±200	70-82
RKZ-xx12D/H	5,12,24	±12	±84	82-84
RKZ-xx15D/H	5,12,24	±15	±66	82-84
RKZ-xx24D/H	5,12,24	±24	±66	82-84

xx=Input Voltage

Description

The RKZ Series of DC/DC Converters are fully certified to EN 60950-1. This makes them ideal for all Telecom and safety applications where approved isolation is required.

EN 60950 is derived from IEC 950 and is equivalent to UL 1950 and CSA 950 standards.

Specifications (Core Operating Area)

Input Voltage Range			±10%
Output Voltage Accuracy			±5%
Line Voltage Regulation			1.2%/1% of Vin typ.
Load Voltage Regulation (10% to 100% full load)	3.3V output types		20% max.
	5V output type		15% max.
	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. / 212mW typ. / 350mW max.
Isolation Voltage	H-Suffix	(tested for 1 second)	4000VDC min.
Isolation Capacitance			30pF min. / 110pF max.
Isolation Resistance			15 GΩ min.
Short Circuit Protection			1 Second
Operating Temperature Range (free air convection)			-40C to +85C(see Graph)

continued on next page

ECONOLINE

DC/DC-Converter

RKZ Series

2 Watt

Single & Dual Output

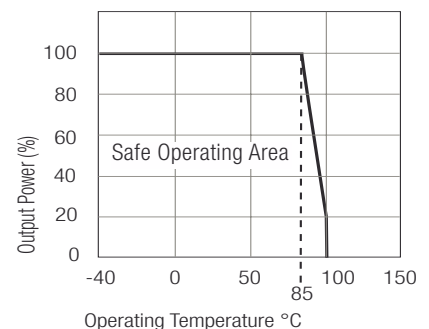


EN-60950-1 Certified

EN-60601-1 Certified

RECOM
Bellnix®

Derating-Graph
(Ambient Temperature)



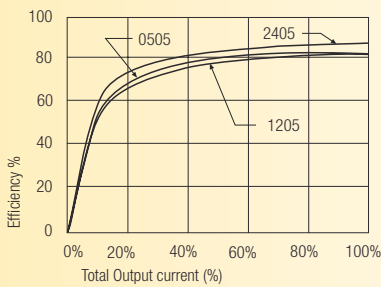
Specifications (Core Operating Area)

Storage Temperature Range	-55°C to +125°C		
Relative Humidity	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

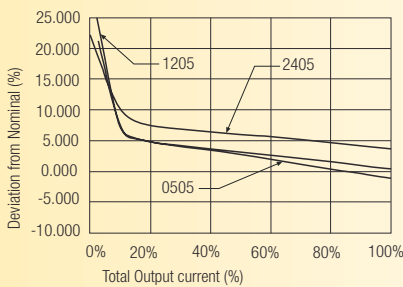
Typical Characteristics

RKZ-xx05S

Efficiency / Load

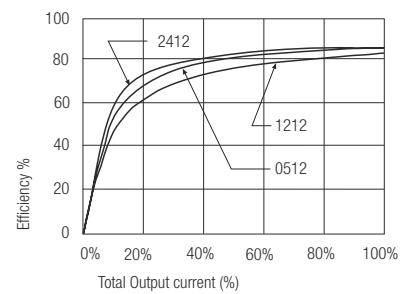


Deviation / Load

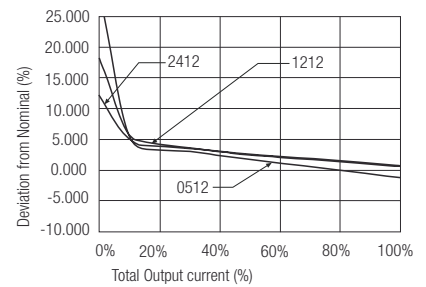


RKZ-xx12S

Efficiency / Load

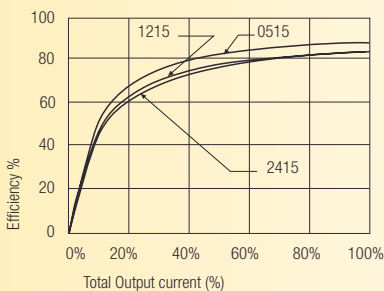


Deviation / Load

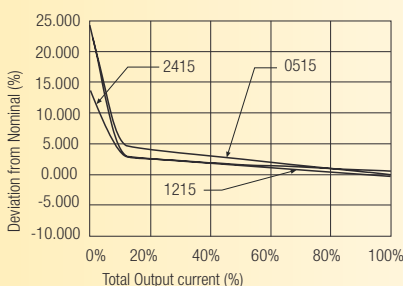


RKZ-xx15S

Efficiency / Load

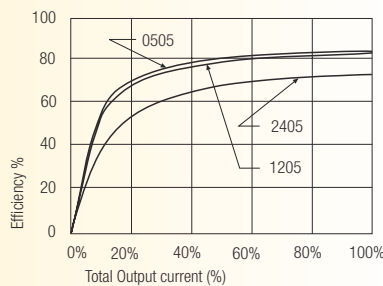


Deviation / Load

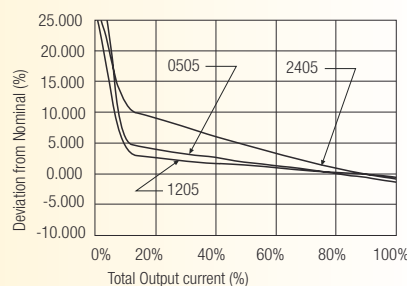


RKZ-xx05D

Efficiency / Load

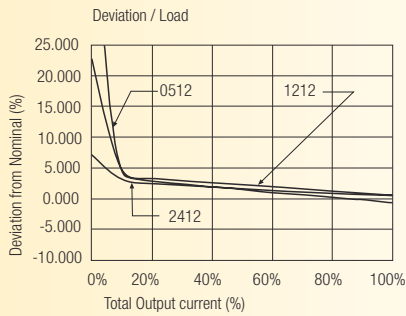
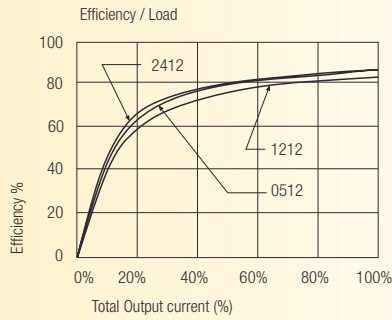


Deviation / Load

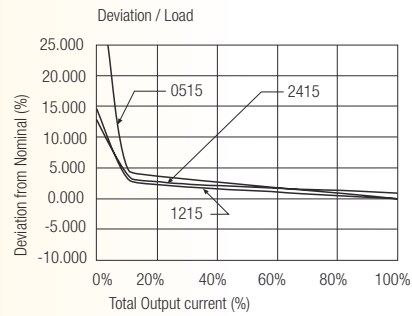
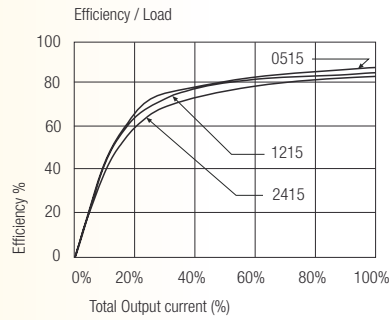


Typical Characteristics

RKZ-xx12D

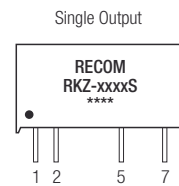
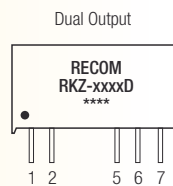
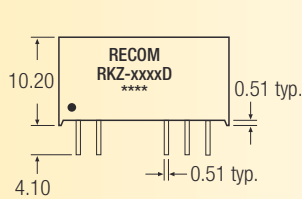


RKZ-xx15D

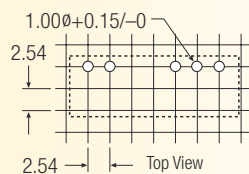
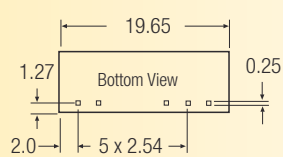


Package Style and Pinning (mm)

7 PIN SIP Package



Recommended Footprint Details



Pin Connections

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

NC = No Connection
XX.X ± 0.5 mm
XX.XX ± 0.25 mm