

Features

Regulated Converters

- 1kVDC Isolation
- SMD Package Styles
- 5V, 12V and 15V Output
- UL94V-0 Package Material
- No Heatsink Required
- No External Components
- Optional Continuous Short Circuit Protected
- Efficiency to 62%

Selection Guide

Part Number	Input Voltage	Output Voltage	Output Current	Efficiency
SMD	(VDC)	(VDC)	(mA)	(%)
RZ-xx05S	5, 9, 12, 15, 24	5	100	50
RZ-xx12S	5, 9, 12, 15, 24	12	42	60
RZ-xx15S	5, 9, 12, 15, 24	15	33	62

xx = Input Voltage

* add Suffix "P" for Continuous Short Circuit Protection, e.g. RZ-0505S/P

Specifications (Core Operating Area)

Input Voltage Range	±5%		
Output Voltage Accuracy	±5%		
Line Voltage Regulation	1% max.		
Load Voltage Regulation (10% to 100% full load)	1% max.		
Output Ripple and Noise (20MHz limited)	100mVp-p max.		
Operating Frequency	50kHz min. / 100kHz typ. / 105kHz max.		
Efficiency at Full Load	50% min. / 60% typ.		
No Load Power Consumption	127mW min. / 155mW typ. / 194mW max.		
Isolation Voltage	(tested for 1 second)	1000VDC min.	
Rated Working Voltage	(long term isolation)	see Application Notes	
Isolation Capacitance	25pF min. / 75pF max.		
Isolation Resistance	10 GΩ min.		
Short Circuit Protection	1 Second		
P-Suffix	Continuous		
Operating Temperature Range (free air convection)	-40°C to +70°C (see Graph)		
Storage Temperature Range	-55°C to +125°C		
Reflow Temperature	ROHS compliant	245°C (30 sec) max.	
	(for more details see Application Notes)		
Relative Humidity	95% RH		
Package Weight	1.9g		
MTBF (+25°C)	} Detailed Information see Application Notes chapter "MTBF"	using MIL-HDBK 217F	1632 x 10 ³ hours
(+70°C)		using MIL-HDBK 217F	156 x 10 ³ hours

ECONOLINE

DC/DC-Converter

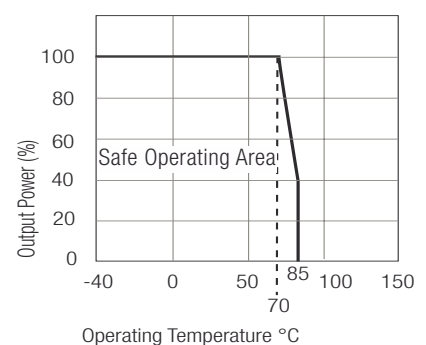
RZ Series

0.5 Watt SMD Isolated Single Output



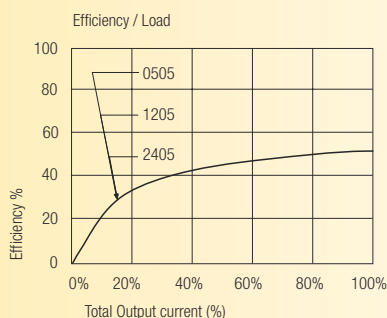
RECOM

Derating-Graph (Ambient Temperature)

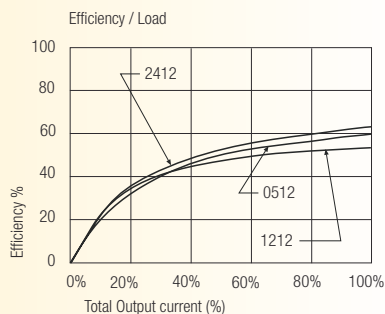


Typical Characteristics

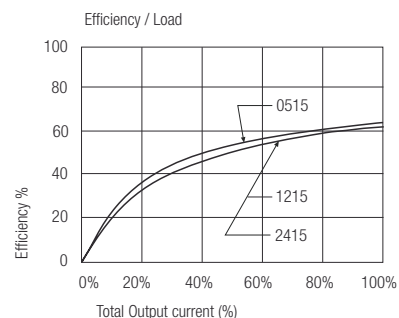
RZ-xx05S



RZ-xx12S

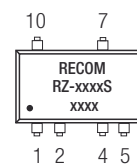
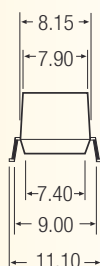
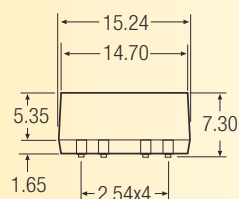


RZ-xx15S



Package Style and Pinning (mm)

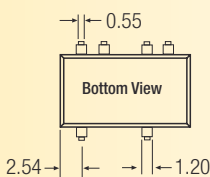
10 PIN SMD Package



Pin Connections

Pin #	Single
1	-Vin
2	+Vin
4	-Vout
5	+Vout
7	+Vout
10	NC

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



Recommended Footprint Details

