ECONOLINE

DC/DC-Converter

RS-S_D(Z) Series

Specifications (measured at $T_A = 25^{\circ}$	°C, nominal input voltage, t	full load and after warm-up time unless of	therwise specified)
Input Voltage Range			2:1 and 4:1
Output Accuracy			±2% typ.
Line Voltage Regulation			±0.5% max.
Load Voltage Regulation		20%-100% Load	±0.5% max.
Minimum Load			10% (2)
Output Ripple and Noise (20MHz limited)			50mVp-p max.
Switching Frequency		Full Load	100kHz min. / 300kHz max.
Efficiency at Full Load			See Selection Guide
Quiescent Current		RS-05xxS_D	40mA typ.
Nominal input Voltage		RS-12xxS_D	32mA typ.
(Standard, /H2 and /H3)		RS-24xxS_D, SZ_DZ	25mA typ.
		RS-48xxS_D, SZ_DZ	15mA typ.
Isolation Voltage	Standard	(tested for 1 second)	1000VDC
		(rated for 1 minute**)	500VAC / 60Hz
	/H2 Version	(tested for 1 second)	2000VDC
	(10.)	(rated for 1 minute**)	1000VAC / 60Hz
	/H3 Version	(tested for 1 second) (rated for 1 minute**)	3000VDC
Isolation Capacitance	Standard	2:1 Single	1500VAC / 60Hz 10pF min. / 40pF typ. / 60pF max.
isolation capacitance	/H2 and /H3	2:1 Single	5pF min. / 30pF typ. / 60pF max.
	Standard	2:1 Dual	120pF min. / 170pF typ. / 250pF max.
	/H2 and /H3	2:1 Dual	5pF min. / 30pF typ. / 60pF max.
	Standard	4:1 Single/Dual	200pF max.
	/H2 and /H3	4:1 Single/Dual	30pF max
Isolation Resistance	/112 dild /110	Ti Onigio Dadi	1GΩ min.
Short Circuit Protection			Continuous
Operating Temperature Range		2:1	-40°C to +85°C
(No Derating)		4:1	-40°C to $+75$ °C
Storage Temperature Range			−55°C to +125°C
Relative Humidity			95% RH
Package Weight			4.7g
Packing Quantity			22 pcs per Tube
MTBF (+25°C) \ Detailed Information se		using MIL-HDBK 217F	1398 x 10³ hours
(+85°C) Application Notes chapter "MTBF"		using MIL-HDBK 217F	210 x 10 ³ hours
Certifications			
EN General Safety	Report: SPCLVD1605077-10		EN60950-1, AM2:2013
EN Medical Safety	Report: MDD1205098-3 + RM1205098-3		IEC/EN 60601-1 3rd Edition
			Medical Report + ISO14971 Risk Assessment
UL General Safety	Report: E224736-A35		UL60950-1, 2nd Edition 2014
-	•		CSA C22.2 60950-1-07, 2nd Edition 2014

^{**}Any data referred to in this datasheet are of indicative nature and based on our practical experience only. For further details, please refer to our Application Notes.

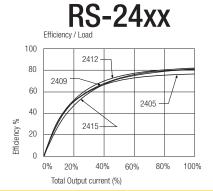
Notes		
Note 1:	Maximum capacitive load is defined as the capacitive load that will allow start up in under 1 second without damage to the converter	
Note 2:	The RS series requires a minimum of 10% load on the output to maintain specified regulation. Operating under no-load conditions	
	will not damage these devices; however, they may not meet all listed specifications.	

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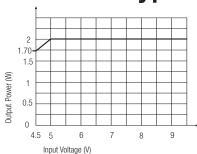
DC/DC-Converter

RS-S_D(Z) Series

Typical Characteristics

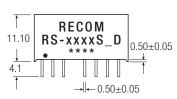


RS-05xx types

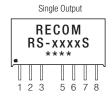


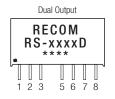
Package Style and Pinning (mm)



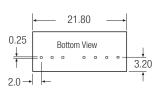




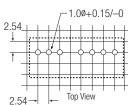




 $\begin{array}{c} \text{XX.X} & \pm \ 0.5 \ \text{mm} \\ \text{XX.XX} & \pm \ 0.25 \ \text{mm} \end{array}$







Pin Connections

Pin #	Single	Dual
1	–Vin	–Vin
2	+Vin	+Vin
3	CTRL	CTRL
5	NC	NC
6	+Vout	+Vout
7	–Vout	Com
8	NC*	-Vout

NC = No Connection

 $NC^{\star}=NC$, but no external Connection allowed.

Pin 8 (NC*) This pin is used internally and must have no external connection.

0 =

0.5V or GND

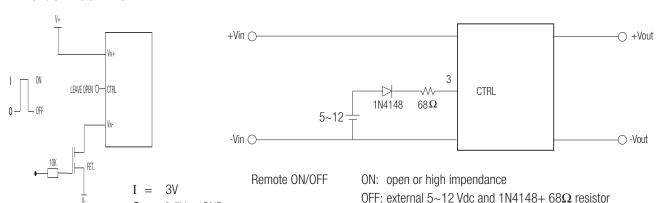
Pin 5 (NC) Not connected internally.

Pin 3 (CTRL)

This pin provides an Off function which puts the converter into a low power mode. When the pin is 'high' the converter is OFF and when the pin is high 'Z' the converter is ON. There is no allowed low state for this pin.

Application Examples

ON/OFF CONTROL



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