



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

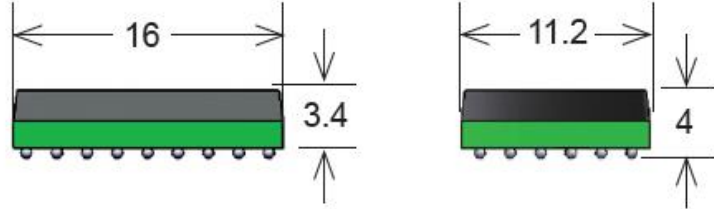
Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

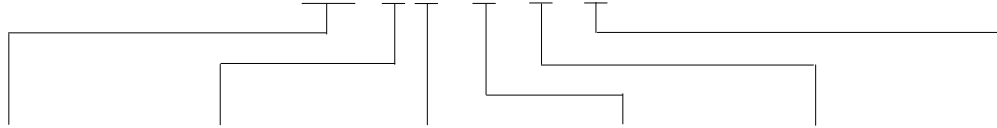


# RM05-4A Series Reed Relays



- Features: 4-Pole Low Profile SMD RF Relay Module, <40ps Rise Time for Switching Fast Pulses, BGA
- Applications: High Frequency Applications, Automated Test Equipment & Others
- Markets: Test and Measurement, Telecommunications & Others

Part Description: **RM05-0X-S-4/0**



Nominal Voltage	Contact QTY	Contact Form	Solder Balls	Input	Output
05	4	4A, 2A2B	S	4	2, 4

Customer Options	Switch Model	Unit
<b>Contact Data</b>	<b>80/1</b>	
<b>Rated Power (max.)</b> Any DC combination of V&A not to exceed their individual max.'s	10	W
<b>Switching Voltage (max.)</b> DC or peak AC	170	V
<b>Switching Current (max.)</b> DC or peak AC	0.5	A
<b>Carry Current (max.)</b> DC or peak AC	0.5	A
<b>Contact Resistance (max.)</b> @ 0.5V & 50mA	200	mOhm
<b>Breakdown Voltage (min.)</b> According to EN60255-5	0.21	kVDC
<b>Operating Time (max.)</b> Incl. Bounce; Measured with w/ Nominal Voltage	0.1	ms
<b>Release Time (max.)</b> Measured with no Coil Excitation	0.02	ms
<b>Insulation Resistance (typ.)</b> Rh<45%, 100V Test Voltage	1	GOhm
<b>Capacitance (typ.)</b> @ 10kHz across open Switch	0.1	pF



Series Datasheet – RM05-4A Reed Relays

www.standexmeder.com

Coil Data		
Contact Form	4A, 2A2B	Unit
Switch Model	80	
Coil Voltage (nom.)	5	VDC
Coil Resistance (typ.)	185	Ohm
Pull-In Voltage (max.)	3.75	VDC
Drop-Out Voltage (min.)	0.5	VDC
Nominal Coil Power (typ.)	135	mW

The Pull-In / Drop-Out Voltage and Coil Resistance will change at Rate of 0.4% per °C

Relay Data		
Module Characteristics		
Insertion Loss (typ.)	Input/Output	On request
Voltage Standing Wave Ratio (typ.)	Input/Output	On request
Isolation (typ.)	Input/Output	On request
Rise Time (typ.)	Input/Output	On request
Characteristics. Impedance (typ.)	0.5	On request

Environmental Data		Unit
Shock Resistance (max.) 1/2 sine wave duration 11ms	50	g
Vibration Resistance (max.)	10	g
Operating Temperature	-20 to 85	°C
Storage Temperature	-35 to 125	°C
Soldering Temperature (max.) 5 sec. max.	220	°C

Glossary Contact Form		
Form A	NO = Normally Open Contacts SPST = Single Pole Single Throw	
Form B	NC = Normally Closed Contacts SPST = Single Pole Single Throw	
Form C	Changeover SPDT = Single Pole Double Throw	

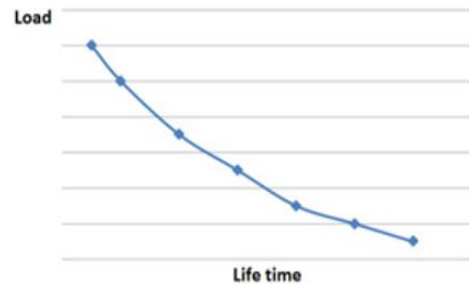


RM05-4A Reed Relay



Life Test Data

\*Load increase reduces life expectancy of Reed Switches



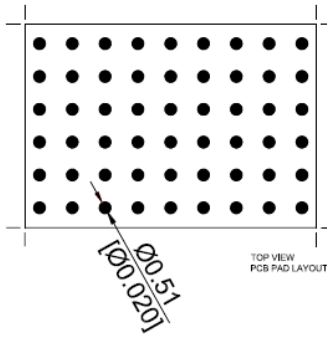
Handling & Assembly Instructions

- Switching inductive and/or capacitive loads create voltage and/or current peaks, which may damage the relay. Protective circuits need to be used.
- External magnetic fields needs to be taken into consideration, including a too high packing density. This may influence the relays' electrical characteristics.
- Mechanical shock impacts e.g. dropping the relays may cause immediate or post-installation failure.
- Wave soldering: maximum 260°/5 seconds.
- Reflow soldering: Recommendations given by the soldering paste manufacturer need to be considered as well as the temperature limits of other components/processes.

**Pad Layout**

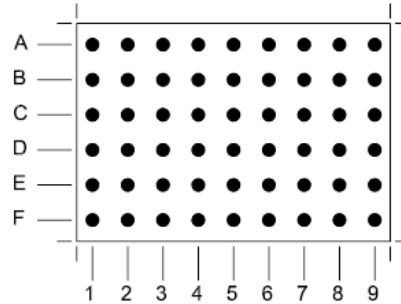
Top View

GRID SPACING IS 1.8mm ON CENTER



**Pad Designation**

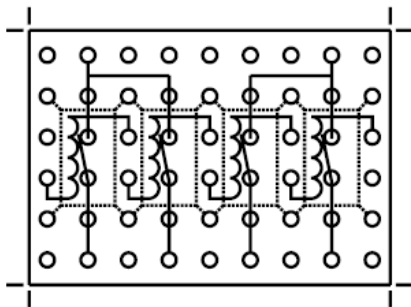
Top View



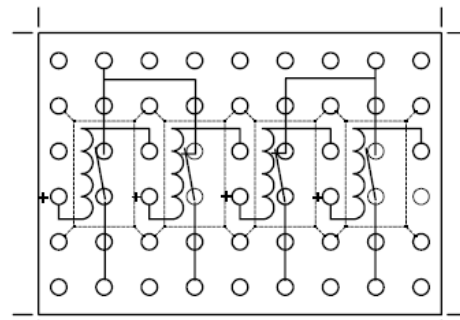
**Schematic**

Top View

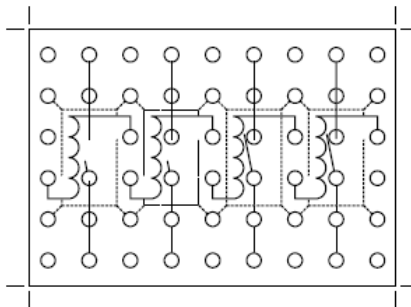
4A-S-4/2



2A2B-S-4/2



4A-S-4/4



2A2B-S-4/4

