



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

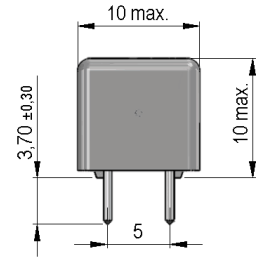
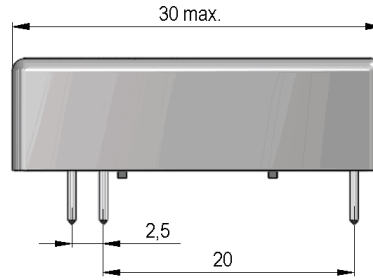
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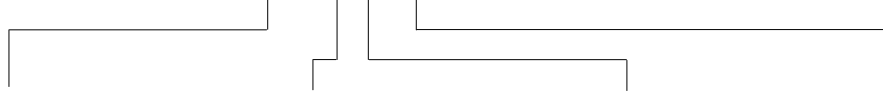


MRX Series Reed Relays



- Features: Ex-Approved for Intrinsic Safety Circuits
- Applications: Process Automatization in Refineries, Mining and Chemical Industry & Others
- Markets: Explosive Environment & Others

Part Description: **MRX 00-0X00**



Nominal Voltage	Contact QTY	Contact Form	Switch Model
05, 12, 24	1, 2, 4	A, C	21, 71, 79, 90

Customer Options	Switch Model				Unit
	21	71	79	90	
Contact Data					
Rated Power (max.) Any DC combination of V&A not to exceed their individual max.'s	5	10	10	7	W
Switching Voltage (max.) DC or peak AC	100	200	250	28	V
Switching Current (max.) DC or peak AC	0.25	0.5	0.5	0.24	A
Carry Current (max.) DC or peak AC	0.5	1.25	1	0.5	A
Contact Resistance (max.) @ 0.5V & 50mA	150	150	150	150	mOhm
Breakdown Voltage (min.) According to EN60255-5	0.25	0.3	0.4	0.25	kVDC
Operating Time (max.) Incl. Bounce; Measured with w/ Nominal Voltage	2.5	0.5	0.5	2	ms
Release Time (max.) Measured with no Coil Excitation	2	0.1	0.2	2	ms
Insulation Resistance (typ.) Rh<45%, 100V Test Voltage	10 ⁹	10 ¹⁰	10 ¹¹	10 ⁹	Ohm
Capacitance (typ.) @ 10kHz across open Switch	0.8	0.3	0.4	1.0	pF

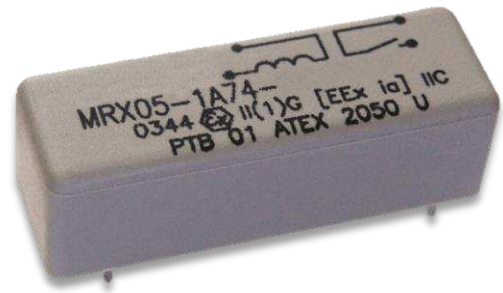
Coil Data		Coil Voltage (nom.)	Coil Resistance (typ.)	Pull-In Voltage (max.)	Drop-Out Voltage (min.)	Nominal Coil Power (typ.)
Contact Form	Switch Model					
Unit		VDC	Ohm	VDC	VDC	mW
1A	71 79*	05	360	3.8	1.0	70
		12	305	9	2	110
		24	5,880	18	3.5	100
2A	71 79**	05	250	3.8	1.0	100
		12	890	9	2	260
		24	1,000	18	3.5	165
4A	71	24	1,780	18	3.5	320
1C	21*** 90	05	360	3.8	1.0	70
		12	305	9	2	110
		24	5,880	18	3.5	100

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

*1A79 only available with Coil Voltage 12 ** 2A79 only available with Coil Voltage 24 ***1C21 only available with Coil Voltage 05 & 12

Environmental Data		Unit
Shock Resistance (max.) 1/2 sine wave duration 11ms	50	g
Vibration Resistance (max.)	20	g
Operating Temperature	-20 to 85	°C
Storage Temperature	-40 to 105	°C
Soldering Temperature (max.) 5 sec. max.	260	°C

MRX Reed Relay

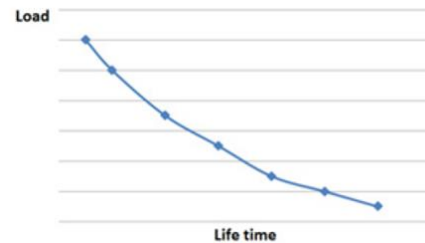


Handling & Assembly Instructions

- 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.

Life Test Data

*Load increase reduces life expectancy of Reed Switches



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	

