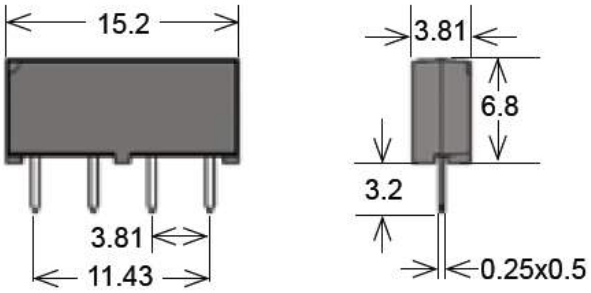
MS Series
Reed Relays



- Features: Micro Single In-Line Relay, High Resistance Coil Option available
- Applications: ATE Systems, Computer Peripherals, Alarm Systems, Measurement Equipment & Others
- Markets: Test and Measurement, Security & Others

Part Description: MS 00-1A87-75X

Nominal Voltage	Contact QTY	Contact Form	Switch Model	Pin Out	Option
05, 12	1	A,	87	75	L, D (HR = High Resistance Version)

Customer Options	Switch Model	Unit
Contact Data	**87**	
Rated Power (max.) Any DC combination of V&A not to exceed their individual max.'s	10	W
Switching Voltage (max.) DC or peak AC	200	V
Switching Current (max.) DC or peak AC	0.5	A
Carry Current (max.) DC or peak AC	1.0	A
Contact Resistance (max.) @ 0.5V & 50mA	150	mOhm
Breakdown Voltage (min.) According to EN60255-5	0.225	kVDC
Operating Time (max.) Incl. Bounce; Measured with w/ Nominal Voltage	0.5	ms
Release Time (max.) Measured with no Coil Excitation	0.1	ms
Insulation Resistance (typ.) Rh<45%, 100V Test Voltage	10^{11}	GOhm
Capacitance (typ.) @ 10kHz across open Switch	0.2	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	87	05	280	3.75	0.5	89
		05HR	500	3.75	0.75	50
		12	700	8.4	1.8	205

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

Environmental Data		Unit
Shock Resistance (max.) 1/2 sine wave duration 11ms	50	g
Vibration Resistance (max.)	20	g
Operating Temperature	-20 to 70	°C
Storage Temperature	-35 to 95	°C
Soldering Temperature (max.) 5 sec. max.	260	°C

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.

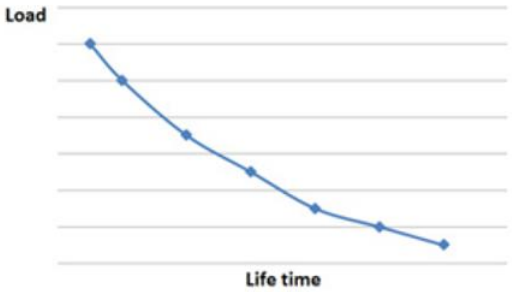
Glossary Contact Form

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	

MS Reed Relay

Life Test Data

*Load increase reduces life expectancy of Reed Switches



Pin Out

Top View
3.81mm [0.15“] pitch grid
Pin #2 must be positive when internal diode protection is present.

Form 1A
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