UMS Series Reed Relays

- **Features: Ultra miniature Single-In Line Relay with Internal Magnetic Shield, UL-listed**
- **Applications: PCB & Semiconductor Test Systems, Automated Test Systems, High Density Assembly**
- **Markets: Test & Measurement, Telecommunication, ATE**



Part Description: UMS05-1A80-75X

Nominal Voltage	Contact Quantity & Contact Form	Switch Model	Pin Out	Option
05	1A	80	75	L, D

Customer Options	Switch Model	Unit
Contact Data	**80 (A Dry)**	
Contact Material	Rhodium	
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	170	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 & 10mA	200	mOhm
Breakdown Voltage (min.) According to EN60255-27	0.21	kVDC
Operating Time (max.) Including Bounce, Measured w/40% Pull-In Overdrive	0.2	ms
Release Time (max.) Measured without Coil Suppression	0.1	ms
Insulation Resistance (typ.) Rh<45%, 100V Test Voltage	10^{10}/ 10^{12}	Ohm
Capacitance (typ.) @ 10kHz across open Switch	0.2 / 0.4	pF

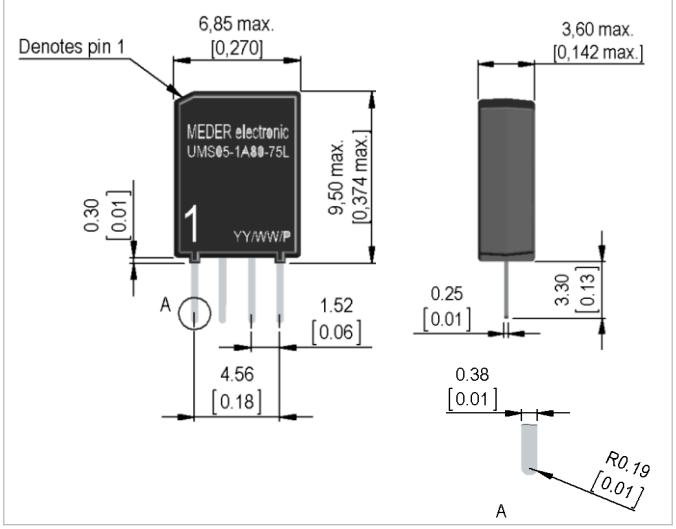
USA: +1 866.782.6339 | info@standexelectronics.com EMEA: +49 (0)7733 9253 200 | salesemea@standexelectronics.com APAC: +86 21/37606000 | salesasia@standexmeder.com

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Coil Data (at 20°C)		Coil Voltage (VDC)		Coil Resistance (Ohm)	Pull-In Voltage (VDC)	Drop-Out Voltage (VDC)	Coil Power (mW)
Contact Form	Switch Model	Nominal	Max.	Typical (± 10 %)	Max.	Min.	Nominal
1A	80	05	7.5	400	3.75	0.5	62.5
The Pull-In, Drop-Out Voltage and Coil Resistance will change at rate of 0.4% per °K The figures in parentheses are for relays in metal casing.							

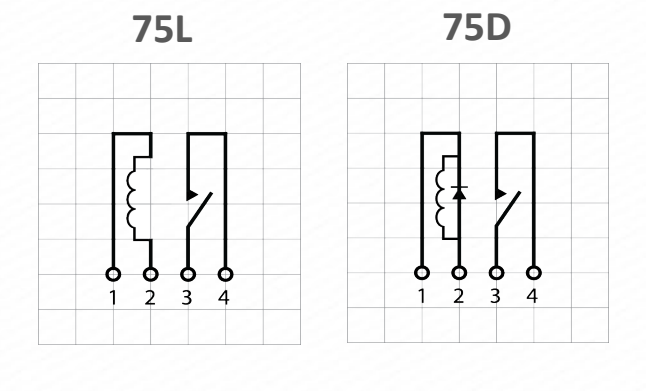
Relay Data (at 20°C)		Unit
Dielectric Strength Coil/Contact (min.) According to IEC 60255-27	1.5	kVDC
Insulation Resistance Coil/Contact (min./typ.) Rh<45%, 200V Test Voltage	10^{12} / 10^{13}	Ohm
Capacitance Coil/Contact (typ. / max.) @ 10 kHz with Closed Switch	0.9 / 1.1	pF
Shock Resistance (max.) 1/2 sine wave duration 11ms	50	g
Vibration Resistance (max.) 10 – 2,000 Hz	20	g
Operating Temperature (max.) Surrounding of the relay's housing	-20 to 85	°C
Storage Temperature (max.) Surrounding of the relay's housing	-35 to 100	°C
Soldering Temperature (max.) 5 seconds max.	260	°C
Washability Aqueous rinsing suitable. Proper drying necessary.	Fully Sealed	

Dimensions in mm (Tolerances acc. to ISO 2768-m)



Glossary Option	
L	Standard, with Magnetic Shield
D	with Diode, with Magnetic Shield
M	*with Magnetic Shield, without Diode*
Q	*with Diode and Magnetic Shield*
HR	*High Resistance Coil*
UMS Relays are available with "L" and "D" Option	

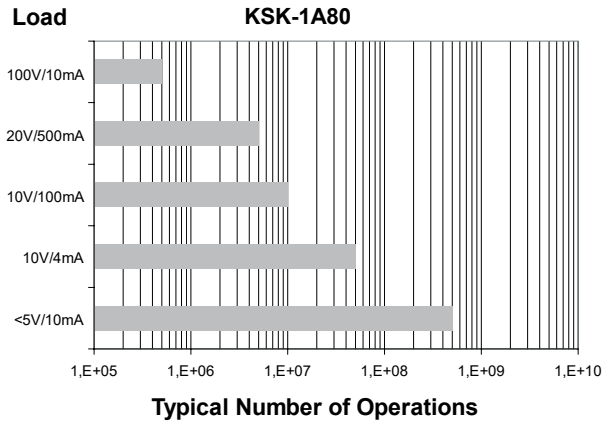
Pin Out Top View (Pitch 1.52 mm [0.06 inch])



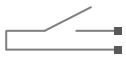
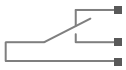
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Life Test Data (*Load increase reduces life expectancy of Reed Switches)



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	

UMS Relays are available only in “Form A” configuration

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 - see our website.
- External magnetic fields and magnetic effects, due to adjacent relays in high density matrices that may influence the relays' electrical characteristics, must be taken into consideration.
- Mechanical shock impacts, e.g. dropping the relays, may cause immediate or post-installation failure.
- Wave soldering: maximum 260°C / 5 seconds.

Please note: All technical specifications on this series datasheet refer to the standard product range. Modifications in the sense of technical progress are reserved. For general information only. For more specific information, please consult the product datasheet, available upon request.

This series datasheet could contain technical inaccuracies or typographical errors. Changes are periodically made to the information herein. These change will be incorporated in future revisions.

For deviating values, most current specifications and products please contact your nearest sales office.

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