

**MICRO SIL  
Reed Relays**

**DESCRIPTION**



MICRO SIL is a single-in-line Reed Relay using only 15.2 x 3.9 mm of board space which is half the standard SIL requirement.

**CHARACTERISTICS**

- Contact Form 1A
- Internal magnetic shield

**APPLICATIONS**

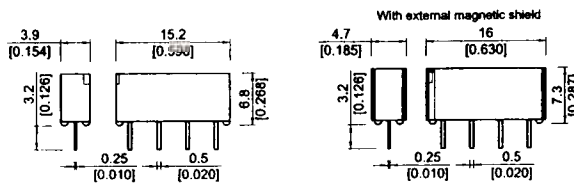
- ATE systems
- Measurement equipment
- Telecommunications
- Security systems

**FEATURES**

- Diode option available
- High coil resistance option

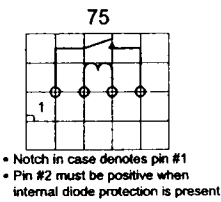
**DIMENSIONS**

All dimenches in mm [inches]



**PIN OUT**

View from top of component  
3.81mm [0.15"] pitch grid



**ORDER INFORMATION**

SERIES	NOMINAL VOLTAGE	CONTACT FORM	SWITCH MODEL	PIN OUT	OPTIONS	HIGH RESISTANCE VERSION
MS -	XX	1A	71 -	75	X	XX
OPTIONS	05, 12				L, M, D, E	HR

**OPTIONS**

- L = No diode (with internal shield)
- M = No diode (with external shield)
- D = With diode and internal magnetic shield
- E = With diode and external magnetic shield
- HR = High resistance version (5 Volt option only)

**Part Number Example**

MS12 - 1A71 - 75L

12 is the nominal voltage  
L is the option

**RELAY DATA**

All data at 20 °C	Switch Model --> Contact Form -->	Contact 71 Form A			Units
		Min.	Typ.	Max.	
<b>Contact Ratings</b>	<b>Conditions</b>				
Contact Rating	Any DC combination of V & A not to exceed their individual max.'s			10	W
Switching Voltage	DC or peak AC			200	V
Switching Current	DC or peak AC			0.5	A
Carry Current	DC or peak AC			1.25	A
Static Contact Resistance	w/ 0.5V & 50mA			150	mΩ
Dynamic Contact Resistance	Measured w/ 0.5V & 50mA 1.5 ms after closure			200	mΩ
Insulation Resistance (100 Volts applied)	Across contacts Contact to coil	10 <sup>10</sup> 10 <sup>10</sup>			Ω
Breakdown Voltage	Across contacts Contact to coil	225 1500			VDC
Operate Time, incl. Bounce	Measured w/ 100% overdrive			0.5	ms
Release Time	No suppression			0.1	ms
Capacitance	Across contacts Contact to coil		0.2 2.0		pF
<b>Life Expectancies</b>					
Switching 5 Volts @ 10mA	DC only & <10 pF stray cap.		1000		10 <sup>6</sup> Cycles
For other load requirements please see our life test section located on page 125.					
<b>Environmental Data</b>					
Shock Resistance	1/2 sine wave duration 11ms			50	g
Vibration Resistance	From 10 - 2000 Hz			20	g
Ambient Temperature	10 °C/ minute max. allowable	-20		65	°C
Storage Temperature	10 °C/ minute max. allowable	-25		85	°C
Soldering Temperature	5 sec. dwell			260	°C

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**COIL DATA**

CONTACT FORM	SWITCH MODEL	COIL VOLTAGE		COIL RESISTANCE			PULL-IN VOLTAGE		DROP-OUT VOLTAGE		NOMINAL COIL POWER
		VDC		Ω			VDC		VDC		mW
All data at 20 °C *											
		Norm.	Max.	Min.	Typ.	Max.	Min.	Max.	Min.	Max.	Typ.
<b>1A</b>	<b>71</b>	5	7.5	252	260	308	0.85	3.5	0.75	3.4	90
		5 HR**	7.5	450	500	550	0.85	3.5	0.75	3.4	50
		12	16	630	700	770	1.9	8.4	1.8	8.3	205

\* The pull-in / drop-out voltages and coil resistance will change at the rate of 0.4% per °C.  
 \*\* High Resistance version