

*Products for tomorrow...*



### Description

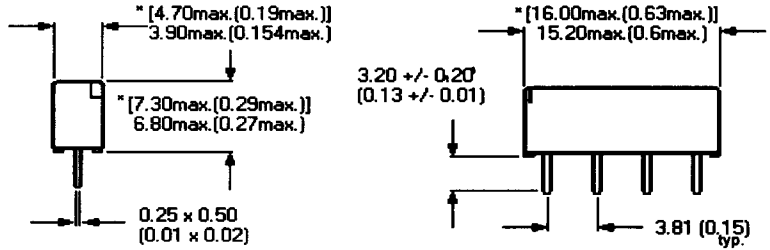
This small SIL is a replacement for the larger SIL relays having twice the square footage

### Features

- Single 1 Form A (SPST) contact
- Magnetic shield versions available
- Diode option available
- High coil resistance options available
- Half the mounting space of conventional SIL relays

### Applications

- Automatic test equipment
- Measurement equipment
- Telecommunications
- Security systems
- Medical electronics
- Industrial control



Tolerance +/- 0.10 mm (0.004 in)

\* Dimensions for versions with external magnetic screen option

\*\*Mark represents Pin 1

### Approvals and Certifications

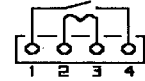
UL, VDE, EN60950  
 ISO9001, QS9000 pending

All data at 20 °C

Contact type  
 Contact form  
 Optional diode  
 Optional magnetic shield

<b>Contact 71</b>
Standard
Form 1A
See ordering information
See ordering information

Top view  
 Schematic Diagram



Parameter	Conditions	Sym.	Min	Typ	Max	Units
<b>Coil Characteristics***</b>						
5 Volt coil drive	Operating voltage			5	7.5	Volts
	Coil resistance		252	280	308	Ω
	Must Operate Voltage		0.8		3.5	Volts
12 Volt coil drive	Must Reset voltage		0.75		3.5	Volts
	Operating voltage			12	16	Volts
	Coil resistance		630	700	770	Ω
	Must Operate Voltage		1.8		8.4	Volts
Must Reset voltage		1.8		8	Volts	
<b>Contact Ratings</b>						
Rated Power	DC/peak AC Resistive	W			10	Watts
Switching Voltage	DC/peak AC Resistive	V			200	Volts
Switching Current	DC/peak AC Resistive	A			0.5	Amps
Carry Current	DC/peak AC Resistive	A			1.5	Amps
Static Contact Res.	50mV @ 10mA @ nom. volt.	CR			150	mΩ
Dynamic Contact Res.	0.5V@50mA, 100 Hz and after 1.5ms @ nom. volt. Switching 1.0 V with 10ma Rated Loads (consult factory)	DCR			200	mΩ
Life expectancy		10 <sup>9</sup>	1000			ops
Contact material				Ru		ops
<b>Relay Specifications</b>						
Dielectric Strength	Across contact		250			DCV
Capacitance	Contact to coil	I/O	1500			DCV
	Across switch			0.2		pf
Operating time	Switch to coil			2		pf
	Including bounce	Top			500	μs
Release time	No suppression	Trel			50	μs
	Diode suppressed	Trel			300	μs
	Diode and 24V zener	Trel			100	μs
Insulation Resistance	Across switch	IR	10 <sup>10</sup>	10 <sup>12</sup>		Ω
	Switch to coil	IR	10 <sup>12</sup>	10 <sup>14</sup>		Ω
<b>Environmental Ratings</b>						
Operating temperature		To	-40		85	°C
Storage temperature		Ta	-40		100	°C
Soldering time					10	sec
Solder temperature					260	°C
Cleaning				Fully Sealed		
Shock	At 11 ms +/-1ms; 1/2 sine wave	S			50	Gs
Vibration	10Hz to 2000Hz	G			10	Gs

\*\*\* The coil resistance, operate and reset characteristics will all change at the rate of 0.4% / °C

### Ordering Information

MS	XX-	XXXX-	75	X
Series	Nominal Voltage	Contact Type		Option
	5	1A71		L - no option
	12			M - with magnetic screen
				D - with diode, no magnetic screen (pins +2, -3)
				E - with diode, with magnetic screen (pins +2, -3)
				HR - high coil resistance version (5V 500Ω only)