

Products for tomorrow...



Description

The SIL series is available as both voltage and current (line sense) driven Reed Relays. They require only half the board space of the standard DIP relay

Features

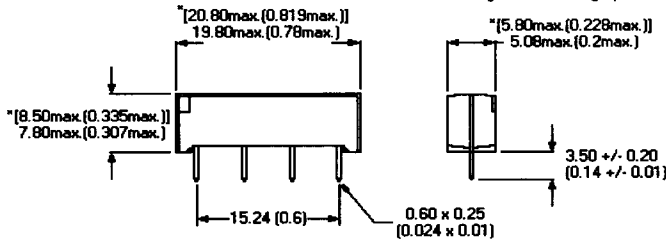
- Contacts come in a single 1 Form A and 1 Form B (SPST)
- Several contact ratings available
- High coil resistance option available
- Diode option available
- Half the mounting space of conventional DIL Relays
- Magnetic shielding option

Applications

- Automatic Test Equipment
- Measurement equipment
- Telecommunications
- Security systems
- Medical electronics
- Industrial control

Approvals and Certifications

- EN60950
- VDE
- UL
- CSA
- ISO 9001
- QS 9000 pending



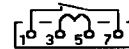
Tolerance +/- 0.10 mm (0.004 in)
 *Dimensions with magnetic screen
 **Mark represents pin 1

Ordering Information

Series	Nominal Voltage	Contact Type	Options
SIL	XX- 5 12	XXX- 1A71 1A75 1A84	XXX 71L - no option 71M - with magnetic shield 71D - with diode, no magnetic shield (pins +3, -5) 71Q - with diode, with magnetic shield (pins +3, -5)

Top view

Schematic Diagram



All data at 20 °C

Contact type
Contact form

Parameter	Conditions	Sym.	Contact 71			Contact 75			Contact 84			Units
			Standard			High Dielectric			High Dielectric			
			Min	Typ	Max	Min	Typ	Max	Min	Typ	Max	
Coil Characteristics****												
5 Volt coil drive	Operating voltage			5	7.5		5	7.5		5	7.5	Volts
	Coil resistance		450	500	550	180	200	220	180	200	220	Ω
	Must Operate Voltage		0.75		3.5	0.75		3.5	0.75		3.5	Volts
	Must Reset voltage		0.75		3.5	0.75		3.5	0.75		3.5	Volts
12 Volt coil drive	Operating voltage			12	16		12	16		12	16	Volts
	Coil resistance		900	1000	1100	900	1000	1100	900	1000	1100	Ω
	Must Operate Voltage		1.8		8.4	1.8		8.4	1.8		8.4	Volts
	Must Reset voltage		1.8		8.4	1.8		8.4	1.8		8.4	Volts
Contact Ratings												
Rated Power	DC/peak AC Resistive	W			10			10			10	Watts
Switching Voltage	DC/peak AC Resistive	V			200			250			250	Volts
Switching Current	DC/peak AC Resistive	A			0.5			0.5			0.5	Amps
Carry Current	DC/peak AC Resistive	A			1.5			1.5			1.5	Amps
Static Contact Res.	50mV @ 10mA @ nom. volt.	CR			150			150			150	mΩ
Dynamic Contact Res.	0.5V@50mA, 100 Hz and after 1.5ms @ nom. volt.	DCR			200			250			200	mΩ
Life expectancy	Switching 1.0 V with 10ma Rated Loads (consult factory)	10 ⁶	1000			1000			1000			ops
Contact material				Ru			Rh			Rh		ops
Relay Specifications												
Dielectric Strength	Across contact		250			1500			700			DCV
	Contact to coil	I/O	1500			1500			1500			DCV
Capacitance	Across switch			0.2			0.2			0.2		pf
	Switch to coil			2			2			2		pf
Operating time	Including bounce	Top			500			700			700	μs
Release time	No suppression	Trel			50			50			50	μs
	Diode suppressed	Trel			300			350			350	μs
	Diode and 24V zener	Trel			100			150			150	μs
Insulation Resistance	Across switch	IR	10 ¹⁰	10 ¹²		10 ¹⁰	10 ¹²		10 ¹⁰	10 ¹¹		Ω
	Switch to coil	IR	10 ¹²	10 ¹⁴		10 ¹²	10 ¹⁴		10 ¹²	10 ¹⁴		Ω
Environmental Ratings												
Operating temperature		To	-40		85	-40		85	-40		85	°C
Storage temperature		Ta	-40		100	-40		100	-40		100	°C
Soldering time					10			10			10	sec
Solder temperature					260			260			260	°C
Cleaning				Fully Sealed		Fully Sealed		Fully Sealed		Fully Sealed		
Shock	At 11 ms +/-1ms; 1/2 sine wave	S			50			50			50	Gs
Vibration	10Hz to 2000Hz	G			10			10			10	Gs

*** Form B relays available

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