

DESCRIPTION

MICRO SIL is a single-in-line Reed Relay using only 15.2 x 3.81 mm of board space which is half the standard SIL requirement.

CHARACTERISTICS

- Contact Form 1A
- Internal magnetic shield

FEATURES

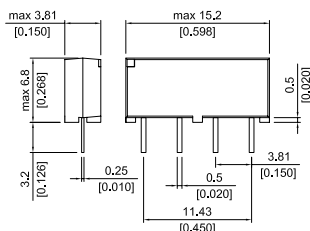
- New rugged molded design
- Diode option available
- High coil resistance option

APPLICATIONS

- ATE systems
- Measurement equipment
- Telecommunications
- Security systems

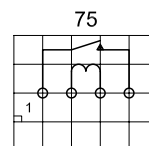
DIMENSIONS

All dimensions in mm [inches]



PIN OUT

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



- Notch in case denotes pin #1
- Pin #2 must be positive when internal diode protection is present

ORDER INFORMATION

Relay Series	Nominal Voltage	Contact Form	Switch Model	Pin Out	Options	High Resistance Version
MS -	XX -	1A	XX -	75	X	XX
Options	05, 12		87		L, D	HR

OPTIONS

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

Part Number Example

MS12 - 1A87 - 75L

12 is the nominal voltage

87 is the switch model

L is the option

MICRO SIL
Reed Relays

RELAY DATA

All Data at 20° C	Switch Model --> Contact Form -->	Switch 87 Form A			
Contact Ratings	Conditions	Min.	Typ.	Max.	Units
Switching Power	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			1.0	A
Static Contact Resistance	w/ 0.5 V & 10mA			150	mΩ
Dynamic Contact Resistance	Measured w/ 0.5 V & 50mA , 1.5 ms after closure			200	mΩ
Insulation Resistance across Contacts	Across Contact Coil - Contact	10 ¹⁰ 10 ¹³	10 ¹² 10 ¹⁴		Ω
Breakdown Voltage across Contact	Across Contact Coil - Contact	225 1500			VDC
Operation Time incl. Bounce	100 % Overdrive			0.5	ms
Release Time	with no coil suppression			0.1	ms
Capacitance	Across Contact Coil - Contact		0.2 2.0		pF
Life Expectance					
Switch Voltage 5V - 10 mA	DC <10 pF stray cap.		1000		10 ⁶ Cycles
For other load requirements, see test section on Page 152.					
Environmental Data					
Shock Resistance	1/2 sinus wave duration 11 ms			50	g
Vibration Resistance	From 10 - 2000 Hz			20	g
Ambient Temperature	10°C/ minute max. allowable	-20		70	°C
Stock Temperature	10°C/ minute max. allowable	-35		95	°C
Soldering Temperature	5 sec.			260	°C

COIL DATA

Contact Form	Switch Model	Coil Voltage		Coil Resistance			Pull-in Voltage	Drop-out Voltage	Nominal Coil Power
All Data at 20 °C *		VDC		Ω			VDC	VDC	mW
		Nom.	Max.	Min.	Typ.	Max.	Max.	Min.	Typ.
1A	87	5	7.5	250	280	310	3.5	0.75	90
		5 HR	7.5	450	500	550	3.5	0.75	50
		12	18	630	700	770	8.4	1.8	205
* The pull-in / drojp-out voltages and coil resistance will change at the rate 0,4% / °C									