

## DESCRIPTION

The SIL HV Reed Relays reduce the required space multiply compared with typical High Voltage Relays. By minimal dimensions can get separate voltage up to 4kVDV.



## FEATURES

- Insulation coil to contact up to 4kVDC
- Small size to save space
- Internal magnetic shield on all relays
- UL approval: NRNT2.E 156887;  
NRNT8.E 156887

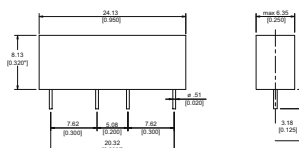
## APPLICATIONS

- Cable and In-circuit tester
- Medical equipment
- High voltage test systems

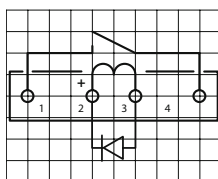
## DIMENSIONS

All dimensions in mm [inch]. Unspecified Tolerances +/- 0.25mm [0.001]

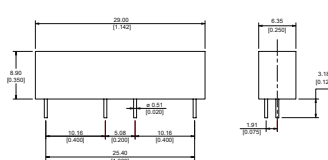
for Pin Out 76



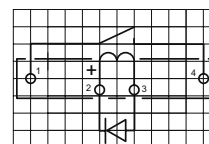
76



for Pin Out 77



77



## ORDER INFORMATION

### Part Number Example

SIL05 - 1A85 76 L 3K

**05** is the nominal voltage

**1A85** is the contact form

**76** is the pin-out

**L** without diode (option with diode =D)

**3K** breakdown voltage, coil - contact

## 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	VDC		Ω			VDC	VDC	mW
		Nom.	Max.	Min.	Typ.	Max.	Max.	Min.	Typ.
1A85	2K	5	7.5	198	220	242	2	0.4	114
	3K	5	7.5	198	220	242	3	0.5	114
	4K	12	16	450	500	550	8.4	1.8	288

The pull-in / drop out voltages and coil resistance will change at the rate of 0,4 % / °C.

High Voltage SIL Reed  
Relay

## RELAY DATA

All Data at 20° C	Contact Form →	Contact 85 Form A			
Contact Ratings	Conditions	Min.	Typ.	Max.	Units
Switching Power	Any DC combination of V & A not to exceed their individual max.'s			100	W
Switching Voltage	DC or peak AC			1000	V
Switching Current	DC or peak AC			1.0	A
Carry Current	DC or peak AC			2.5	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 <sup>13</sup> 10 <sup>12</sup>			Ω
Breakdown Voltage across Contacts	Across Contact Coil - Contact	4 4			kVDC
Operate Time incl. Bounce	at nominal voltage			1.0	ms
Release Time	with no coil suppression			0.1	ms
Capacitance	Across Contact Coil - Contact		0.2 5.0		pF
<b>Life Expectance</b>					
Switch Voltage 5V - 10 mA	DC <10 pF stray cap.		500		10 <sup>6</sup> Cycles
For other load requirements, see the life test section on P. 120.					
<b>Environmental Data</b>					
Shock Resistance	1/2 sinus wave for 11 ms			50	g
Vibration Resistance	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