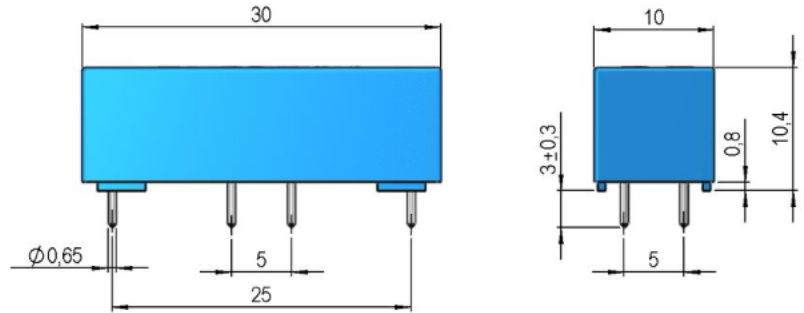


# LI Series Reed Relays



- Features: Small Size High Voltage Relay, High Dielectric Strength, High Insulation Resistance
- Applications: Cable & In-Circuit, Battery Mngt., High Voltage Test Equipment, Electric Vehicles & Others
- Markets: Solar, Test & Measurement, Automotive & Others

Part Description: **LI 00-1A XX**

Nominal Voltage	Contact QTY	Contact Form	Switch Model
05, 12, 24	1	A	31, 85

Customer Options	Switch Model		Unit
	31 (Mercury)	85 (Dry)	
<b>Contact Data</b>			
<b>Rated Power (max.)</b> <small>Any DC combination of V&amp;A not to exceed their individual max.'s</small>	50	100	W
<b>Switching Voltage (max.)</b> <small>DC or peak AC</small>	500	1,000	V
<b>Switching Current (max.)</b> <small>DC or peak AC</small>	2.0	1.0	A
<b>Carry Current (max.)</b> <small>DC or peak AC</small>	2.0	2.5	A
<b>Contact Resistance (max.)</b> <small>@ 0.5V &amp; 50mA</small>	80	150	mOhm
<b>Breakdown Voltage (min.)</b> <small>According to EN60255-5</small>	2.1	3 – 4.2	kVDC
<b>Operating Time (max.)</b> <small>Incl. Bounce; Measured with w/ Nominal Voltage</small>	1.2	1.1	ms
<b>Release Time (max.)</b> <small>Measured with no Coil Excitation</small>	1.0	0.1	ms
<b>Insulation Resistance (typ.)</b> <small>Rh&lt;45%, 100V Test Voltage</small>	X	10 <sup>10</sup>	Ohm
<b>Capacitance (typ.)</b> <small>@ 10kHz across open Switch</small>	0,3	0.5	pF

Coil Data		Coil Voltage (nom.)	Coil Resistance (typ.)	Pull-In Voltage (max.)	Drop-Out Voltage (min.)	Nominal Coil Power (typ.)
Contact Form	Switch Model					
Unit		VDC	Ohm	VDC	VDC	mW
1A	85	05	200	3.5	0.75	125
		12	680	8.4	1.4	211
		24	2,000	16.8	3.6	288

The Pull-In / Drop-Out Voltage and Coil Resistance will change at rate of 0.4% per °C.

Relay Data		Unit
Dielectric Strength Coil/Contact (min.) according to EN60255-5	7	kVDC
Insulation Resistance Coil/Contact (typ.) Rh<45%, 200V Test Voltage	10 <sup>13</sup>	Ohm
Capacitance Coil/Contact (typ.) @ 10 kHz	1.2	pF
Shock Resistance (max.) 1/2 sine wave duration 11ms	50	g
Vibration Resistance (max.)	20	g
Operating Temperature	-20 to 70	°C
Storage Temperature	-35 to 95	°C
Soldering Temperature (max.) 5 sec. max.	260	°C
Washability	Fully Sealed	

LI Reed Relay

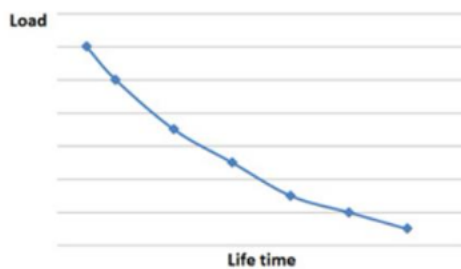


Handling & Assembly Instructions

- Switching inductive and/or capacitive loads create voltage and/or current peaks, which may damage the relay. Protective circuits need to be used.
- External magnetic fields needs to be taken into consideration, including a too high packing density. This may influence the relays' electrical characteristics.
- Mechanical shock impacts e.g. dropping the relays may cause immediate or post-installation failure.
- Wave soldering: maximum 260°/5 seconds.
- Reflow soldering: Recommendations given by the soldering paste manufacturer need to be considered as well as the temperature limits of other components/processes.

Life Test Data

\*Load increase reduces life expectancy of Reed Switches



Glossary Contact Form

Form A	NO = Normally Open Contacts SPST = Single Pole Single Throw	
Form B	NC = Normally Closed Contacts SPST = Single Pole Single Throw	
Form C	Changeover SPDT = Single Pole Double Throw	



Pin Out

View from top of component  
2.54mm [0.10"] pitch grid

