

High Voltage Reed Relays for PCB Mounting



DESCRIPTION

The LI series offers the maximum distance between coil and switch in the smallest possible housing.

APPLICATIONS

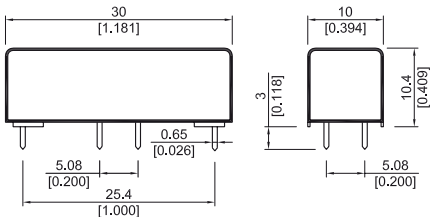
- High voltage test systems
- Cable and in-circuit test equipment
- Battery operated high voltage test equipment
- Direct voltage converter in photo-voltaic applications
- Electric vehicles

FEATURES

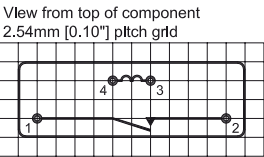
- High coil resistance version available
- Insulation voltage between coil and contact up to 7 kVDC
- Insulation resistance > 10 TΩ

DIMENSIONS

All dimensions in mm [inch]



PIN OUT



ORDER INFORMATION

Series	Nominal Voltage	Contact Form	Switch Model
LI	XX -	1 A	XX
Options	05, 12, 24		66, 85

Part Number Example

LI12 - 1A66

12 is the nominal voltage
66 is the switch model

RELAY DATA

All Data at 20° C	Switch Model → Contact Form →	Switch 66 Form A			Switch 85 Form A			
Contact Ratings	Conditions	Min.	Typ.	Max.	Min.	Typ.	Max.	Unit
Switching Power	Any DC combination of V & A not to exceed their individual max.'s			10			100	W
Switching Voltage	DC or peak AC			200			1000	V
Switching Current	DC or peak AC			0.5			1.0	A
Carry Current	DC or peak AC			1.25			2.5	A
Static Contact Resistance	w/ 0.5 V & 10mA			150			150	mΩ
Dynamic Contact Resistance	Measured w/ 0.5V & 50 mA 1.5 ms after closure			200			200	mΩ
Insulation Resistance (100 Volts applied)	Across contacts Coil to contacts	10 ¹⁰ 10 ¹³			10 ¹³ 10 ¹³			Ω
Breakdown Voltage	Across contacts Coil to contacts			0.225 7			5 7	kVDC kVDC
Operation Time incl. Bounce	At nominal voltage			0.5			1.0	ms
Release Time	Measured w/ no coil suppression			0.1			0.1	ms
Capacitance	Across contacts Coil to contacts		0.2 2.0			0.2 2.5		pF
Life Expectancies								
Switching 5 V - 10 mA	DC only & <10 pF stray cap.		1000			500		10 ⁶ Cycles
For other load requirements please see our life test section on P. 120.								
Environmental Data								
Shock Resistance	1/2 sinus wave duration 11 ms			50			50	g
Vibration Resistance	From 10 - 2000 Hz			20			20	g
Ambient Temperature	10°C/ minute max. allowable	-20		70	-20		70	°C
Stock Temperature	10°C/ minute max. allowable	-35		95	-35		95	°C
Soldering Temperature	5 sec. dwell			260			260	°C

High Voltage Reed Relays for PCB Mounting

COIL DATA

Contact Form	Switch Model	Coil Voltage		Coil Resistance ± 10%			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	66	5	7.5	405	450	495	3.5	0.75	55
		12	16	1080	1200	1320	8.4	1.8	119
		24	30	3240	3600	3960	16.8	3.6	159
1A	85	5	7.5	180	200	220	3.5	0.75	125
		12	16	612	680	748	8.4	1.8	210
		24	30	1800	2000	2200	16.8	3.6	290
The pull-in / drop-out voltage and coil resistance will change at rate of 0.4% per °C.									