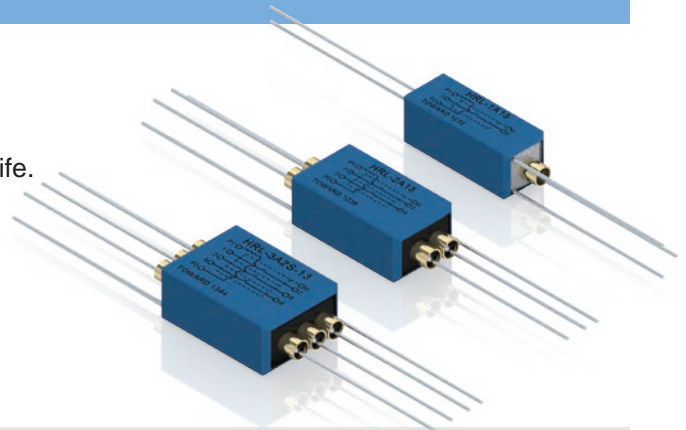


HRL Series

1a, 2a, 3a Hi-Voltage Reed Relay

Features

- Ultra reed relay.
- High reliability, hermetically sealed contacts for long life.
- External magnetic and electrostatic shield.



Order Code

HRL-XX X X-X-X
 a b c d e

a : Contact Form : 1A=1 Form A, 2A=Form A, 3A=Form A
 b : Nominal Coil Voltage : 1=24VDC, 2=12VDC, 4=5VDC
 c : Nil=No Electrostatic Shield, S=Electrostatic Shield
 d : Nil=Standard Type=500VDC, 1=1KV, 3=3KV
 e : Insulation Resistance : Nil= 10^{10} , 11= 10^{11} , 12= 10^{12} ,
 13= 10^{13} , 14= 10^{14}

Coil Data-Standard Type (at 20°C)

Part Number	Nominal Voltage DC $\pm 10\%$ [V]	Coil Resistance $\pm 10\%$ [ohm]	Nominal Current [mA]	Must Release Voltage MIN. [V] at 20°C	Must Operate Voltage MAX. [V] at 20°C
HRL-1A HRL-2A	5	100	50.0	0.5	4.0
	12	400	30.0	1.2	8.8
	24	1600	15.0	2.0	18.0
HRL-3A	05	50	100.0	0.5	4.0
	12	300	40.0	1.2	8.8
	24	800	30.0	2.0	18.0

Contact Rating

Relay Model	HRL-XXXS	HRL-XXXS-1	HRL-XXXS-4	
Contact Rating Max DC / Peak AC	50W	100W	100W	
Switching Voltage Max DC / Peak AC	300VAC / 350VDC	300VDC / 350VDC	1000VDC	
Max. Switching Current Max DC / Peak AC	1.0A			
Max. Carry Current	2.5A			
Contact Resistance	150mΩ			
Dielectric Strengths(tatic)	Between contacts	500VDC	1000VDC	3000VDC
	Contacts to shield	2500VDC	2500VDC	2500VDC
	Contacts / shield to coil	2500VDC	2500VDC	2500VDC



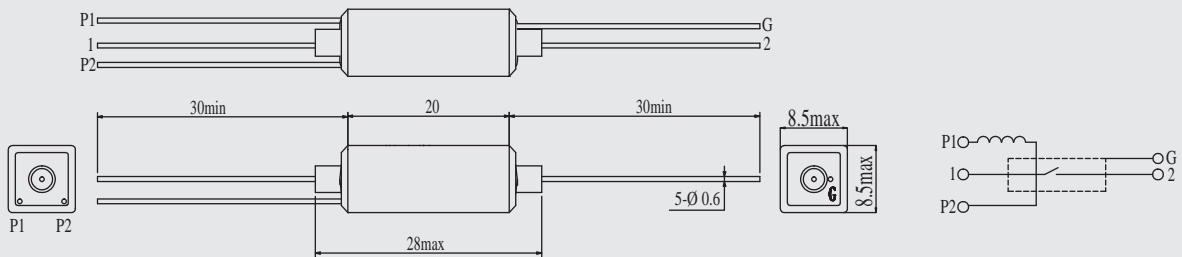
Specification

Relay Model	HRL-XXXS	HRL-XXXS-1	HRL-XXXS-4
Electrostatic Capacitance	0.5pF	0.5pF	0.2pF
Insulation Resistance (except shield to coil)	$10^{10}\Omega$	$10^{10}\Omega$	$10^{10}\Omega$
Operate Time	0.6ms	0.6ms	1.0ms
Release Time	0.05ms	0.05ms	0.1ms
Vibration	20G (0~2000Hz)	20G (0~2000Hz)	20G (0~2000Hz)
Shock	30G (11mS.1/2Sin Wave)	30G (11mS.1/2Sin Wave)	50G (11mS.1/2Sin Wave)
Operating Temperature	-10°C ~+60°C		
Storage Temperature	-10°C ~+80°C		
Life Expectancy	AC / DC 10mV-10 μ A 1X10 ⁸ Ops	200VDC 1mA 1X10 ⁷ Ops	5VDC 10mA 500X10 ⁶ Ops

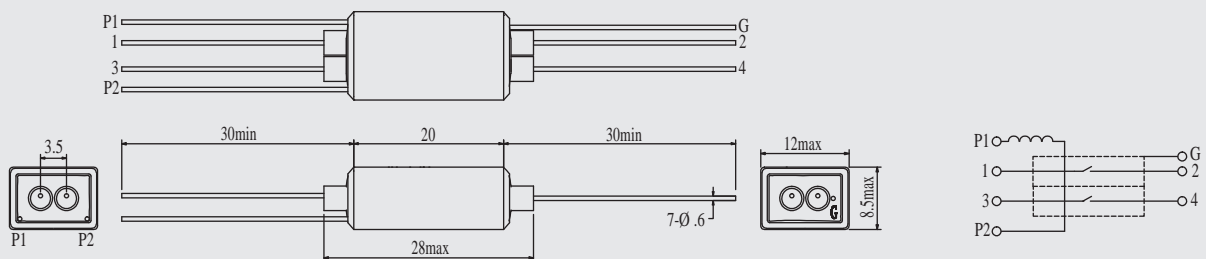
Dimensions (Unit : mm)

Wiring Diagrams (Top View)

HRL-1A



HRL-2A



HRL-3A

