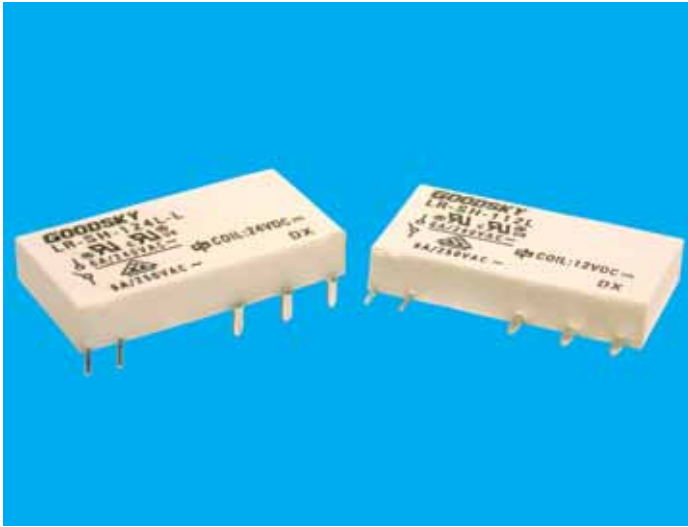


# LR Series



## Main Feature

1. Slim size (28.2 x 5.0 x 15.0mm).
2. Wide switching capacity  
100mA/12VDC~6A/250VAC.
3. High coil sensitivity: 170mW
4. High breakdown (4,000V) and surge (6,000V)  
Voltage between contacts and coil.
5. Light weight Approx. 4g.
6. 1 From A; 1 From B; 1 From C.
7. Conforming to UL, CUL and VDE.

## Application

PLC, Factory Machine, Timer/Counter, Temperature Controller, Measuring Instrument, Testing Instrument, OA Equipment.

## Contact Rating

- Nominal Load(Resistive Load  $\cos \varphi = 1$ )  
Contact Capacity ..... 6A at 250VAC.  
6A at 30VDC.  
Max. Allowable Current ..... 6A.  
Max. Allowable Voltage ..... AC 400V, DC 300V.  
Max. Allowable Power Force 1,500 VA, 180W  
Min. Switching Load ..... DC 5V, 10mA.
- Contact Material ..... Ag Alloy.
- Contact Form ..... SPDT & SPST

## Performance (at Initial Value)

- Contact Resistance ..... 100 m $\Omega$  Max. @ 1A, 6VDC
- Operate Time ..... 8 mSec. Max.
- Release Time ..... 4 mSec. Max.
- Dielectric Strength:  
Between Coil & Contact ..... 4,000VAC at 50/60 Hz  
for one minute.  
Between Contacts ..... 1,000VAC at 50/60 Hz  
for one minute.
- Surge Resistance ..... 6,000V (between coil  
& Contact 1.2x50 $\mu$ Sec.)
- Insulation Resistance ..... 1,000 Mega $\Omega$  Min. at  
500VDC.
- Max. On/Off Switching:  
Electrical ..... 6 Ops per Minute.  
Mechanical ..... 180 Ops per Minute.
- Temperature Range ..... -40~85°C

- Humidity Range ..... 5~85% RH.
- Coil Temperature Rise ..... 30°C Max.
- Vibration :  
Endurance ..... 10 to 55 Hz dual  
amplitude width  
1.0mm.  
Error Operation ..... 10 to 55 Hz dual  
amplitude width  
1.5mm.
- Shock:  
Endurance ..... 980 m/S<sup>2</sup> Min.  
Error Operation ..... 98 m/S<sup>2</sup> Min.
- Life Expectancy:  
Mechanical ..... 5x10<sup>6</sup> Operations at No  
load condition.  
Electrical ..... (NO: 5x10<sup>4</sup>, NC: 3x10<sup>4</sup>)  
Operations at Rated  
Resistive Load.
- Weight ..... about 4 g.

## Safety Standard & Its File Number

- In Progress

## Coil Specification (at 20 °C)

Coil Sensitivity	Nominal Voltage (VDC)	Nominal Current (mA)	Coil Resistance ( $\Omega \pm 10\%$ )	Power Consumption (W)	Pull-In Voltage (VDC)	Drop-Out Voltage (VDC)	Maximum Allowable Voltage (VDC)
LR	4.5	37.8	119	Abt. 0.17	66% Maximum	5% Minimum	235%
	6	28.3	212				
	12	14.2	847				
	18	9.4	1,906				
	24	7.1	3,388				
	48	4.5	10,618				

## Ordering Information

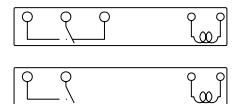
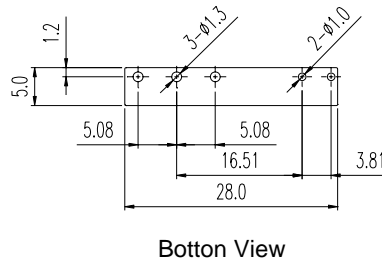
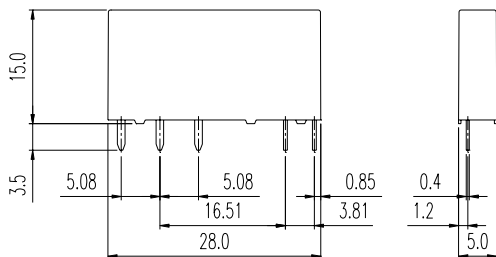
LR - SS - 1 12 L M - L	<b>Operation Function:</b>	<b>Nil:</b> Vertical Mounting <b>L:</b> Level Mounting
	<b>Contact Form:</b>	<b>Nil:</b> One Form C <b>M:</b> One Form A <b>B:</b> One Form B
	<b>Coil Type:</b>	<b>L:</b> High Sensitivity DC Coil
	<b>Coil Voltage:</b>	<b>4.5:</b> 4.5V, <b>06:</b> 6V, <b>12:</b> 12V, <b>18:</b> 18V, <b>24:</b> 24V, <b>48:</b> 48V
	<b>Number of Pole:</b>	<b>1:</b> One Pole
	<b>Type Sealing:</b>	<b>SS:</b> Flow Solder Type <b>SH:</b> Plastic Sealed Type
	<b>Type:</b>	<b>LR</b>

## Classification

Model	LR		
Coil Sensitivity	High Sensitivity DC Coil		
Contact Form	1C	1A	1B
Flow Solder Type	LR - SS - 1□□L	LR - SS - 1□□LM	LR - SS - 1□□LB
	LR - SS - 1□□L - L	LR - SS - 1□□LM - L	LR - SS - 1□□LB - L
Plastic Sealed Type	LR - SH - 1□□L	LR - SH - 1□□LM	LR - SH - 1□□LB
	LR - SH - 1□□L - L	LR - SH - 1□□LM - L	LR - SH - 1□□LB - L

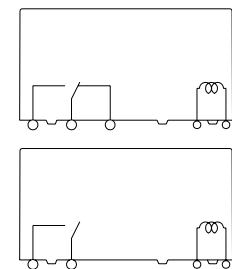
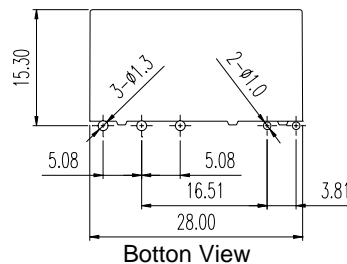
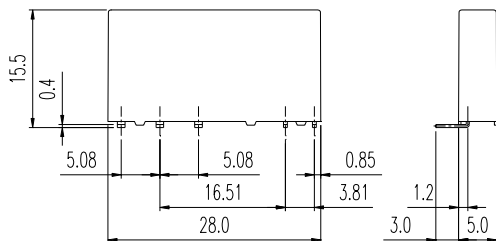
## Dimension

### LR-L



Bottom View

### LR-L-L



Bottom View