

## »» Features

- ☐ 5A general purpose Power Relay.
- ☐ DPDT & 4PDT contact configurations.
- ☐ AC & DC coil.
- ☐ Epoxy sealed type and or flux free type.
- ☐ Optional to be equipped with lamp, diode, flashed contact, and flanged cover.
- ☐ Comply with RoHS-Directive 2002/95/EC.



## »» Type List

| Terminal style        | Contact form | Designation (provided with) | Enclosure style   |                    |                      |
|-----------------------|--------------|-----------------------------|-------------------|--------------------|----------------------|
|                       |              |                             | Straight cover    | Flanged cover      | Sealed type washable |
| W<br>(Quick terminal) | 4PDT         | -----                       | SCLD-W-B-4PDT-C   | SCLD-W-B-4PDT-C1   | SCLD-W-B-4PDT-S      |
|                       | DPDT         |                             | SCLB-W-DPDT-C     | SCLB-W-DPDT-C1     | SCLB-W-DPDT-S        |
|                       | 4PDT         | Diode                       | SCLD-W-B-D-4PDT-C | SCLD-W-B-D-4PDT-C1 | SCLD-W-B-D-4PDT-S    |
|                       | DPDT         |                             | SCLB-W-D-DPDT-C   | SCLB-W-D-DPDT-C1   | -----                |
|                       | 4PDT         | Au plating contact          | SCLD-W-B-F-4PDT-C | SCLD-W-B-F-4PDT-C1 | SCLD-W-B-F-4PDT-S    |
|                       | DPDT         |                             | SCLB-W-F-DPDT-C   | SCLB-W-F-DPDT-C1   | -----                |
|                       | 4PDT         | Lamp                        | SCLD-W-B-L-4PDT-C | SCLD-W-B-L-4PDT-C1 | SCLD-W-B-L-4PDT-S    |
|                       | DPDT         |                             | SCLB-W-L-DPDT-C   | SCLB-W-L-DPDT-C1   | -----                |
| P<br>(PCB terminal)   | 4PDT         | -----                       | SCLD-P-B-4PDT-C   | -----              | SCLD-P-B-4PDT-S      |
|                       | DPDT         |                             | SCLB-P-DPDT-C     | -----              | -----                |
|                       | 4PDT         | Diode                       | SCLD-P-B-D-4PDT-C | -----              | SCLD-P-B-D-4PDT-S    |
|                       | DPDT         |                             | SCLB-P-D-DPDT-C   | -----              | -----                |
|                       | 4PDT         | Au plating contact          | SCLD-P-B-F-4PDT-C | -----              | SCLD-P-B-F-4PDT-S    |
|                       | DPDT         |                             | SCLB-P-F-DPDT-C   | -----              | -----                |
|                       | 4PDT         | Lamp                        | SCLD-P-B-L-4PDT-C | -----              | SCLD-P-B-L-4PDT-S    |
|                       | DPDT         |                             | SCLB-P-L-DPDT-C   | -----              | -----                |
|                       | 4PDT         | Manual                      | SCLD-P-B-M-4PDT-C | -----              | -----                |
|                       | DPDT         |                             | SCLB-P-M-DPDT-C   | -----              | -----                |

## »» Ordering Information

SCL    B    -    P    -    ☐    -    ☐    -    DPDT    -    ☐  
 1       2       3       4       5       6       7

1. SCL -- Basic series designation

2. B -- Double pole  
D -- Four pole

3. P -- PCB terminal  
W -- Quick terminal

4. Blank -- Without any special features  
B -- Provided with contact barrier

# SCLD/SCLB

5. Blank -- No special features

D -- Diode across coil

F -- Ag contact with Au plating - 3A rating

L -- Provided with pilot light

M -- Provided with manual operator

6. DPDT -- Double pole double throw

4PDT -- Four pole double throw

7. Blank -- Open type

C -- Straight cover

C1 -- Flanged cover

V -- Sealed type

S -- Sealed type washable

## »» Contact Rating

|                |          |             |           |
|----------------|----------|-------------|-----------|
| Resistive load | 5A 28VDC | General Use | 5A 250VAC |
|----------------|----------|-------------|-----------|

## »» Coil Rating (DC)

| Rated voltage<br>(V) | Rated current<br>±10 % at 23°C<br>(mA) | Coil resistance<br>±10 % at 23°C<br>(Ω) | Max. continuous<br>voltage<br>at 70°C | Pick up<br>voltage(Max)<br>at 23°C | Drop out<br>voltage(Min)<br>at 23°C | Power consumption<br>at rated<br>voltage |
|----------------------|----------------------------------------|-----------------------------------------|---------------------------------------|------------------------------------|-------------------------------------|------------------------------------------|
| 6                    | 150                                    | 40                                      | 110 % of<br>rated<br>voltage          | 75 % of<br>rated<br>voltage        | 10 % of<br>rated<br>voltage         | approx. 0.9W                             |
| 12                   | 75                                     | 160                                     |                                       |                                    |                                     |                                          |
| 15                   | 60                                     | 250                                     |                                       |                                    |                                     |                                          |
| 24                   | 37                                     | 650                                     |                                       |                                    |                                     |                                          |
| 48                   | 19                                     | 2600                                    |                                       |                                    |                                     |                                          |
| 110                  | 10                                     | 11000                                   |                                       |                                    |                                     |                                          |
| 120                  | 11                                     | 11000                                   |                                       |                                    |                                     |                                          |

## »» Coil Rating (AC)

| Rated voltage<br>(V) | Coil resistance<br>±10 % at 23°C<br>(Ω) | Max. continuous<br>voltage<br>at 70°C | Pick up<br>voltage(Max)<br>at 23°C | Drop out<br>voltage(Min)<br>at 23°C | Power consumption<br>at rated<br>voltage |
|----------------------|-----------------------------------------|---------------------------------------|------------------------------------|-------------------------------------|------------------------------------------|
| 12                   | 40                                      | 110 % of<br>rated<br>voltage          | 85 % of<br>rated<br>voltage        | 30 % of<br>rated<br>voltage         | approx. 1.2VA                            |
| 24                   | 160                                     |                                       |                                    |                                     |                                          |
| 100                  | 3400                                    |                                       |                                    |                                     |                                          |
| 110                  | 3400                                    |                                       |                                    |                                     |                                          |
| 115                  | 3400                                    |                                       |                                    |                                     |                                          |
| 120                  | 3400                                    |                                       |                                    |                                     |                                          |
| 220                  | 13600                                   |                                       |                                    |                                     |                                          |
| 230                  | 13600                                   |                                       |                                    |                                     |                                          |
| 240                  | 13600                                   |                                       |                                    |                                     |                                          |

## »» Specification

|                                      |                                         |                                                           |
|--------------------------------------|-----------------------------------------|-----------------------------------------------------------|
| Contact material                     | AgNi / AgSnO alloy                      |                                                           |
| Contact resistance <sup>(1)</sup>    | 50mΩ Max. (1A/6VDC by 4 pipes mΩ meter) |                                                           |
| Operate time <sup>(1)</sup>          | 25 ms Max.                              |                                                           |
| Release time <sup>(1)</sup>          | 25 ms Max.                              |                                                           |
| Insulation resistance <sup>(1)</sup> | 100 MΩ Min. (DC 500V)                   |                                                           |
| Dielectric strength <sup>(1)</sup>   | Between open contact                    | : AC 500V , 50/60Hz 1 min.                                |
|                                      | Between contact and coil                | : AC 1500V , 50/60Hz 1 min.                               |
|                                      | Between contact circuits                | : AC 1500V , 50/60Hz 1 min.                               |
| Vibration resistance                 | Operating extremes                      | 10~55Hz , amplitude 1.0 mm                                |
|                                      | Damage limits                           | 10~55Hz , amplitude 1.0 mm                                |
| Shock resistance                     | Operating extremes                      | 20G                                                       |
|                                      | Damage limits                           | 100G                                                      |
| Life expectancy                      | Mechanical                              | 10,000,000 operations<br>(frequency 18,000 operations/hr) |
|                                      | Electrical                              | 100,000 operations<br>(frequency 1,800 operations/hr)     |
| Operating ambient temperature        | -25~+70°C (no freezing)                 |                                                           |
| Weight                               | Approx. 35 g (LD) 、 32 g (LB)           |                                                           |

Note : (1) initial value

## »» Safety Approval

| Certified | UL     | CSA     | TUV         | FIMKO |
|-----------|--------|---------|-------------|-------|
| File No.  | E88991 | 1474292 | R3-09452080 | 24562 |

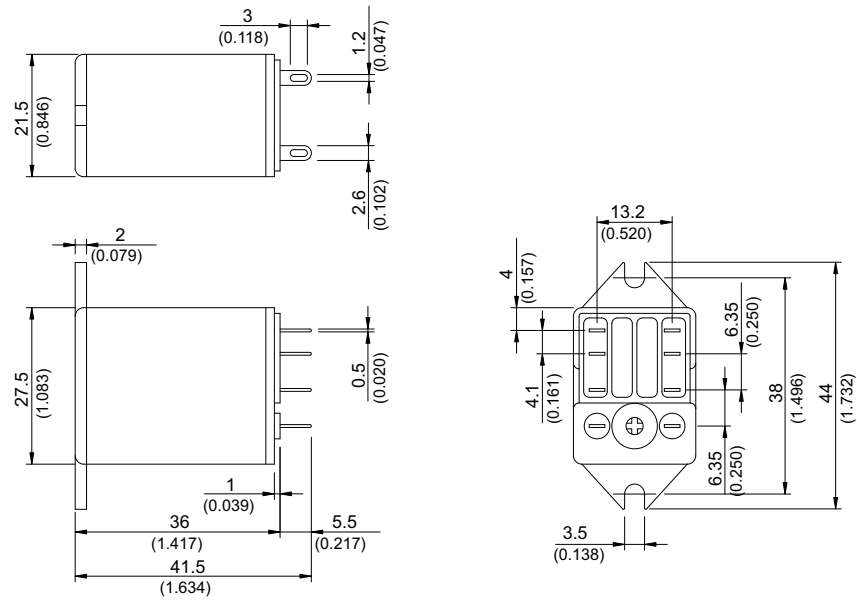
## »» Safety Approval Rating

| UL                                           | CSA                   | UL & CSA (-F)         | TUV                   | FIMKO     |
|----------------------------------------------|-----------------------|-----------------------|-----------------------|-----------|
| 5A 250VAC<br>5A 28VDC<br>1/8HP 3.8FLA,120VAC | 5A 250VAC<br>5A 28VDC | 3A 250VAC<br>3A 30VDC | 5A 250VAC<br>5A 30VDC | 5A 250VAC |

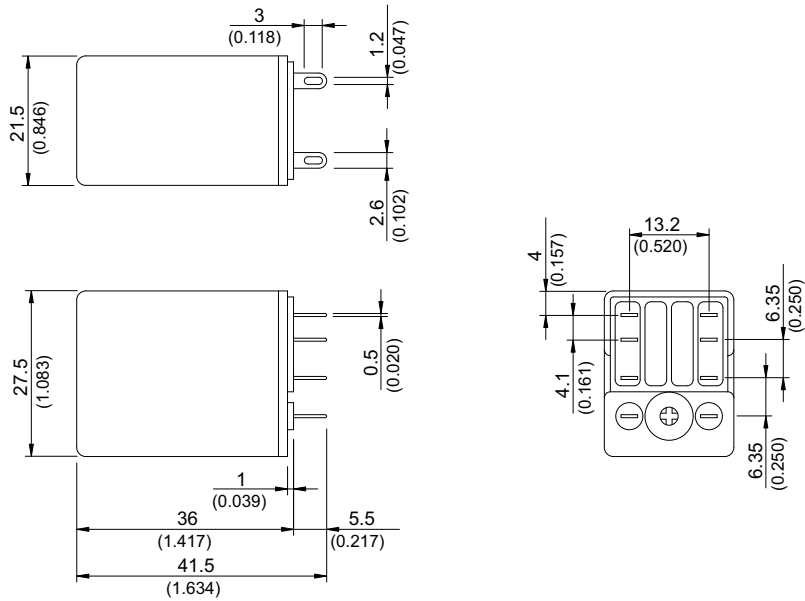
# SCLD/SCLB

## »» Outline Dimensions

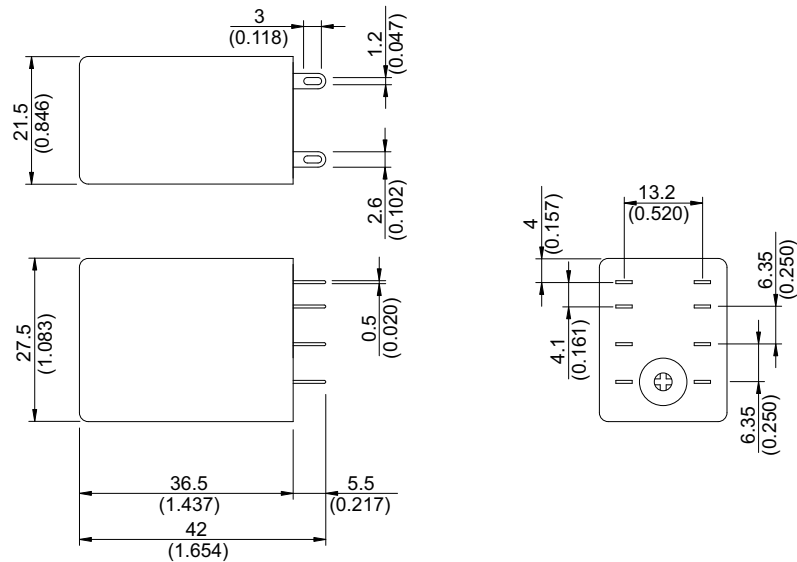
### ◆LB-W C1



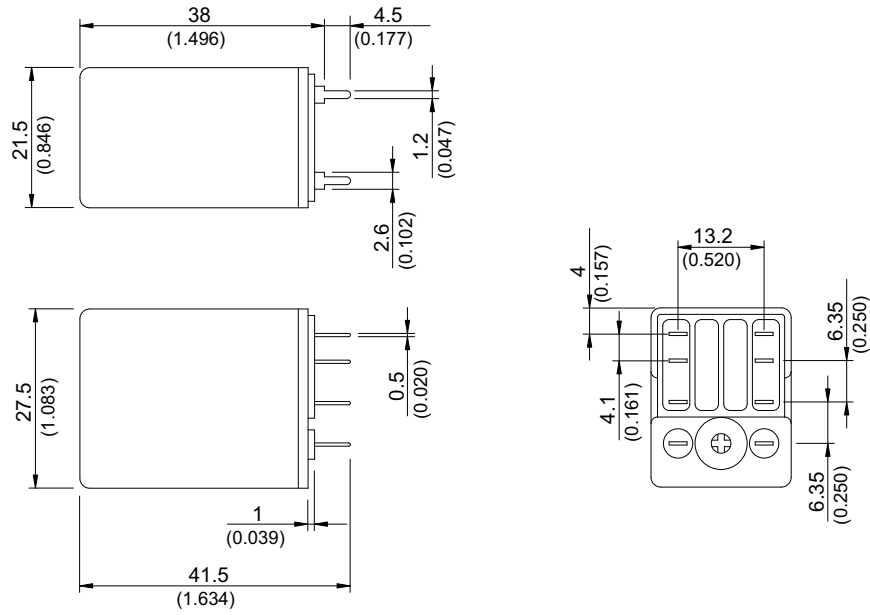
### ◆LB-W C



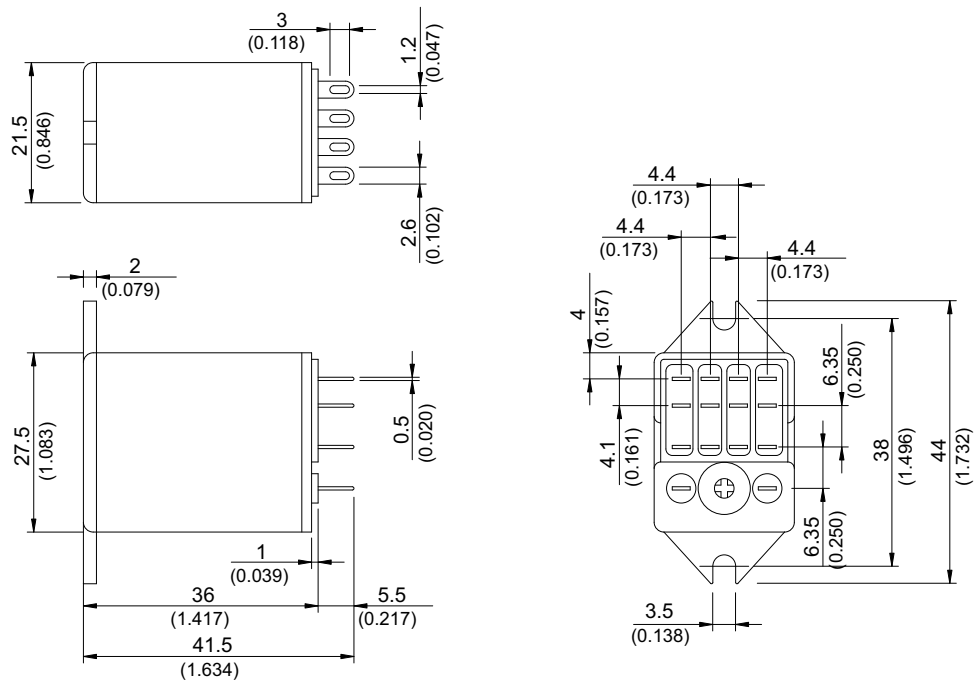
### ◆LB-W S



## ◆LB-P C

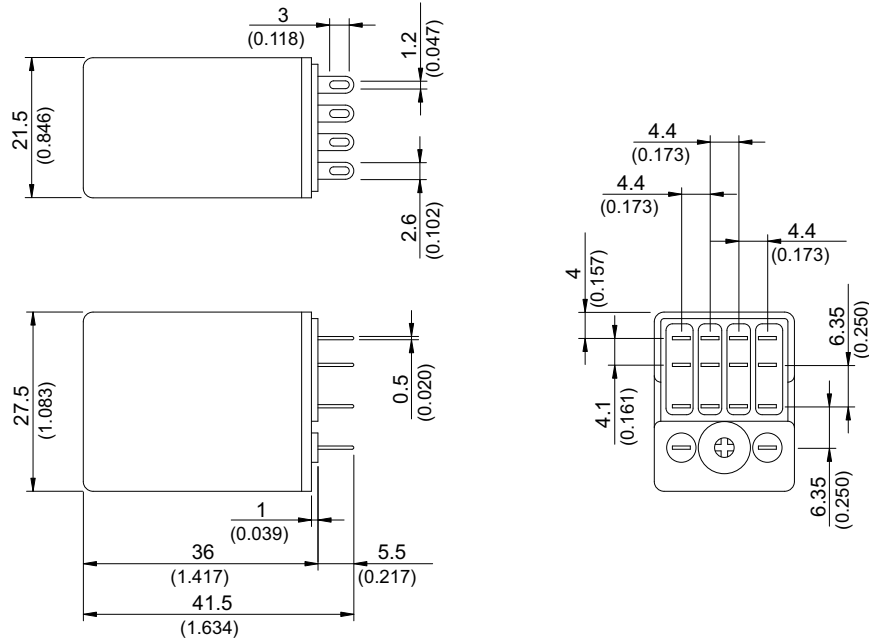


## ◆LD-W C1

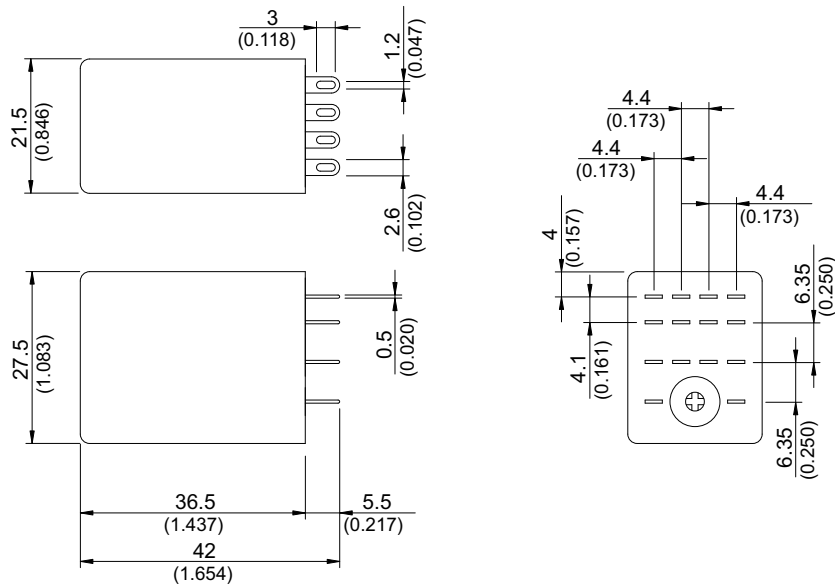


# SCLD/SCLB

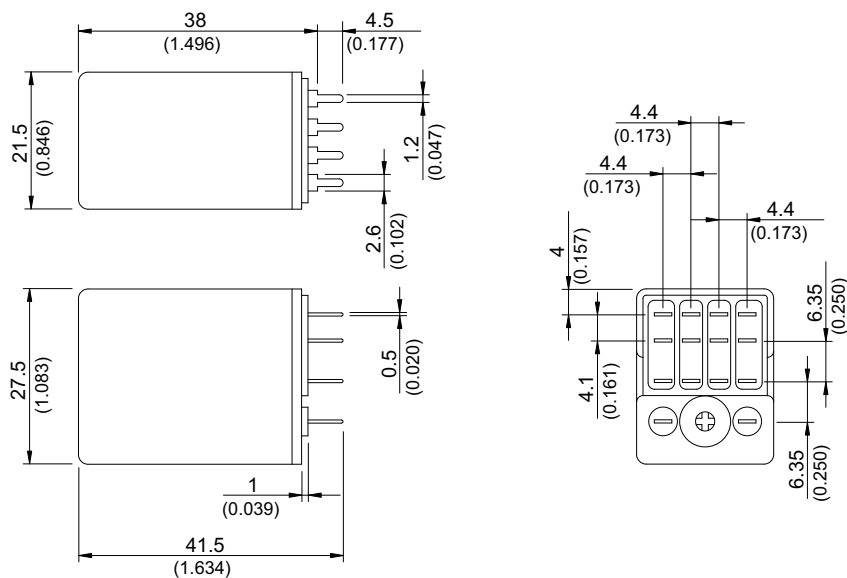
## ◆LD-W C



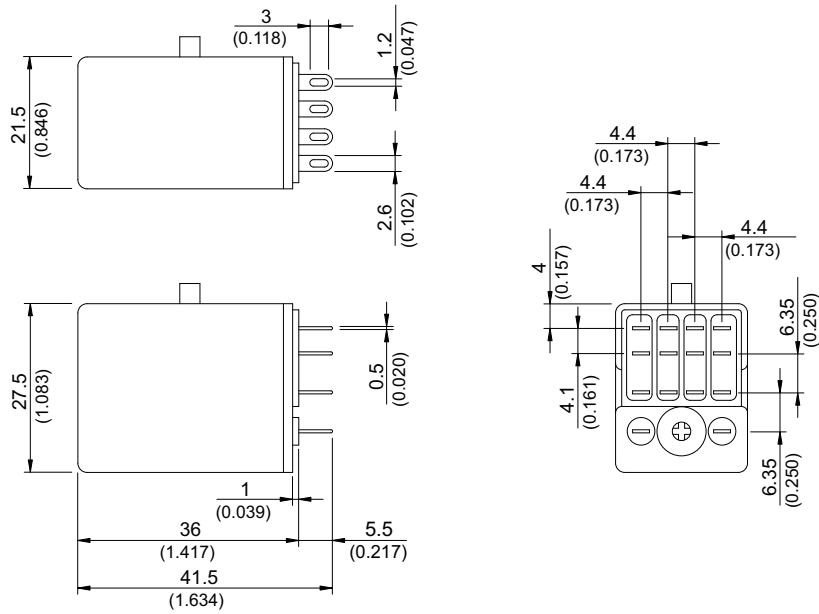
## ◆LD-W S



## ◆LD-P C

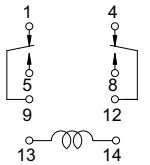


## ◆LD-W M

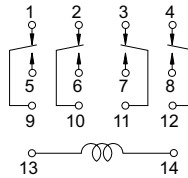


## »» Wiring Diagram BOTTOM VIEW

### DPDT

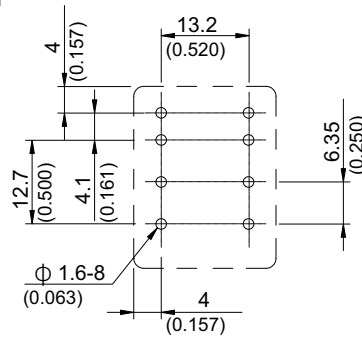


### 4PDT

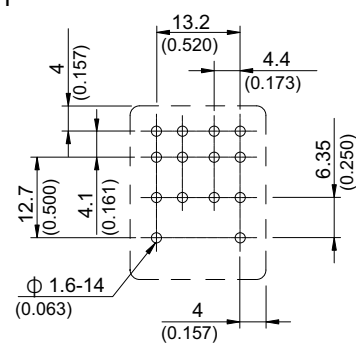


## »» PC Board Layout BOTTOM VIEW

### DPDT

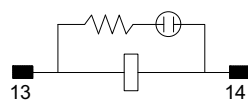


### 4PDT

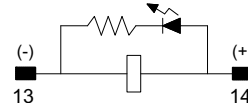


## »» Designation(Provided with) BOTTOM VIEW

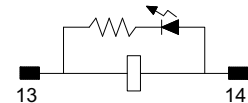
### Lamp



(100~240VAC)

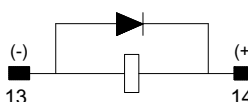


(6~48VDC)



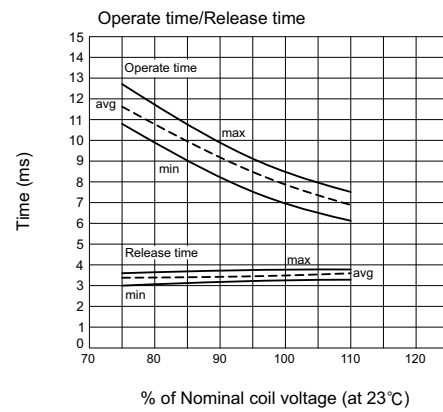
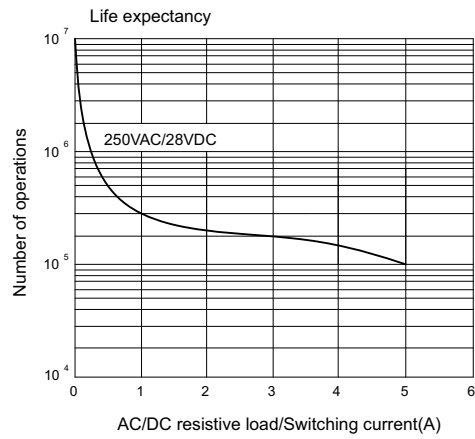
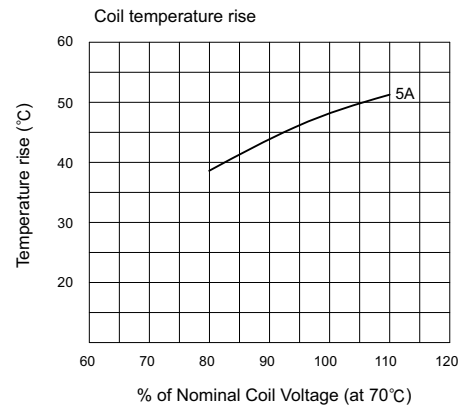
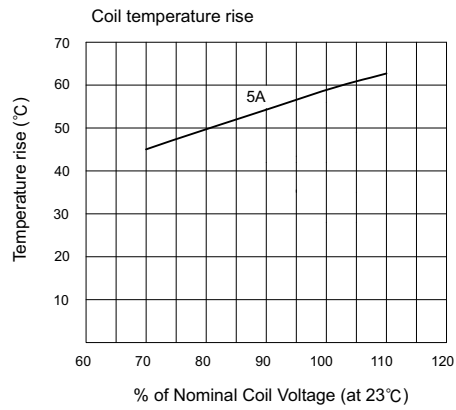
(6~48VAC)

### Diode



# SCLD/SCLB

## »» Engineering Data



# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Song Chuan:](#)

[SCLB-W-DPDT-C-12VDC](#) [SCLD-WB-4PDT-C-12VDC](#) [SCLDWB4PDTC120VAC](#) [SCLB-W-DPDT-C-24VDC](#) [SCLB-W-DPDT-C120VAC](#) [SCLDWB4PDTC24VDC](#) [SCLD-W-B-G-L-4PDT-C-120VAC](#)