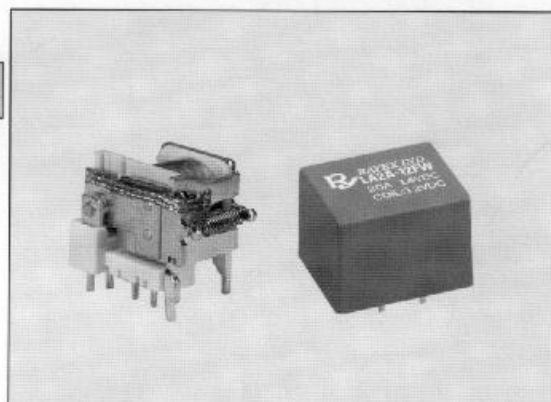


## FEATURES

- Open-frame and plastic sealed types
- European and USA footprints are available to meet international standards
- Using at automotive, control industrial , Domestic appliances, heavy loads, etc.



## ORDERING INFORMATION

**LA**      **12**   **F**      **W**  
 1      2      3      4      5      6

1. Type

2. Contact Arrangement

Nil: 1 Form C

1A: 1 Form A

1B: 1 Form B

2A: 1PDM

2B: 1PDB

3. Coil Nominal Voltage

4. Pin Position

F : USA footprint

E : European footprint

5. Coil Sensitivity

Nil : Standard Type (1.6W)

S : High Sensitive Type (1.2W)

6. Enclosure

Nil : Open Type

W : Sealed Type

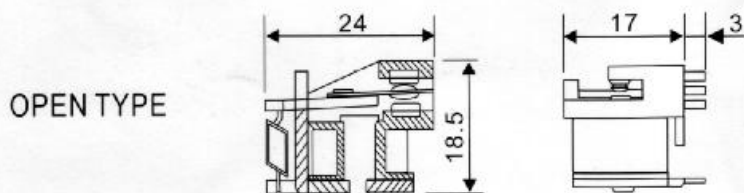
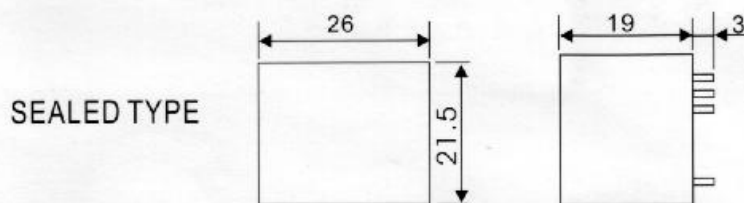
## CONTACT RATING

|      |                       |        |         |
|------|-----------------------|--------|---------|
| 1PDT | Resistive (Cos.θ = 1) | DC 12V | 40A/30A |
| 1PDM | Resistive (Cos.θ = 1) | DC 12V | 2 x 20A |

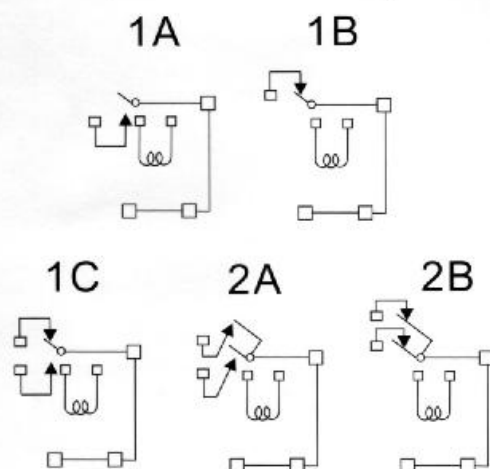
## COIL DATA(1.2W~1.6W, at 25°C)

| Coil Nominal Voltage (VDC) | Resistance Tol. ± 10% (Ohms) |      | Nominal Current (mA) |       | Maximum Pick Up Voltage (V) |      | Minimum Drop Out Voltage (V) |
|----------------------------|------------------------------|------|----------------------|-------|-----------------------------|------|------------------------------|
|                            | 1.6W                         | 1.2W | 1.6W                 | 1.2W  | 1.6W                        | 1.2W |                              |
| 6                          | 22.5                         | 30   | 266.7                | 200   | 4.2                         | 4.5  | 0.6                          |
| 9                          | 50.6                         | 67.5 | 177.9                | 133.3 | 6.3                         | 6.75 | 0.9                          |
| 12                         | 90                           | 120  | 133.3                | 100   | 8.4                         | 9.0  | 1.2                          |
| 24                         | 360                          | 480  | 66.7                 | 50    | 16.8                        | 18.0 | 2.4                          |

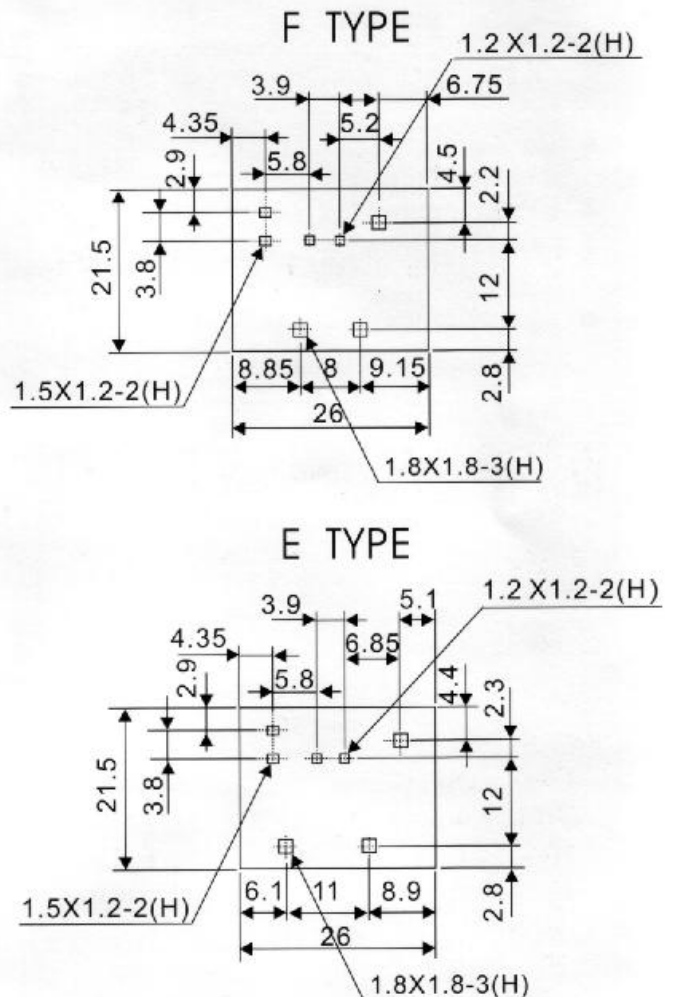
## DIMENSIONS(mm)



## WIRING DIAGRAM (BOTTOM VIEW)



## P.C.B LAYOUT (BOTTOM VIEW)



## GENERAL DATA

|                       |                                                         |
|-----------------------|---------------------------------------------------------|
| Insulation Resistance | 100 MΩ Min. (DC 500V)                                   |
| Dielectric Strength   | 500 VAC, 50/60Hz between contact.                       |
|                       | 1,000 VAC, 50/60Hz between all elements.                |
| Contact Material      | Silver- Cadmium Oxide as standard. <b>Ag Alloy</b>      |
| Contact Resistance    | 100 milliohms max. ( initial value )                    |
| Shock Resistance      | Malfunction: 10G(11ms) ; Destructive: 100G(6ms)         |
| Vibration Resistance  | Malfunction: 10 to 55 Hz. at Double Amplitude of 1.5 mm |
|                       | Destructive: 10 to 55 Hz. at Double Amplitude of 1.5 mm |
| Operation Time        | 10 ms max.                                              |
| Release Time          | 5 ms max.                                               |
| Temperature Range     | - 30°C ~ + 80°C                                         |
| Expected Life         | With operation rate 30/min.                             |
|                       | Mechanical - 10,000,000 operations min.                 |
|                       | Electrical - 100,000 operations min. at rated load.     |
| Weight                | 17 grams                                                |