

## FEATURES

- Miniature reed relay, cost-effective, switching solution
- Pin out 1357 & 1267
- Diode version are available for customer selection
- Washable type
- Using at security system, modem and other telecommunication products



UL FILE NO.: E126157  
CUL FILE NO.: E126157

## ORDERING INFORMATION

R1    —    D    1A    05    00  
 1                    2                    3                    4                    5

1. Type  
2. Diode  
    Nil : Standard Type  
    D : With Diode  
3. Contact Arrangement  
    1A : 1 Form A  
4. Coil Nominal Voltage
5. Terminals Type  
    00: Pin Out 1357  
    50: Pin Out 1267

## CONTACT RATING

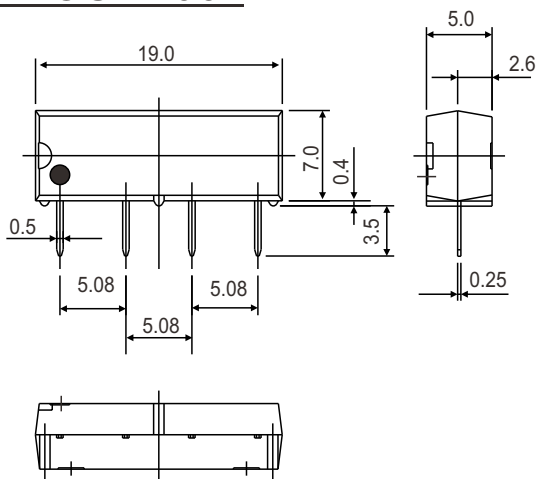
|                       |                |              |
|-----------------------|----------------|--------------|
| Resistive (Cos.θ = 1) | Switch Current | 0.5 ADC Max. |
|                       | Carry Current  | 1.0 ADC Max. |

## COIL DATA

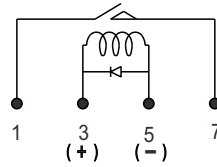
| Coil Nominal Voltage (VDC) | Maximum Operate Voltage(V) | Resistance Tol.±10% (Ohms) | Maximum Pick Up Voltage(V) | Minimum Drop Out Voltage (V) | Nominal Input Power (mW) |
|----------------------------|----------------------------|----------------------------|----------------------------|------------------------------|--------------------------|
| 5                          | 16                         | 500                        | 3.75                       | 0.8                          | 50                       |
| 12                         | 20                         | 1,000                      | 9.0                        | 1.0                          | 144                      |
| 24                         | 32                         | 2,150                      | 18.0                       | 2.0                          | 268                      |

## DIMENSIONS: ±0.2mm

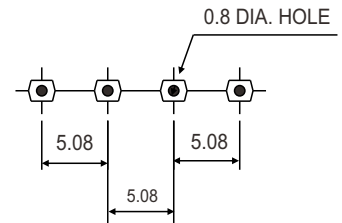
### PIN OUT 1357



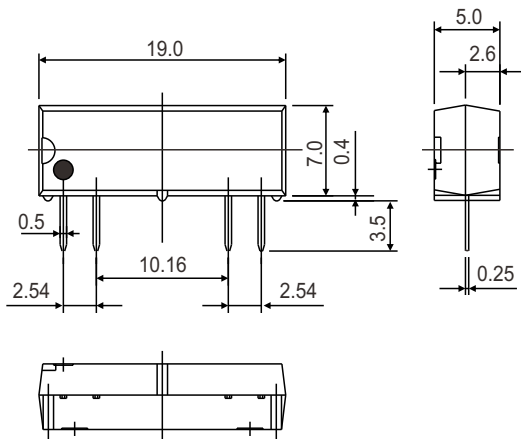
WIRING DIAGRAM  
(BOTTOM VIEW)



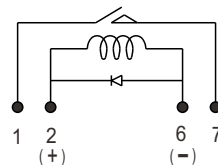
P.C.B LAYOUT  
(BOTTOM VIEW)



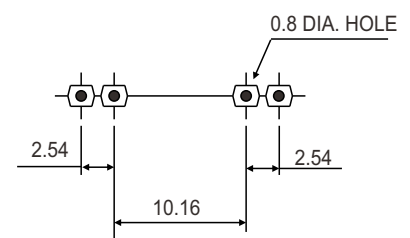
### PIN OUT 1267



WIRING DIAGRAM  
(BOTTOM VIEW)



P.C.B LAYOUT  
(BOTTOM VIEW)



## GENERAL DATA

|                       |   |
|-----------------------|---|
| Insulation Resistance | 1,000 MΩ Min. (DC 100V)   |
| Dielectric Strength   | 250 VDC between contact.  |
|                       | 1,400 VDC between all elements.   |
| Contact Material      | Silver- Cadmium Oxide as standard.  |
| Contact Resistance    | 150 milliohms max. ( initial value )  |
| Switching Current     | 1A, 2A, 1B : 0.5ADC Max., 1C : 0.2ADC Max.  |
| Carry Current         | 1A, 2A, 1B : 1.0ADC Max., 1C : 0.5ADC Max.  |
| Switching Power       | 1A, 2A, 1B : 10VA Max. 1C : 3VA Max.  |
| Operation Time        | 1 ms max.   |
| Release Time          | 0.5 ms max.   |
| Temperature Range     | - 40°C ~ + 85°C   |
| Expected Life         | With operation rate 30/min.<br>Mechanical - 10,000,000 operations min.<br>Electrical - 100,000 operations min. at rated load. |
| Weight                | 1.4 grams   |

## FEATURES

- DIP and SMD type
- Diode version are available for customer's selection
- UL approved
- Using at security system, modem and other telecommunication products



UL FILE NO.: E126157  
CUL FILE NO.: E126157

## ORDERING INFORMATION

R2 — D 1A 05  
1                      2                      3                      4

- |   |  |
|---|--|
| <p>1. Type<br/>R2 : DIP Type<br/>R3 : SMD Type</p> <p>2. Function<br/>Nil : Standard Type<br/>D : With Diode Type<br/>H : High Insulation</p> | <p>3. Contact Arrangement<br/>1A : 1 Form A(SPST-NO)<br/>1B : 1 Form B(SPSTNC)<br/>1C : 1 Form C(SPDT)<br/>2A : 2 Form A(2PST-NO)</p> <p>4. Coil Nominal Voltage</p> |
|---|--|

## COIL DATA

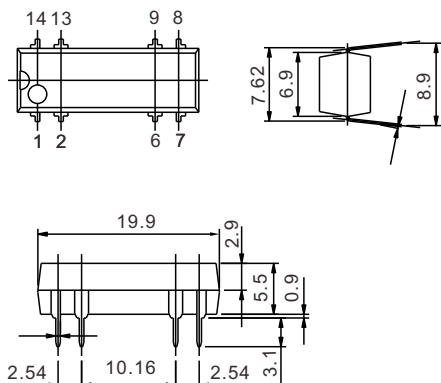
| Contact form | Nominal Voltage(VDC) | Max. Operate Voltage(VDC) | Pull-in Voltage(VDC) | Dropout Voltage(VDC) | Coil $\pm 10\%$ Resistance( $\Omega$ ) | Nominal input power(mW) |
|--------------|----------------------|---------------------------|----------------------|----------------------|--|-------------------------|
| 1A           | 5                    | 16                        | 3.75                 | 0.8                  | 500                                    | 50                      |
|              | 12                   | 20                        | 9.00                 | 1.0                  | 1000                                   | 144                     |
|              | 24                   | 32                        | 18.00                | 2.0                  | 2150                                   | 268                     |
| 2A           | 5                    | 11                        | 3.75                 | 0.8                  | 140                                    | 179                     |
|              | 12                   | 20                        | 9.00                 | 1.0                  | 500                                    | 288                     |
|              | 24                   | 32                        | 18.00                | 2.0                  | 2150                                   | 268                     |
| 1B           | 5                    | 6                         | 4.20                 | 0.6                  | 500                                    | 50                      |
|              | 12                   | 14.5                      | 9.00                 | 1.0                  | 1000                                   | 144                     |
|              | 24                   | 29                        | 18.00                | 2.0                  | 2150                                   | 268                     |
| 1C           | 5                    | 11                        | 3.75                 | 0.8                  | 200                                    | 125                     |
|              | 12                   | 20                        | 9.00                 | 1.0                  | 500                                    | 288                     |
|              | 24                   | 32                        | 18.00                | 2.0                  | 2150                                   | 268                     |

## CONTACT RATING

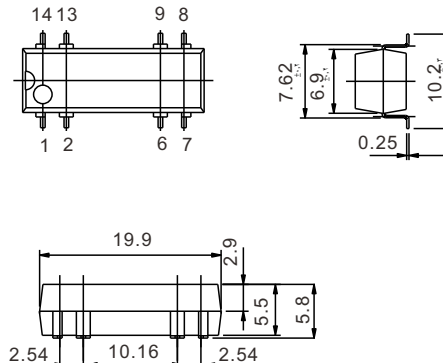
|                              |                |             |               |             |
|------------------------------|----------------|-------------|---------------|-------------|
| 1PST-NO / 1PST-NC<br>2PST-NO | Switch Current |             | 0.5ADC Max.   |             |
|                              | Carry Current  |             | 1.0ADC Max.   |             |
| 1PDT                         | Switch Current | 0.2ADC MAX. | Carry Current | 0.5ADC Max. |

## DIMENSIONS: ±0.2mm

### DIP TYPE

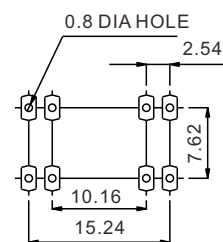


### SMD TYPE

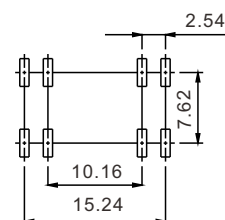


### P.C.B LAYOUT

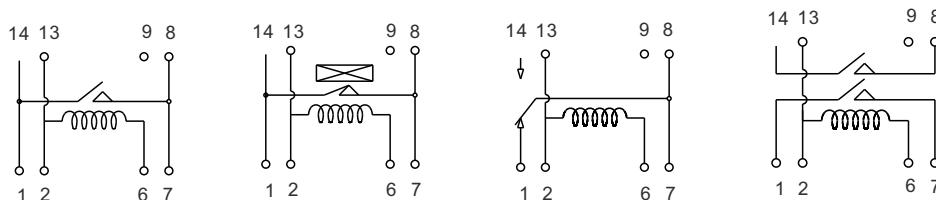
#### DIP TYPE



#### SMD TYPE



### WRING DIAGRAM



## GENERAL DATA

|                       |   |
|-----------------------|---|
| Insulation Resistance | 1,000 MΩ Min. (DC 100V)   |
| Dielectric Strength   | 250 VDC between contact.  |
|                       | 1,400 VDC between all elements.   |
| Contact Material      | Silver- Cadmium Oxide as standard.  |
| Contact Resistance    | 150 mΩ max. ( initial value )   |
| Switching Power       | 1A, 2A, 1B : 10VA Max., 1C : 3VA Max.   |
| Carry Current         | 1A, 2A, 1B : 1.0ADC Max., 1C : 0.5ADC Max.  |
| Switching Power       | 1A, 2A, 1B : 10VA Max. 1C : 3VA Max.  |
| Operation Time        | 1.0 ms max.   |
| Release Time          | 0.5 ms max.   |
| Temperature Range     | - 40°C ~ + 85°C   |
| Expected Life         | With operation rate 30/min.<br>Mechanical - 10,000,000 operations min.<br>Electrical - 100,000 operations min. at rated load. |
| Weight                | 1.4 grams   |

## FEATURES

- Breakdown Voltage Is DC.14KV
- PCB type,pcb+wire type
- Dimensions:70×19×20.5mm



## ORDERING INFORMATION

R4 — 1A 12 W  
 1                      2                      3                      4

- |                         |                   |
|-------------------------|-------------------|
| 1. Type                 | 4. Terminals Type |
| 2.. Contact Arrangement | Nil:PCB           |
| 1A : 1 Form A           | W :PCB+Wire       |
| 1B : 1 Form B           |                   |
| 3. Coil Nominal Voltage |                   |
| DC:12,24                |                   |

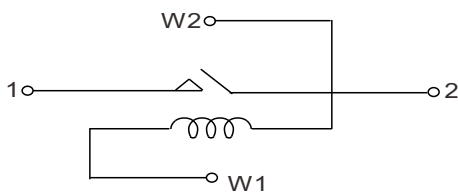
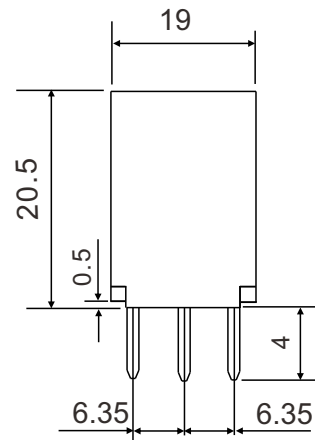
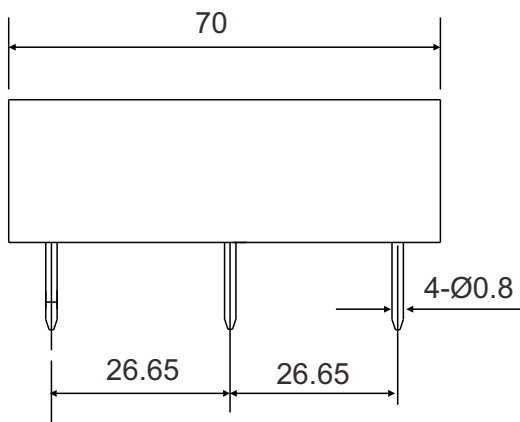
## CONTACT RATING

|                       |                |      |
|-----------------------|----------------|------|
| Resistive (Cos.θ = 1) | Switch Current | 2.0A |
|                       | Carry Current  | 3.0A |

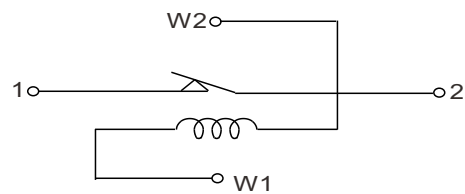
## COIL DATA

| Coil Nominal Voltage (VDC) | Maximum Operate Voltage(V) | Resistance Tol.±10% (Ohms) | Maximum Pick Up Voltage(V) | Minimum Drop Out Voltage (V) | Normal Current (mA) |
|----------------------------|----------------------------|----------------------------|----------------------------|------------------------------|---------------------|
| 12                         | 15.6                       | 200                        | 8.4                        | 1.2                          | 60.0                |
| 24                         | 31.2                       | 720                        | 16.8                       | 2.4                          | 33.3                |

## DIMENSIONS: ±0.2mm



Normal Open



Normal Close

## GENERAL DATA

|                           |  |
|---------------------------|--|
| Contact Resistance        | 150 MW Max. (Initial)                              |
| Breakdown Voltage         | Open Contacts DC. 14KV Min.                        |
|                           | Contacts to Coil DC. 15KV Min.                     |
| Insulation Resistance     | Open contacts $1 \times 10^9$ W Min. (DC 100V)     |
|                           | Contacts to coil $1 \times 10^9$ W Min. (DC 100V)  |
| Electromotive Capacitance | 2.0pF Max.   |
| Operation Time            | (Incl. bounce) 4.0ms Max. (at Normal Voltage)      |
| Release Time              | 2.0 ms Max. (at Normal Voltage)                    |
| Vibration                 | 20G (0~55Hz, 1.5mm)                                |
| Shock                     | 30G (11ms, 1/2 Sin Wave)                           |
| Operating Temperature     | - 20°C ~ + 70°C                                    |
| Storage Temperature       | - 35°C ~ + 90°C                                    |
| Expected Life             | Mechanical - 10,000,000 operations min.            |
|                           | Electrical - $1 \times 10^8$ Min Operations (R.L.) |