

**REED RELAY**

## EDR SERIES

**RL** US E155181(R)

SIP (PIN OUT:1357)



DIP



SMD



SIP (PIN OUT:1267)



HIGH INSULATION (DIP)



HIGH INSULATION (SMD)



## FEATURES

- Miniature, cost-effective switching solution.
- Molded construction for compatibility with automatic board processing.
- Completely washable.
- Dip type construction with the same terminal pitch as ICs or TTLs.
- The high sensitivity allows direct driving by TTL, etc.
- Magnetic shield cover is available.

## PART NUMBERING SYSTEM

EDR 1 0 1A 05 00 Z

|  |  |  |  |  |  |                         |
|--|--|--|--|--|--|-------------------------|
|  |  |  |  |  |  |                         |
|  |  |  |  |  |  | +--- Z:RoHS Compliance  |
|  |  |  |  |  |  | +--- SPECIAL CODE:00~99 |
|  |  |  |  |  |  | 00:PIN OUT 1357         |
|  |  |  |  |  |  | 50:PIN OUT 1267         |
|  |  |  |  |  |  | +--- NOMINAL VOLTAGE:   |
|  |  |  |  |  |  | 05:5VDC                 |
|  |  |  |  |  |  | 12:12VDC                |
|  |  |  |  |  |  | 24:24VDC                |
|  |  |  |  |  |  | +--- CONTACT FORM:      |
|  |  |  |  |  |  | 1A:OPEN TYPE, 1 FORM A  |
|  |  |  |  |  |  | +--- FUNCTION:          |
|  |  |  |  |  |  | 0:NORMAL FUNCTION       |
|  |  |  |  |  |  | D:WITH DIODE TYPE       |
|  |  |  |  |  |  | +--- TYPE:              |
|  |  |  |  |  |  | 1:SIP TYPE              |
|  |  |  |  |  |  | +--- MODEL NAME         |

EDR 2 0 1A 05 00 Z

|  |  |  |  |  |  |                                  |
|--|--|--|--|--|--|----------------------------------|
|  |  |  |  |  |  |                                  |
|  |  |  |  |  |  | +--- Z:RoHS Compliance           |
|  |  |  |  |  |  | +--- SPECIAL CODE:00~99          |
|  |  |  |  |  |  | +--- NOMINAL VOLTAGE:            |
|  |  |  |  |  |  | 05:5VDC                          |
|  |  |  |  |  |  | 12:12VDC                         |
|  |  |  |  |  |  | 24:24VDC                         |
|  |  |  |  |  |  | +--- CONTACT FORM:               |
|  |  |  |  |  |  | 1A:OPEN TYPE, 1 FORM A           |
|  |  |  |  |  |  | 2A:OPEN TYPE, 2 FORM A           |
|  |  |  |  |  |  | 1B:CLOSE TYPE, 1 FORM B          |
|  |  |  |  |  |  | 1C:1 OPEN 1 CLOSE TYPE, 1 FORM C |
|  |  |  |  |  |  | +--- FUNCTION:                   |
|  |  |  |  |  |  | 0:NORMAL FUNCTION                |
|  |  |  |  |  |  | D:WITH DIODE TYPE                |
|  |  |  |  |  |  | H:HIGHS INSULATION               |
|  |  |  |  |  |  | +--- TYPE:                       |
|  |  |  |  |  |  | 2:DIP TYPE                       |
|  |  |  |  |  |  | 3:SMD TYPE                       |
|  |  |  |  |  |  | +--- MODEL NAME                  |

## SPECIFICATIONS

### ● COIL RATING

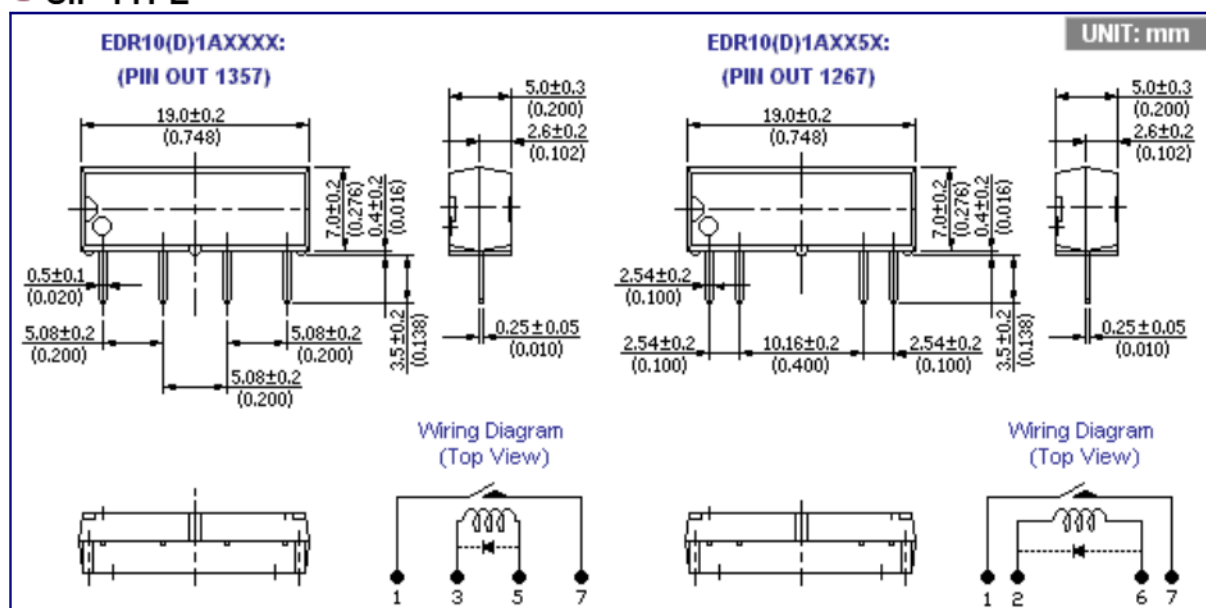
| Contact form                              | Nominal Voltage (VDC) | Max. Operate Voltage (VDC) | Pull-in Voltage (VDC) | Dropout Voltage (VDC) | ※Coil Resistance( $\Omega$ ) | Nominal input power(mW) |
|-------------------------------------------|-----------------------|----------------------------|-----------------------|-----------------------|--------------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

### ● CONTACT RATING

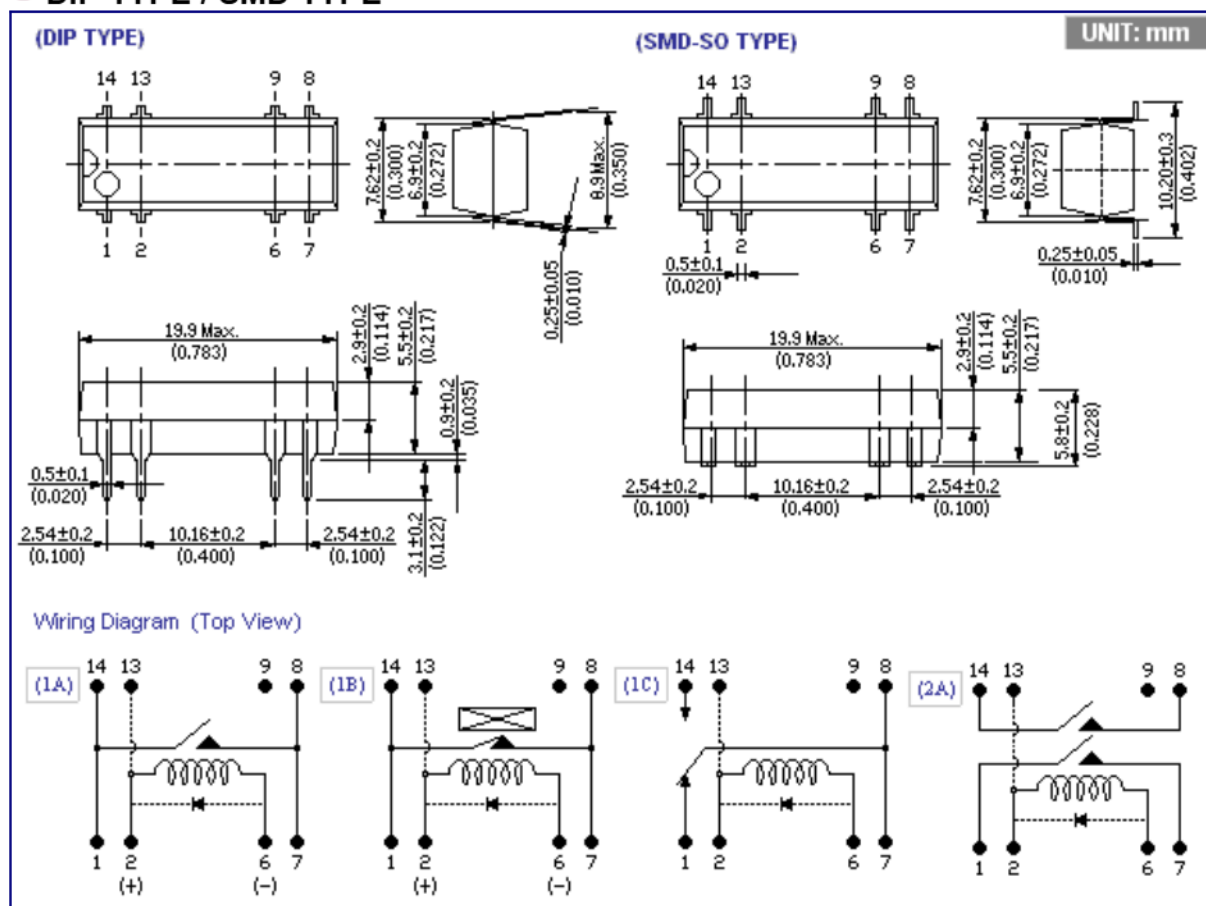
| Contact form                            |                 | 1A                                                               | 2A                                    | 1B                                    | 1C                                  |
|-----------------------------------------|-----------------|------------------------------------------------------------------|---------------------------------------|---------------------------------------|-------------------------------------|
| Switching current                       |                 | 0.5 ADC Max.                                                     | 0.5 ADC Max.                          | 0.5 ADC Max.                          | 0.2 ADC Max.                        |
| Carry current                           |                 | 1.0 ADC Max.                                                     | 1.0 ADC Max.                          | 1.0 ADC Max.                          | 0.5 ADC Max.                        |
| Switching power                         |                 | 10 VA Max.                                                       | 10 VA Max.                            | 10 VA Max.                            | 3 VA Max.                           |
| Electrical life                         |                 | 1x10 <sup>8</sup><br>(Ref 10VDC,10mA)                            | 1x10 <sup>8</sup><br>(Ref 10VDC,10mA) | 1x10 <sup>8</sup><br>(Ref 10VDC,10mA) | 5x10 <sup>7</sup><br>(Ref 5VDC,1mA) |
| Contact resistance                      |                 | 150m $\Omega$ Max.                                               | 150m $\Omega$ Max.                    | 150m $\Omega$ Max.                    | 150m $\Omega$ Max.                  |
| Operate time<br>(including bounce time) |                 | 1.0ms Max.                                                       | 1.0ms Max.                            | 1.0ms Max.                            | 1.5ms Max.                          |
| Release time                            |                 | 0.5ms Max.                                                       | 0.5ms Max.                            | 0.5ms Max.                            | 2.0ms Max.                          |
| Maximum voltage                         |                 | 100 VDC Max.                                                     | 100 VDC Max.                          | 100 VDC Max.                          | 30 VDC Max.                         |
| Insulation resistance<br>(at 100 VDC)   |                 | 10 <sup>10</sup> $\Omega$ Min.                                   | 10 <sup>10</sup> $\Omega$ Min.        | 10 <sup>10</sup> $\Omega$ Min.        | 10 <sup>9</sup> $\Omega$ Min.       |
| Dielectric strength                     | Coil to contact | 1400 VDC Min.<br>(General)<br>4000 VDC Min.<br>(High insulation) | 1400 VDC Min.                         | 1400 VDC Min.                         | 1400 VDC Min.                       |
|                                         | Across contacts | 250 VDC Min.                                                     | 250 VDC Min.                          | 250 VDC Min.                          | 150 VDC Min.                        |
| Temperature range                       |                 |                                                                  |                                       |                                       |                                     |
| Operating temperature                   |                 | -40°C ~ +85°C                                                    | -40°C ~ +85°C                         | -40°C ~ +85°C                         | -40°C ~ +85°C                       |
| Storage temperature                     |                 | -55°C ~ +125°C                                                   | -55°C ~ +125°C                        | -55°C ~ +125°C                        | -55°C ~ +125°C                      |
| Shock resistance                        |                 | 30G Min.                                                         | 30G Min.                              | 30G Min.                              | 30G Min.                            |

## DIMENSIONS

### ● SIP TYPE

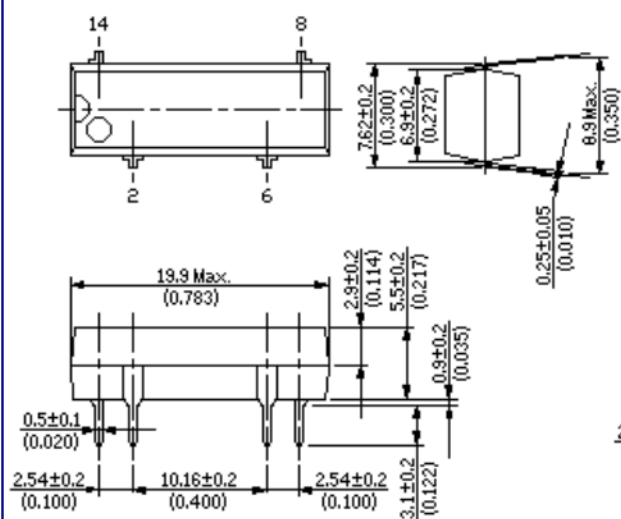


### ● DIP TYPE / SMD TYPE

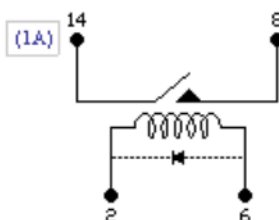


# HIGH INSULATION TYPE

(DIP TYPE)

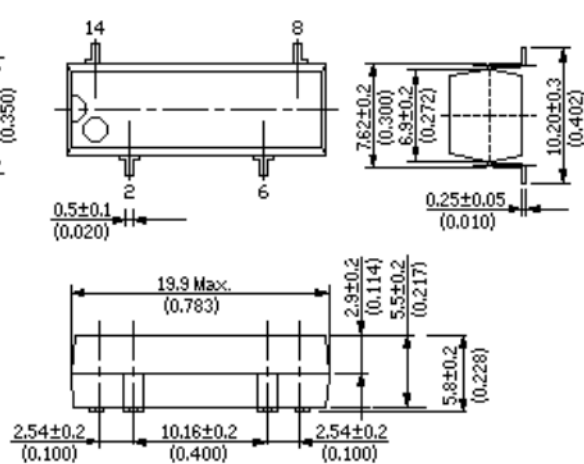


Wiring Diagram (Top View)



(SMD-SO TYPE)

UNIT: mm



Wiring Diagram (Top View)

