

# Small Stand Type (1a Mercury Relay)

## ■ Part number・Feature

### ● MWG-10\*

Coil Voltage

● Stand type for small mounting space

## ■ Performance

| Specifications            | Item                        | Standard                                                            |
|---------------------------|-----------------------------|---------------------------------------------------------------------|
| Contact Specifications    | Contact Form                | 1a (make mercury)                                                   |
|                           | Contact Rating              | 50W                                                                 |
|                           | Max. Switching Voltage      | DC. 500V                                                            |
|                           | Max. Switching Current      | 1 A                                                                 |
|                           | Max. Carry Current          | 2 A                                                                 |
|                           | Contact Resistance          | 100 mΩ MAX (Initial)                                                |
| Electrical Specifications | Breakdown Voltage           | Open Contacts DC. 1000V (1 min)<br>Contact to Coil DC. 500V (1 min) |
|                           | Insulation Resistance       | Between all isolated pins $1 \times 10^{10} \Omega$ MIN (DC. 100V)  |
|                           | Capacitance                 | Open Contacts 1.8pF TYP.                                            |
|                           | Thermal Electromotive Force | 60 $\mu$ V TYP.                                                     |
|                           | Operate Time                | (1 Pulse) 2.5 mS MAX. (at Nominal Voltage)                          |
|                           | Release Time                | (1 Pulse) 2.0 mS MAX. (at Nominal Voltage)                          |
| Mechanical Specifications | Vibration                   | 20G (0 to 55Hz 1.5mm)                                               |
|                           | Shock                       | 30G (11mS 1/2 Sin Wave)                                             |
| Environment               | Operating Temperature       | -10°C to +60°C                                                      |
| Life Expectancy           | Mechanical                  | 1X10 <sup>9</sup> MIN. Operations                                   |
|                           | Electrical                  | DC. 10mV-10 $\mu$ A 1X10 <sup>9</sup> MIN. Operations (R.L.)        |

## ■ Coil Specifications

| Contact Form | Part Number | Nominal Voltage<br>DC. $\pm 10\%$ (V) | Coil Resistance<br>$\pm 10\%$ ( $\Omega$ ) at 20°C | Nominal Current<br>(mA) | Must Operate<br>Voltage<br>MAX. (V) at 20°C |
|--------------|-------------|---------------------------------------|----------------------------------------------------|-------------------------|---------------------------------------------|
| 1a           | MWG-101     | 24                                    | 1600                                               | 15.0                    | 16.8                                        |
|              | MWG-102     | 12                                    | 400                                                | 30.0                    | 9.0                                         |
|              | MWG-104     | 5                                     | 100                                                | 50.0                    | 3.8                                         |

## ■ Dimensions /Terminal Identification (Unit:mm)

| Dimensions                                                                                                                                                                                                                                                                                                                                                                     | Terminal Identification                                                                                                                     |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| <p>mounted height 25mm</p> <p>8.0<sup>+0.5</sup><sub>-0</sub></p> <p>21.5<math>\pm</math>1</p> <p>10<math>\pm</math>3</p> <p>2.5<math>\pm</math>0.3</p> <p>2.5<math>\pm</math>0.3</p> <p>3-0.5 <math>\phi</math></p> <p>1-0.6 <math>\phi</math></p> <p>2.5<math>\pm</math>0.3</p> <p>2.5<math>\pm</math>0.3</p> <p>weight about 4.1gr.</p> <p>2 1 W1 W2</p> <p>BOTTOM VIEW</p> | <p>W1 2 1 W2</p> <p>UP</p> <p>Note: Mount a relay to be UP indication arrow within <math>\pm 30^\circ\text{C}</math> from a plumb line.</p> |