

MRB(45° Step)

Super-Miniature Rotary Switches

Washable



RoHS Compliant



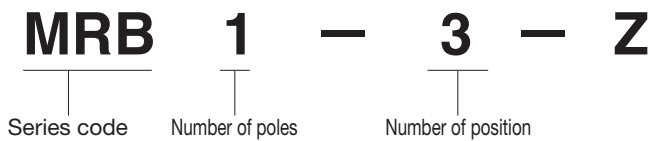
■ Features

1. High contact reliability assured (Twin contact type)
2. Selection of various circuits is flexible.
3. Fully-sealed structure protects the contacts from environmental contamination.
4. Immersion cleaning is possible.
5. Best suited for use in dry circuit since the contacts and terminals are gold-plated.

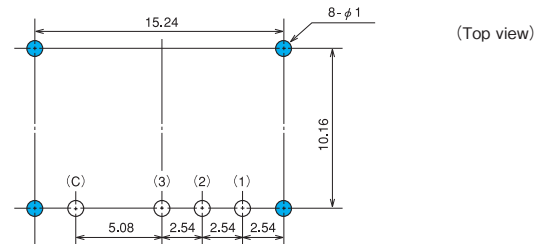
■ Specifications

| | |
|-----------------------------|----------------------------|
| Rating | 0.4VA max. (12VDC max.) |
| Initial contact resistance | 200mΩ max. (1,5mA 200μVAC) |
| Dielectric strength | 250VAC 1 minute |
| Insulation resistance | 100MΩ min. (100VDC) |
| Electrical life | 10,000 cycles |
| Operating force | 1.96~5.88N·cm |
| Operating temperature range | -20~+70°C |
| Storage temperature range | -40~+85°C |

■ Part Numbering

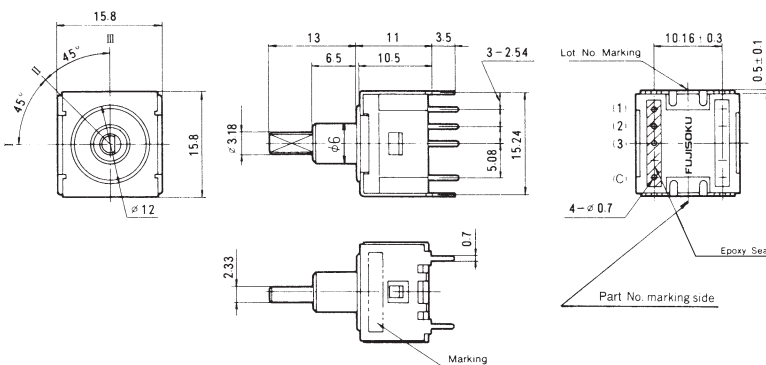


■ PC Hole Layouts



MRB series

★MRB1-3-Z 1-pole 3-position



Terminal numbers are not shown on the switch.

| Switching function | | | Circuit diagram |
|---------------------|-------------|--------------|-----------------|
| Circuit arrangement | | | |
| Position I | Position II | Position III | |
| ON | ON | ON | |
| C-1 | C-2 | C-3 | |

The shaft fully rotates 360 degrees. In the shaft positions other than I, II and III, the contacts is in the OFF state.

Optional Accessories

《Sold separately》

| Part Name | | Knob | | | |
|---------------|----------------|--------------|--------------|--------------|--------------|
| | | FB | | FN | |
| Dimensions | | | | | |
| Part No. | | 140000050598 | 140000051012 | 140000050956 | 140000050601 |
| Color | Body | Silver | Black | Silver | Black |
| | Indicator Line | Black | White | Black | White |
| Body Material | | Aluminium | | Aluminium | |

● For the hexagon wrench for **FB/FN** types, choose the M4 wrench (2 mm) available on the market.

Handling Precautions

1. Soldering Specifications

(1) Manual Soldering

Device : Soldering iron
360°C, Max.; 3 seconds, Max.

(2) Auto Soldering

Device: Jet wave type or dip type
275°C, Max.; 6 seconds, Max.

• Pre-heating should be done at temperatures from 80 to 120°C and within 120 seconds

(3) When soldering two or more terminals to the common land, use the solder resist to solder them independently.

2. Flux Cleaning

(1) For the solvent, use the fluorine-based or alcohol-based solvent.

Solvent: Fluorine or Alcohol type

(2) Do not use the ultrasonic cleaning system.

3. Mounting of Switch

(1) Use the PC boards of ϕ 1 holes.

(2) Do not bend the terminals before mounting the switch on the PC board.

(3) After mounting the switch, do not place the device in such a way that the device weight will be applied on the knob, etc. of the switch.

(4) Do not apply a load exceeding 29.4 N (3 kgf) to the knob.