

MRP

Pulse Switches



RoHS Compliant



Features

1. Miniature size of 10 mm square.
2. Gold-plated contacts for high contact reliability.
3. Easy mounting on PC board in a single-touch operation is ensured. Compatible with auto soldering.

Specifications

Rating	10mA 5VDC
Dielectric strength	250VAC 1 minute
Insulation resistance	100MΩ min. (250VDC)
Electrical life	10,000 cycles
Operating force	0.098~0.98N·cm
Operating temperature range	-20~+70°C
Storage temperature range	-40~+85°C

Part Numbering



Fig.	Mounting
None	Bracket mounting
1	Nut mounting
R	Right angle

Standard Accessories (for MRP 1-20-1 only)

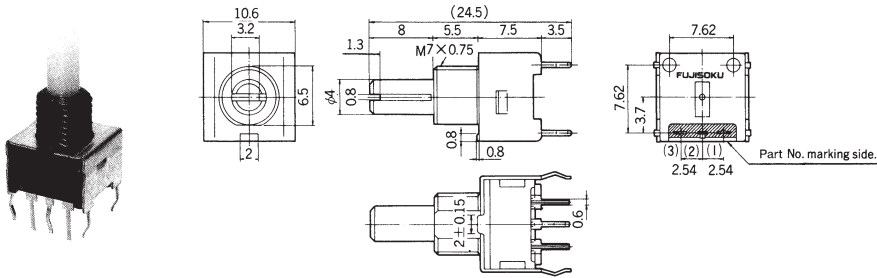
〈Supplied with switch〉

Part Name	Nut	Washer
Part Number	140008010193	140008150123
Dimensions	<p>Nickel Plated</p>	<p>Zinc plated</p>

● We accept orders for custom-made knobs for MRP. Please contact us.

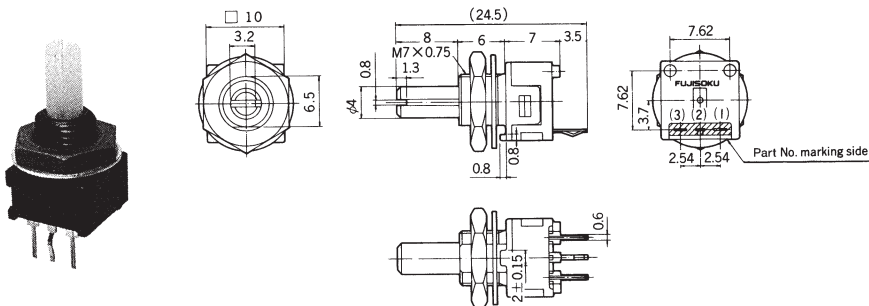
MRP

★MRP1-20-Z (Bracket mounting)



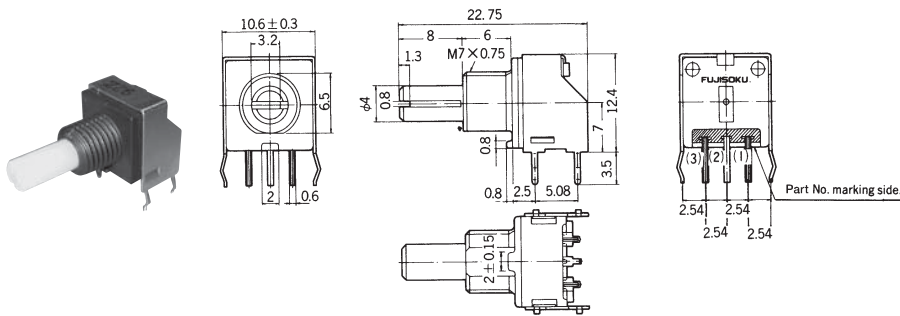
Terminal numbers are not shown on the switch.

★MRP1-20-1-Z (Nut mounting)



Terminal numbers are not shown on the switch.

★MRP1-20-R-Z (Right-angle)



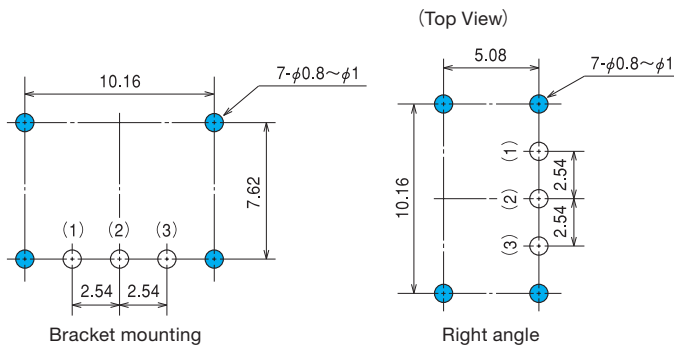
Terminal numbers are not shown on the switch.

MRP

■ Circuit Characteristics

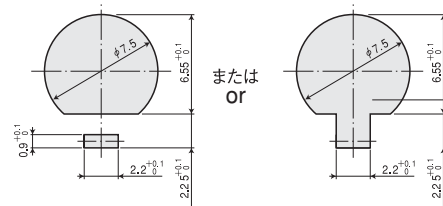
Operating direction	Connecting terminal	Step angle						
		0	18°	36°	324°	342°	360°	
Clockwise	2-1	ON	[Pulse waveform]					
		OFF	[Pulse waveform]					
Counterclockwise	2-3	ON	[Pulse waveform]					
		OFF	[Pulse waveform]					
360° Endless : 20±2 pulses								

■ PC Hole Layouts



■ Panel Cut-Out Dimensions

Panel thickness : 2 mm max.



■ Handling Precautions (MRP & DRS series)

1. Soldering Specifications

(1) Manual Soldering

Device : Soldering iron
270°C, Max.; 3 seconds, Max.

(2) Auto Soldering

Device: Jet wave type or dip type
260±5°C; 5 seconds, Max.

• Pre-heating should be done at temperatures of 100°C or below and within 30 sec.

(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) Since the **MRP** Series products are not waterproof-structured, if the PC board is to be cleaned, clean the soldering surface of substrate with a brush so that the switch is not exposed to the cleaning solution.

3. Mounting of Switch

- (1) Do not apply a load exceeding 29.4 N · cm to the fixing screws.
- (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 16.7 N to the knob.