



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	

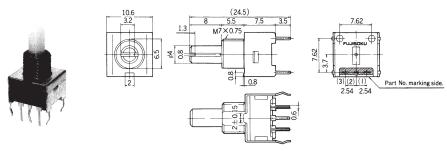
■Standard Accessories (for MRP 1-20-1 only) -

《Supplied with switch》

		W1-1-1			
Part Name	Nut	Washer			
Part Number	140008010193	140008150123			
Dimensions	Nickel Plated	Zinc plated			

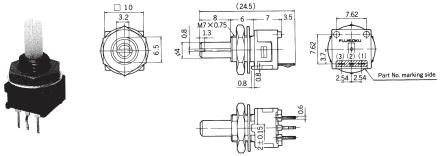
•We accept orders for custom-made knobs for MRP. Please contact us.

★MRP1-20-Z (Bracket mounting)



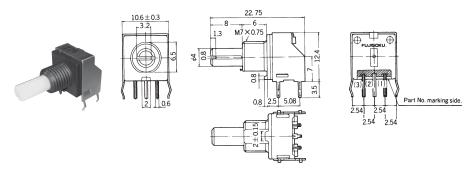
Terminal numbers are not shown on the switch.

★MRP1-20-1-Z (Nut mounting)



Terminal numbers are not shown on the switch.

★MRP1-20-R-Z (Right-angle)

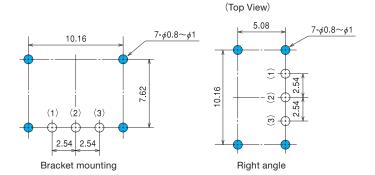


Terminal numbers are not shown on the switch.

■Circuit Characteristics

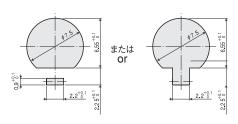
Operating direction	Connecting terminal	Step angle 0 18° 36° 324° 342° 360°					360°	
Clockwise	2-1	ON OFF					Ш	
Counterclockwise	2-3	ON OFF					Ш	
360° Endless : 20±2 pulses								

■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 $260\pm5^{\circ}\text{C}$; 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

- For the solvent, use the fluorine-based or alcohol-based solvent.
 Solvent: Fluorine or Alcohol type
- (2) Since the MRP Series products are not waterproofstructured, 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.