

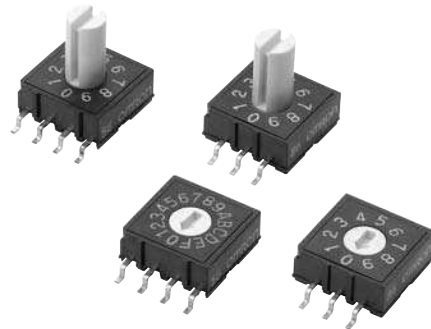
Rotary DIP Switch

A6RS

Surface-mounting Rotary DIP Switches

- Improved solder heat resistance (reflow peak solder temperature: 260 °C).
- Flat/Extended-actuator models available.
- Two different terminal arrangements allow the flexibility.

RoHS Compliant



List of Models

Type (actuator color)			Top-actuated, flat (white)		Top-actuated, extended actuator (white)				
			Tube packaging	Embossed taping	Tube packaging	Embossed taping			
Number of positions	Terminal arrangement	Output code	Quantity per tube	Quantity per reel	Quantity per tube	Quantity per reel			
10	4 × 1	BCD Decimal	48	750	48	250			
	3 × 3						A6RS-101RF	A6RS-101RF-P	A6RS-101RS
	4 × 1	A6RS-102RF					A6RS-102RF-P	A6RS-102RS	A6RS-102RS-P
	3 × 3	A6RS-161RF					A6RS-161RF-P	A6RS-161RS	A6RS-161RS-P
16	4 × 1	BCD Hexadecimal							
	3 × 3		A6RS-162RF	A6RS-162RF-P	A6RS-162RS	A6RS-162RS-P			

Note: Order in multiples of the package quantity.

Ratings/Characteristics

Rating (resistive load)	25 mA at 24 VDC 10 µA (minimum current) at 3.5 VDC
Ambient operating temperature	−25 to +80°C at 60% max. (with no icing or condensation)
Ambient operating humidity	35% to 95% (at +5 to +35°C)
Insulation resistance	100 MΩ min. (at 250 VDC with insulation tester)
Contact resistance (initial value)	200 mΩ max.
Dielectric strength	Between terminals 250 VAC for 1 min
Vibration resistance	Malfunction 10 to 55 Hz, 1.5-mm double amplitude
Shock resistance	Malfunction 300 m/s ² min.
Durability	Electrical 5,000 steps min.
Washing	Not possible
Degree of protection	IEC IP60
Operating torque	1.96 × 10 ^{−2} N·m {2 gf·m} max.
Weight	Top-actuated: Approx. 0.6 g (Add 0.13 g for the extended-actuator type of each model.)

Output Codes

10-position Models

Position	BCD Decimal code			
	1	2	4	8
0				
1	●			
2		●		
3	●	●		
4			●	
5	●		●	
6		●	●	
7	●	●	●	
8				●
9	●			●

16-position Models

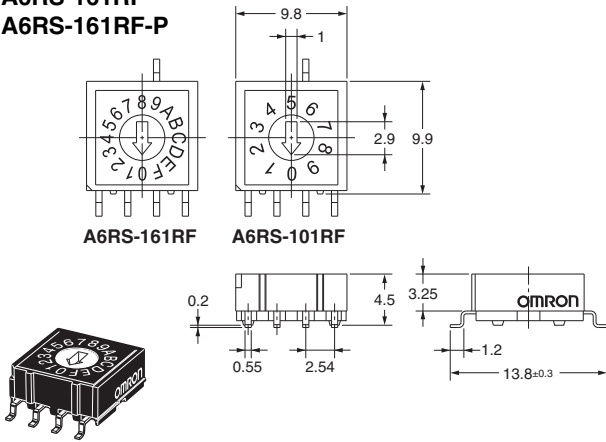
Position	BCD Hexadecimal code			
	1	2	4	8
0				
1	●			
2		●		
3	●	●		
4			●	
5	●		●	
6		●	●	
7	●	●	●	
8				●
9	●			●
A		●		●
B	●	●		●
C			●	●
D	●		●	●
E		●	●	●
F	●	●	●	●

Note: "●" indicates that the internal switch is ON.

■Dimensions (Unit: mm)

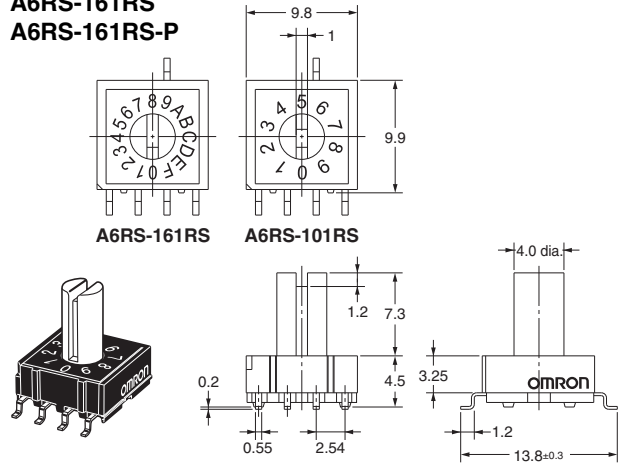
● **Top-actuated Flat Models with 4×1 Terminal Arrangement**

- A6RS-101RF
- A6RS-101RF-P
- A6RS-161RF
- A6RS-161RF-P



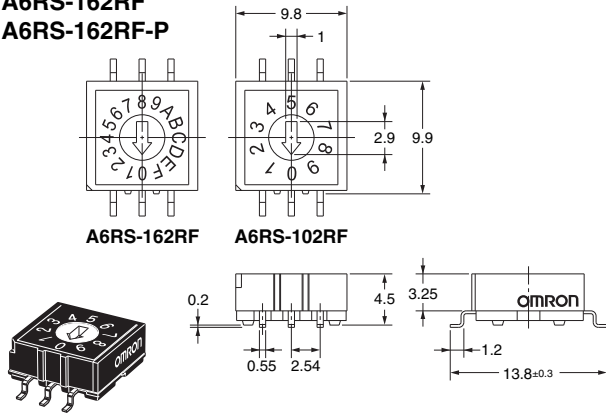
● **Top-actuated Extended-actuator Models with 4×1 Terminal Arrangement**

- A6RS-101RS
- A6RS-101RS-P
- A6RS-161RS
- A6RS-161RS-P



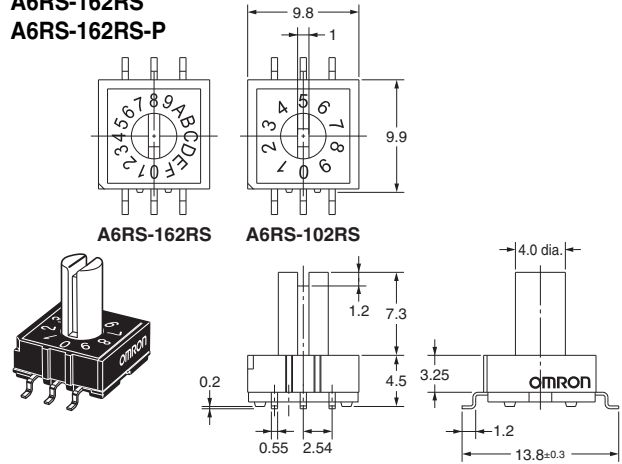
● **Top-actuated Flat Models with 3×3 Terminal Arrangement**

- A6RS-102RF
- A6RS-102RF-P
- A6RS-162RF
- A6RS-162RF-P



● **Top-actuated Extended-actuator Models with 3×3 Terminal Arrangement**

- A6RS-102RS
- A6RS-102RS-P
- A6RS-162RS
- A6RS-162RS-P

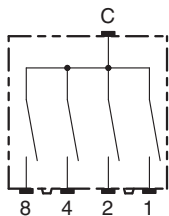


Note: Unless otherwise specified, a tolerance of ±0.4 mm applies to all dimensions.

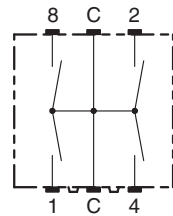
■Internal Connections

Contact Form (Top View)

4×1 Terminal Arrangement

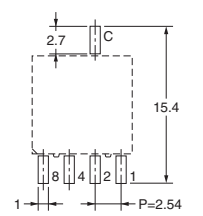


3×3 Terminal Arrangement



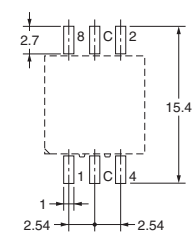
■PCB Dimensions (Top View)

4×1 Terminal Arrangement



P: Pole numbers

3×3 Terminal Arrangement



■Precautions

Be sure to read the Safety precautions common to all DIP Switches for correct use.

- Application examples provided in this document are for reference only. In actual applications, confirm equipment functions and safety before using the product.
- Consult your OMRON representative before using the product under conditions which are not described in the manual or applying the product to nuclear control systems, railroad systems, aviation systems, vehicles, combustion systems, medical equipment, amusement machines, safety equipment, and other systems or equipment that may have a serious influence on lives and property if used improperly. Make sure that the ratings and performance characteristics of the product provide a margin of safety for the system or equipment, and be sure to provide the system or equipment with double safety mechanisms.

Note: Do not use this document to operate the Unit.

OMRON Corporation
Electronic and Mechanical Components Company

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