

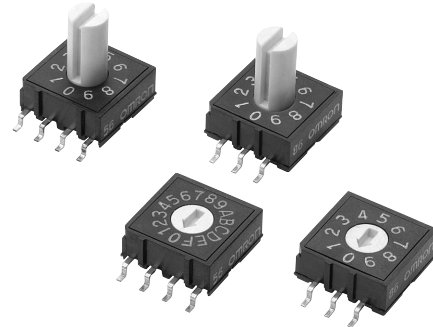
Rotary DIP Switch

A6RS


Surface Mounting Rotary DIP Switches


- Flat/Extended-actuator models are available.
- Terminal arrangement of 4×1 and 3×3 allow high flexibility in the PCB design
- Embossed 100 pcs reel type is recommended for flexible demand.

RoHS Compliant



List of Models

Type			Top-actuated, Flat					
								
			Quantity per tube	Tube packaging	Embossed taping			
Quantity per reel	Quantity per reel	Quantity per reel			100 pcs reel			
Number of positions	Terminal arrangement	Output code	48	A6RS-101RF	750	A6RS-101RF-P	100	A6RS-101RF-R100
				A6RS-102RF		A6RS-102RF-P		A6RS-102RF-R100
16	4 × 1	BCD Hexadecimal		A6RS-161RF		A6RS-161RF-P		A6RS-161RF-R100
	3 × 3			A6RS-162RF		A6RS-162RF-P		A6RS-162RF-R100

Type			Top-actuated, Extended-actuator					
								
			Quantity per tube	Tube packaging	Embossed taping			
Quantity per reel	Embossed taping	Quantity per reel			100 pcs reel			
Number of positions	Terminal arrangement	Output code	48	A6RS-101RS	250	A6RS-101RS-P	100	A6RS-101RS-R100
				A6RS-102RS		A6RS-102RS-P		A6RS-102RS-R100
16	4 × 1	BCD Hexadecimal		A6RS-161RS		A6RS-161RS-P		A6RS-161RS-R100
	3 × 3			A6RS-162RS		A6RS-162RS-P		A6RS-162RS-R100

Note: Order in multiples of the package quantity.

■ Ratings/Characteristics

Rating (resistive load)		25 mA at 24 VDC 10 μ A (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 M Ω min. (at 250 VDC with insulation tester)
Contact resistance (initial value)		200 m Ω 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		Flat: Approx. 0.6 g Extended-actuator: Approx. 0.73 g

■ Output Codes

10-position Models

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

16-position Models

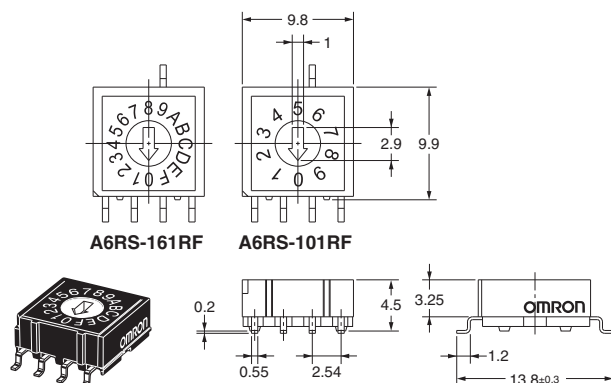
Code Position	BCD Hexadecimal code			
	1	2	4	8
0				
1	●			
2		●		
3	●	●		
4			●	
5	●		●	
6		●	●	
7	●	●	●	
8				●
9	●			●
A		●		●
B	●	●		●
C			●	●
D	●		●	●
E		●	●	●
F	●	●	●	●

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

■Dimensions (Unit: mm)

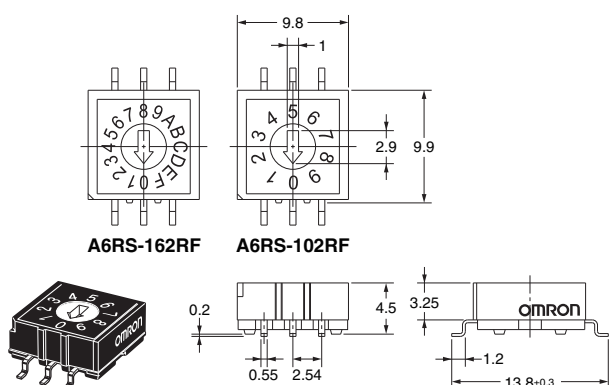
● Top-actuated Flat Models with 4 × 1 Terminal Arrangement

A6RS-101RF
A6RS-101RF-P
A6RS-101RF-R100
A6RS-161RF
A6RS-161RF-P
A6RS-161RF-R100



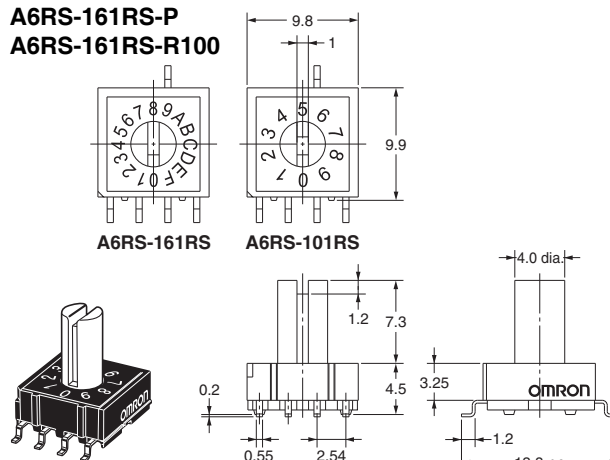
● Top-actuated Flat Models with 3 × 3 Terminal Arrangement

A6RS-102RF
A6RS-102RF-P
A6RS-102RF-R100
A6RS-162RF
A6RS-162RF-P
A6RS-162RF-R100



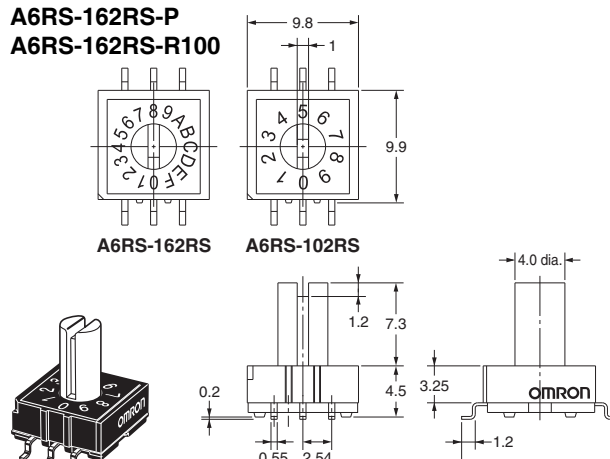
● Top-actuated Extended-actuator Models with 4 × 1 Terminal Arrangement

A6RS-101RS
A6RS-101RS-P
A6RS-101RS-R100
A6RS-161RS
A6RS-161RS-P
A6RS-161RS-R100



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

A6RS-102RS
A6RS-102RS-P
A6RS-102RS-R100
A6RS-162RS
A6RS-162RS-P
A6RS-162RS-R100

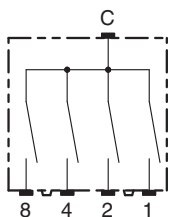


Note: Unless otherwise specified, a tolerance of ± 0.4 mm applies to all dimensions.

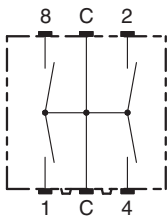
■Internal Connections

Contact Form (Top View)

4 × 1 Terminal Arrangement



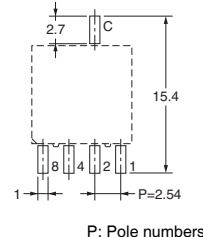
3 × 3 Terminal Arrangement



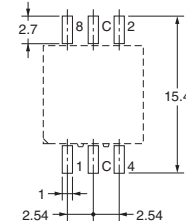
■PCB Dimensions (Reference) (Unit: mm)

(Top View)

4 × 1 Terminal Arrangement



3 × 3 Terminal Arrangement



P: Pole numbers

■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.

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Electronic and Mechanical Components Company

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