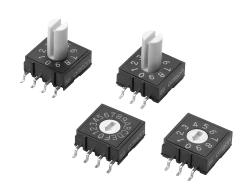
# **Surface-mounting Rotary DIP**

### **Surface-mounting Rotary DIP Switches**

- Temperature-resistant resin allows use in peak reflow temperatures of 260°C.
- Series includes flat and extended-shaft models.
- Two different types of terminal arrangement are available to allow flexibility in the circuit design.
- RoHS Compliant.



## **Ordering Information**

			Top-actuated, flat				Top-actuated, extended shaft				
			Tube pack	aging	Embossed tape packaging		Tube packaging		Embossed tape packaging		
Output code	Number of positions	Terminal arrangement		Quantity per tube		Quantity per reel		Quantity per tube		Quantity per reel	
BCD	10	4 × 1	A6RS-101RF	48	A6RS-101RF-P	750	A6RS-101RS	48	A6RS-101RS-P	- 250	
1-2-4-8		3 × 3	A6RS-102RF		A6RS-102RF-P		A6RS-102RS		A6RS-102RS-P		
BCD Hexadecimal	16	4 × 1	A6RS-161RF	40	A6RS-161RF-P		A6RS-161RS		A6RS-161RS-P		
1-2-4-8		3 × 3	A6RS-162RF		A6RS-162RF-P		A6RS-162RS		A6RS-162RS-P		

Note: Order in multiples of the quantities given for each package (tube: 48, embossed taping: 250 or 750).

## **Specifications**

## **■** Ratings/Characteristics

Switching Capacity	25 mA at 24 VDC			
Min. Permissible Load	10 μA at 3.5 VDC			
Contact resistance	200 m $Ω$ max.			
Insulation resistance	100 M $\Omega$ min. (at 250 VDC)			
Dielectric strength	250 VAC for 1 minute between terminals			
Operating torque	200 g-cm max. (1.96 x 10 <sup>-2</sup> N⋅m max.)			
Vibration resistance	Malfunction: 10 to 55 Hz, 1.5-mm double amplitude			
Shock resistance	Malfunction: 300 m/s <sup>2</sup> (30G) min.			
Ambient operating temperature	-25 to 80°C at 60% RH max. (with no icing or condensation)			
Ambient operating humidity	35% to 95% (at 5 to 35°C)			
Electrical service life	5,000 steps min.			
Weight (See note 2)	Top-actuated: Approx. 0.6 g			

- Note: 1. Data shown are of initial value.
  - 2. Add 0.13 g for the extended-shaft version of each model
  - 3. Switches cannot be water washed

## **■** Output Codes

### 10-position Models

10-position woders							
Туре	BCD 1-2-4-8						
Terminal No. Position	1	2	4	8			
0							
1	•						
2		•					
3	•	•					
4			•				
5	•		•				
6		•	•				
7	•	•	•				
8				•			
9	•			•			

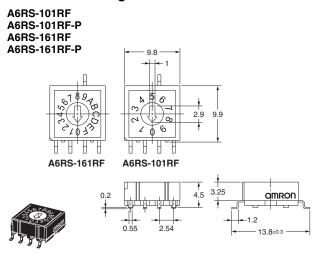
Note: "O" indicates that the internal switch is ON.

16-position Models						
Туре	BCI	)/hex 1-2-	cadecima 2-4-8			
Terminal No.	1	2	4	8		
Position		2	•	١		
0						
1	•					
2		•				
3	•	•				
4			•			
5	•		•			
6		•	•			
7	•	•	•			
8				•		
9	•			•		
Α		•		•		
В	•	•		•		
С			•	•		
D	•		•	•		
E		•	•	•		
F	•	•	•	•		

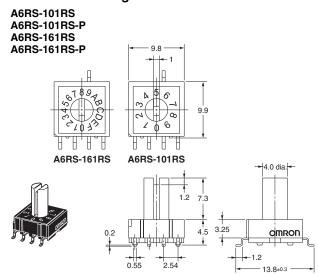
### **Dimensions**

- Note: 1. All units are in millimeters unless otherwise indicated.
  - 2. A tolerance of  $\pm 0.4$  mm applies to the above dimensions unless otherwise specified.

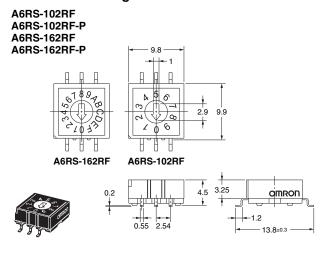
# Top-actuated Flat Models with 4x1 Terminal Arrangement



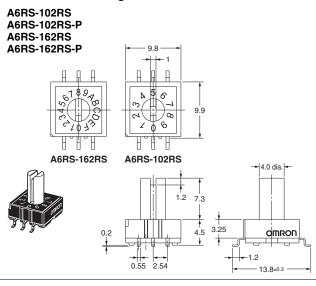
# Top-actuated Extended-shaft Models with 4x1 Terminal Arrangement



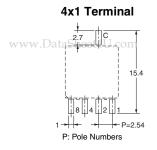
# Top-actuated Flat Models with 3x3 Terminal Arrangement



# Top-actuated Extended-shaft Models with 3x3 Terminal Arrangement

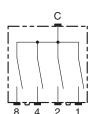


## Mounting pads (Top view)

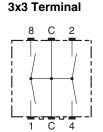


# 

## Internal connections (Top view)



4x1 Terminal



### **Omron Electronic Components, LLC**

### **Terms and Conditions of Sales**

### I. GENERAL

Definitions: The words used herein are defined as follows.

Terms: These terms and conditions

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The buyer of Products, including any end user in section III through VI Buyer: (c)

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Delivery and shipping dates are estimates only; and

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OMRON ELECTRONIC COMPONENTS LLC

55 E. Commerce Drive, Suite B Schaumburg, IL 60173

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11/09

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