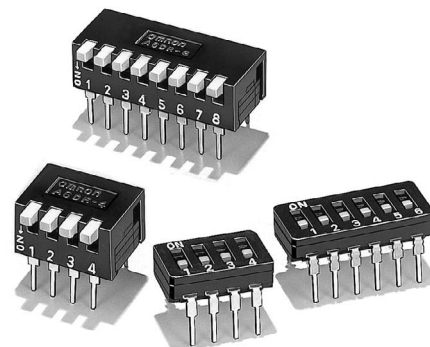


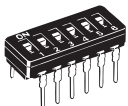
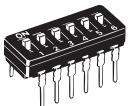
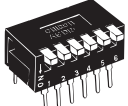
### High Contact Reliability with Sealed Structure

- Sealed structure equivalent to IP64 (IEC-60529) prevents flux penetration and provides high contact reliability even in dusty locations and locations where water is used.
- Smooth, sure switching action enables comfortable operation.
- Gold-plated twin contacts and a slide-type, self-cleaning mechanism ensure high reliability.



RoHS Compliant

### List of Models

| Type (actuator color) | Flat actuator (Orange) |                                                                                   | Raised actuator (Orange) |                                                                                    | Piano-actuator (Orange) |                                                                                     |
|-----------------------|------------------------|-----------------------------------------------------------------------------------|--------------------------|------------------------------------------------------------------------------------|-------------------------|-------------------------------------------------------------------------------------|
| No. of poles          | Quantity per tube      |  | Quantity per tube        |  | Quantity per Unit box   |  |
| 2                     | 73                     | A6D-2100                                                                          | 73                       | A6D-2103                                                                           | 100                     | A6DR-2100                                                                           |
| 3                     | 54                     | A6D-3100                                                                          | 54                       | A6D-3103                                                                           | —                       | —                                                                                   |
| 4                     | 43                     | A6D-4100                                                                          | 43                       | A6D-4103                                                                           | 50                      | A6DR-4100                                                                           |
| 5                     | 35                     | A6D-5100                                                                          | 35                       | A6D-5103                                                                           | —                       | —                                                                                   |
| 6                     | 30                     | A6D-6100                                                                          | 30                       | A6D-6103                                                                           | 50                      | A6DR-6100                                                                           |
| 7                     | 26                     | A6D-7100                                                                          | 26                       | A6D-7103                                                                           | —                       | —                                                                                   |
| 8                     | 23                     | A6D-8100                                                                          | 23                       | A6D-8103                                                                           | 50                      | A6DR-8100                                                                           |
| 9                     | 20                     | A6D-9100                                                                          | 20                       | A6D-9103                                                                           | —                       | —                                                                                   |
| 10                    | 19                     | A6D-0100                                                                          | 19                       | A6D-0103                                                                           | 50                      | A6DR-0100                                                                           |

- Note:** 1. The piano actuator model has a flat actuator inside.  
 2. Contact your OMRON sales representatives to request special markings or designations.  
 3. The quantity per tube applies only to A6Ds. A6DRs are packaged in a box.  
 4. Order in multiples of the package quantity.

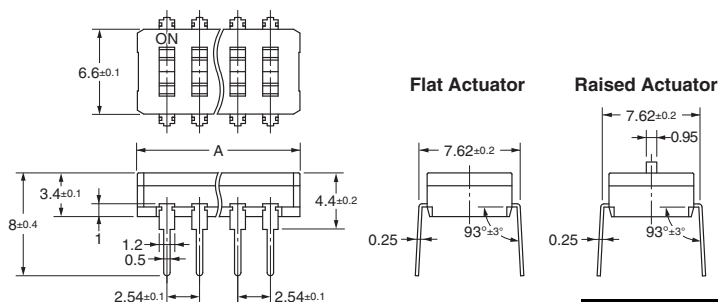
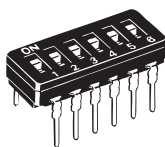
### Ratings/Characteristics

|                                      |                          |                                                                                                                                                                                                                               |
|--------------------------------------|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Ratings</b>                       |                          | 30 mA at 30 VDC<br>10 $\mu$ A (minimum current) at 3.5 VDC                                                                                                                                                                    |
| <b>Ambient operating temperature</b> |                          | -20 to +70°C at 60% max. (with no icing or condensation)                                                                                                                                                                      |
| <b>Ambient operating humidity</b>    |                          | 35% to 95% (at +5 to +35°C)                                                                                                                                                                                                   |
| <b>Insulation resistance</b>         |                          | 100 M $\Omega$ min. (at 250 VDC)                                                                                                                                                                                              |
| <b>Contact resistance</b>            |                          | 100 m $\Omega$ max. (initial value)                                                                                                                                                                                           |
| <b>Dielectric strength</b>           | <b>Between terminals</b> | 500 VAC for 1 min                                                                                                                                                                                                             |
| <b>Vibration resistance</b>          | <b>Malfunction</b>       | 10 to 55 Hz, 1.5-mm double amplitude                                                                                                                                                                                          |
| <b>Shock resistance</b>              | <b>Malfunction</b>       | 300 m/s <sup>2</sup> min.                                                                                                                                                                                                     |
| <b>Durability</b>                    | <b>Electrical</b>        | 2,000 operations min.                                                                                                                                                                                                         |
| <b>Operating force</b>               |                          | 0.29 to 4.9 N {30 to 500 gf}                                                                                                                                                                                                  |
| <b>Weight</b>                        |                          | Flat and raised actuators: 0.28 g (2 poles), 0.45 g (4 poles), 0.65 g (6 poles), 0.80 g (8 poles), 1.0 g (10 poles)<br>Piano actuators: 0.53 g (2 poles), 0.8 g (4 poles), 1.2 g (6 poles), 1.7 g (8 poles), 2.2 g (10 poles) |

## ■Dimensions (Unit: mm)

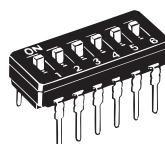
### ● Flat Actuator

#### A6D-□100



### ● Raised Actuator

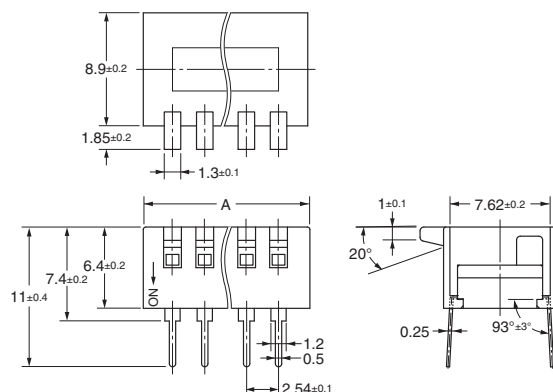
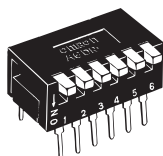
#### A6D-□103



| No. of poles | Model         |                 | Dimension<br>A±0.2 |
|--------------|---------------|-----------------|--------------------|
|              | Flat Actuator | Raised Actuator |                    |
| 2            | A6D-2100      | A6D-2103        | 7.1                |
| 3            | A6D-3100      | A6D-3103        | 9.7                |
| 4            | A6D-4100      | A6D-4103        | 12.2               |
| 5            | A6D-5100      | A6D-5103        | 14.7               |
| 6            | A6D-6100      | A6D-6103        | 17.3               |
| 7            | A6D-7100      | A6D-7103        | 19.8               |
| 8            | A6D-8100      | A6D-8103        | 22.4               |
| 9            | A6D-9100      | A6D-9103        | 24.9               |
| 10           | A6D-0100      | A6D-0103        | 27.4               |

### ● Piano Actuator

#### A6DR-□100



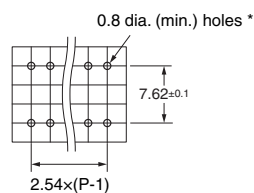
| No. of poles | Model     | Dimension<br>A±0.2 |
|--------------|-----------|--------------------|
| 2            | A6DR-2100 | 7.1                |
| 4            | A6DR-4100 | 12.2               |
| 6            | A6DR-6100 | 17.3               |
| 8            | A6DR-8100 | 22.4               |
| 10           | A6DR-0100 | 27.4               |

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

## ■Internal Connections/PCB Dimensions (Unit: mm)

### Dimension of PCB dimensions (Top View)

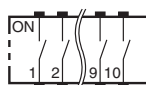
(Single-sided PCB, t=1.2 to 1.6)



P: Number of Poles

\* 0.9 dia. for automatic insertion.

### Contact Form (Top View)



## ■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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**OMRON Corporation**

ELECTRONIC AND MECHANICAL COMPONENTS COMPANY

Contact: [www.omron.com/ecb](http://www.omron.com/ecb)

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