

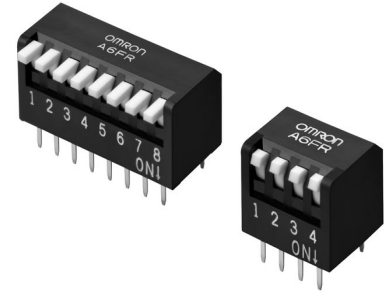
# A6FR

Piano DIP Switch

## Box type Through-hole Mounting Piano DIP Switches

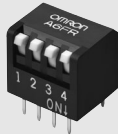
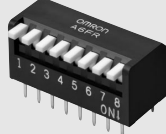
- Slide twin contacts mechanism ensure high reliability.
- Available both ON and OFF-set soldering.
- Both short and long actuators are available.

RoHS Compliant



### List of Models

#### ● Tube Packaging

| Type (actuator color) |                   | Short actuator (white)  | Long actuator (white)   |
|-----------------------|-------------------|---|---|
| No. of poles          | Quantity per tube |  |  |
| 2                     | 70                | A6FR-2101   | A6FR-2104   |
| 3                     | 50                | A6FR-3101   | A6FR-3104   |
| 4                     | 39                | A6FR-4101   | A6FR-4104   |
| 5                     | 32                | A6FR-5101   | A6FR-5104   |
| 6                     | 27                | A6FR-6101   | A6FR-6104   |
| 7                     | 24                | A6FR-7101   | A6FR-7104   |
| 8                     | 21                | A6FR-8101   | A6FR-8104   |
| 9                     | 19                | A6FR-9101   | A6FR-9104   |
| 10                    | 17                | A6FR-0101   | A6FR-0104   |

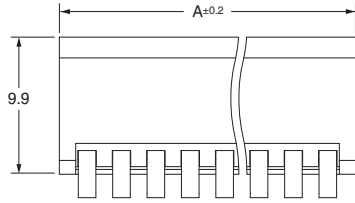
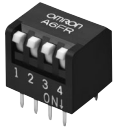
Note: Order in multiples of the package quantity.

### Ratings / Characteristics

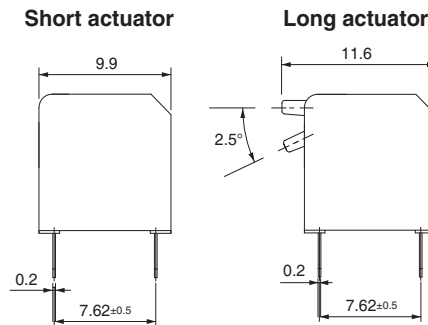
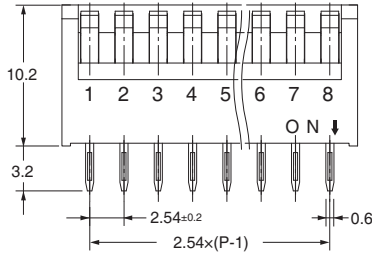
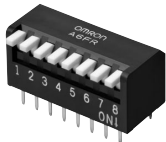
|                                    |   |                                      |
|------------------------------------|---|--------------------------------------|
| Rating (resistive load)            | 25 mA at 24 VDC<br>10 $\mu$ A (minimum current) at 3.5 VDC                                |                                      |
| Ambient operating temperature      | -20 to +70°C at 60% max. (with no icing or condensation)                                  |                                      |
| Ambient operating humidity         | 35% to 95% (at +5 to +35°C)   |                                      |
| Insulation resistance              | 100 M $\Omega$ min. (at 250 VDC with insulation tester)                                   |                                      |
| Contact resistance (initial value) | 200 m $\Omega$ max.   |                                      |
| Dielectric strength                | Between terminals   | 500 VAC for 1 min                    |
| Vibration resistance               | Malfunction   | 10 to 55 Hz, 1.5-mm double amplitude |
| Shock resistance                   | Malfunction   | 300 m/s <sup>2</sup> min.            |
| Durability                         | Electrical  | 1,000 operations min.                |
| Washing                            | Not possible  |                                      |
| Degree of protection               | IEC IP40  |                                      |
| Operating force                    | 0.29 to 9.8 N {30 to 1,000 gf}  |                                      |
| Weight                             | 0.83 g (2 poles), 1.39 g (4 poles), 1.99 g (6 poles), 2.59 g (8 poles), 3.18 g (10 poles) |                                      |

## Dimensions (Unit: mm)

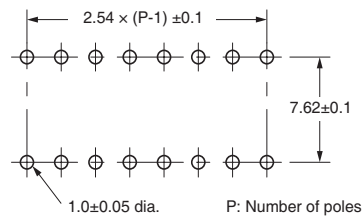
### ● Short Actuator A6FR-□101



### ● Long Actuator A6FR-□104



### PCB Dimensions (Reference) (Top View)

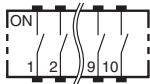


| No. of poles | Model          |               | Dimension A |
|--------------|----------------|---------------|-------------|
|              | Short actuator | Long actuator |             |
| 2            | A6FR-2101      | A6FR-2104     | 6.64        |
| 3            | A6FR-3101      | A6FR-3104     | 9.18        |
| 4            | A6FR-4101      | A6FR-4104     | 11.72       |
| 5            | A6FR-5101      | A6FR-5104     | 14.26       |
| 6            | A6FR-6101      | A6FR-6104     | 16.80       |
| 7            | A6FR-7101      | A6FR-7104     | 19.34       |
| 8            | A6FR-8101      | A6FR-8104     | 21.88       |
| 9            | A6FR-9101      | A6FR-9104     | 24.42       |
| 10           | A6FR-0101      | A6FR-0104     | 26.96       |

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

## Internal Connections

### Contact Form (Top View)



## Safety 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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