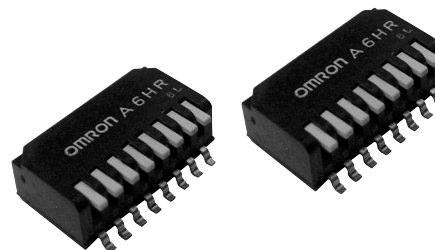


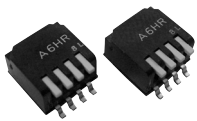
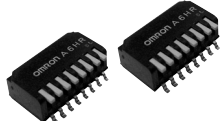
# Half-pitch Piano DIP Switch A6HR

## Piano type models available in Half-pitch.

- Gold-plated twin contacts will ensure high reliability.
- Embossed tapping models available for automatic mounting. (small reel also available)
- Temperature-resistant resin allows at peak reflow temperatures of 260°C.


**NEW**

## Ordering Information

|                 | Part Number                                                                        |                   |                                                                                     |                   |
|-----------------|------------------------------------------------------------------------------------|-------------------|-------------------------------------------------------------------------------------|-------------------|
|                 | Tube Packaging                                                                     |                   | Embossed tapping packaging                                                          |                   |
|                 |  |                   |  |                   |
| Number of poles |                                                                                    | Quantity per Tube |                                                                                     | Quantity per reel |
| 2               | <b>A6HR-2104</b>                                                                   | 125               | <b>A6HR-2104-P</b>                                                                  | 1,000             |
| 4               | <b>A6HR-4104</b>                                                                   | 70                | <b>A6HR-4104-P</b>                                                                  |                   |
| 6               | <b>A6HR-6104</b>                                                                   | 50                | <b>A6HR-6104-P</b>                                                                  |                   |
| 8               | <b>A6HR-8104</b>                                                                   | 40                | <b>A6HR-8104-P</b>                                                                  |                   |
| 10              | <b>A6HR-0104</b>                                                                   | 30                | <b>A6HR-0104-P</b>                                                                  |                   |

**Note:** 1. Small reels of 500 pieces are also available. Order "-PM" version instead of "-P".  
2. Switches cannot be washed.

## Specifications

### ■ Characteristics

|                                      |                               |                                                                                    |
|--------------------------------------|-------------------------------|------------------------------------------------------------------------------------|
| <b>Switching Capacity</b>            |                               | 25 mA at 24 VDC                                                                    |
| <b>Minimum permissible load</b>      |                               | 10 $\mu$ A (minimum current) at 3.5 VDC                                            |
| <b>Contact resistance</b>            |                               | 200 m $\Omega$ max. (initial value)                                                |
| <b>Insulation resistance</b>         |                               | 100 M $\Omega$ min. (at 100 VDC)                                                   |
| <b>Dielectric strength</b>           |                               | 300 VAC for 1 min between terminals                                                |
| <b>Operating force</b>               |                               | 29.5 to 500 gf (0.29 to 4.9 N)                                                     |
| <b>Vibration resistance</b>          | <b>Malfunction durability</b> | 10 to 55 Hz, 1.5-mm double amplitude                                               |
| <b>Shock resistance</b>              | <b>Malfunction durability</b> | 490 m/s <sup>2</sup> min.                                                          |
| <b>Service life</b>                  | <b>Electrical</b>             | 1,000 operations min.                                                              |
| <b>Ambient operating temperature</b> |                               | -30 to 85°C at 60% RH max. (with no icing or condensation)                         |
| <b>Ambient operating humidity</b>    |                               | 35% to 95% (at 5 to 35°C)                                                          |
| <b>Weight</b>                        |                               | 0.13g (2 poles), 0.22g (4 poles), 0.3g (6 poles), 0.4g (8 poles), 0.48g (10 poles) |

**Note:** Data shown are of initial value.

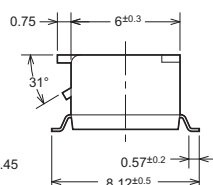
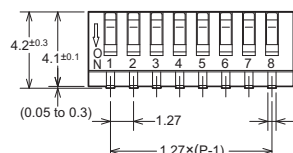
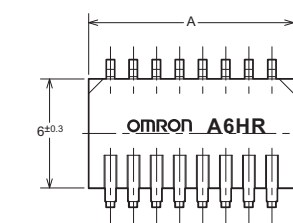
## Dimensions

**Note: 1.** All units are in millimeters unless otherwise indicated.

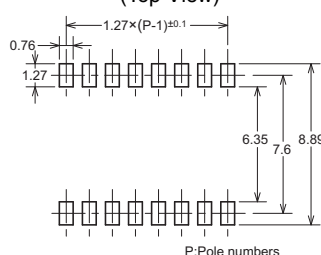
**2. Unless otherwise specified, a tolerance of  $\pm 0.4$  mm applies to all dimensions.**

### ■ Standard

A6HR-104



### Dimensions of PCB pad (Top View)



| No. of poles | Models    | Dimension A |
|--------------|-----------|-------------|
| 2            | A6HR-2104 | 3.67        |
| 4            | A6HR-4104 | 6.21        |
| 6            | A6HR-6104 | 8.75        |
| 8            | A6HF-8102 | 11.29       |
| 10           | A6HR-0104 | 13.83       |

## Internal Connections

(Top View)

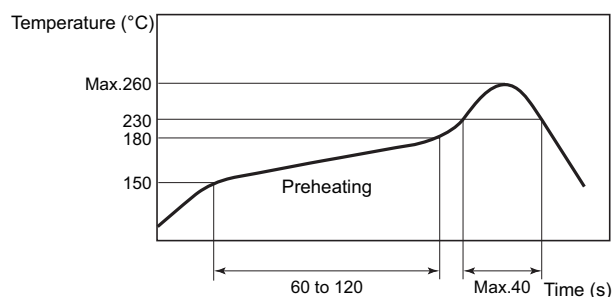


## Precautions

## ■ Correct Use

## Soldering

- Set the Switch to OFF before soldering.
- Observe the following conditions for reflow soldering.  
(Measurement location: Top of Switch)

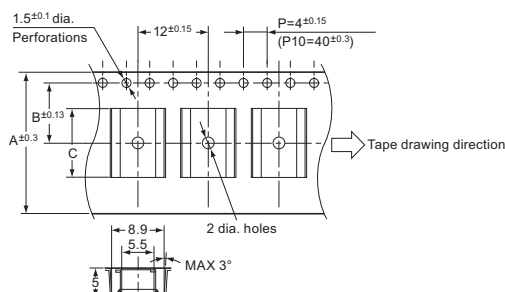


- Do not manually solder the switches.
- Subject the switches to a reflow solder process only once.

## Washing

A6HR switches are non-washable models.

## Packing Specifications



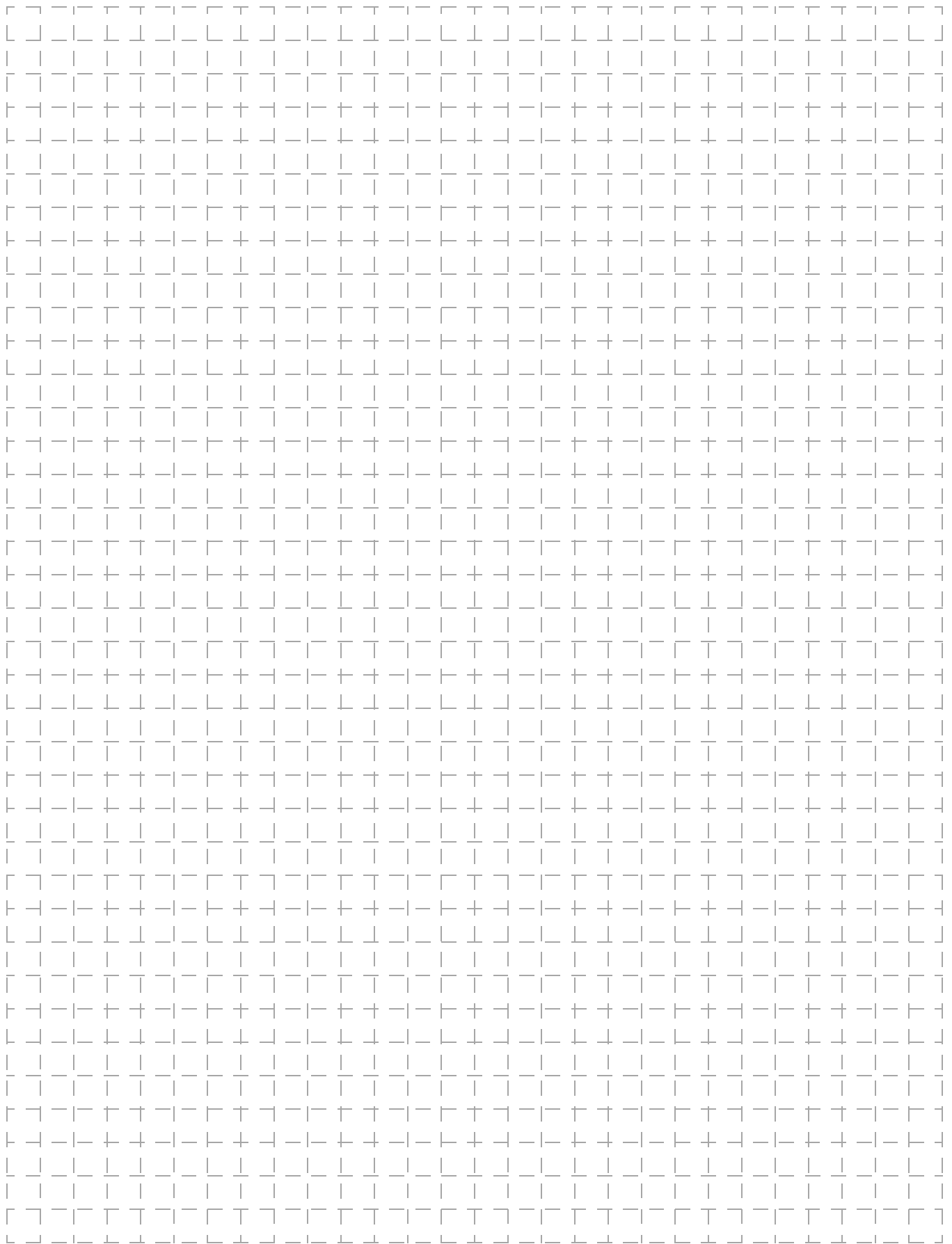
| No. of poles                   | 2      | 4     | 6      | 8      | 10     |
|--------------------------------|--------|-------|--------|--------|--------|
| Dimension                      |        |       |        |        |        |
| <b>A <math>\pm</math> 0.3</b>  | 16     | 16    | 16     | 24     | 24     |
| <b>B <math>\pm</math> 0.13</b> | 7.5    | 7.5   | 7.5    | 11.5   | 11.5   |
| <b>C</b>                       | (4.45) | (7.0) | (9.55) | (12.1) | (14.6) |

## Environment for Storage and Use

To prevent discoloration of the terminals and other problems during storage, do not store the A6HR in locations subject to the following conditions.

High temperatures or humidity/Corrosive gases

Direct sunlight/Contact with water



All sales are subject to Omron Electronic Components LLC standard terms and conditions of sale, which can be found at [http://www.components.omron.com/components/web/webfiles.nsf/sales\\_terms.html](http://www.components.omron.com/components/web/webfiles.nsf/sales_terms.html)

**ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.**

To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.

---

**OMRON**<sup>®</sup>

**OMRON ELECTRONIC  
COMPONENTS LLC**

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

**847-882-2288**

**OMRON ON-LINE**

Global - <http://www.omron.com>

USA - <http://www.components.omron.com>

Cat. No. A191-E-1

11/10

Specifications subject to change without notice

Printed in USA