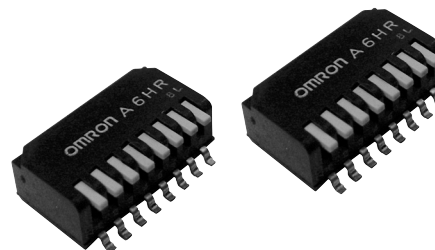


# Half-pitch Piano DIP Switch A6HR

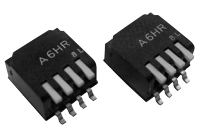
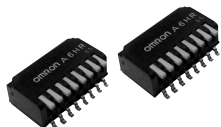
## Piano type models available in Half-pitch.

- 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               | A6HR-2104                                                                          | 125               | A6HR-2104-P                                                                         | 1,000             |
| 4               | A6HR-4104                                                                          | 70                | A6HR-4104-P                                                                         |                   |
| 6               | A6HR-6104                                                                          | 50                | A6HR-6104-P                                                                         |                   |
| 8               | A6HR-8104                                                                          | 40                | A6HR-8104-P                                                                         |                   |
| 10              | A6HR-0104                                                                          | 30                | A6HR-0104-P                                                                         |                   |

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

## Specifications

### ■ Characteristics

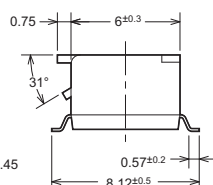
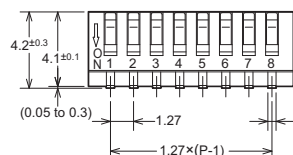
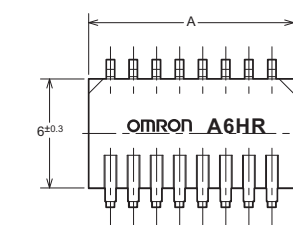
|                               |                        |                                                                                    |
|-------------------------------|------------------------|------------------------------------------------------------------------------------|
| Switching Capacity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

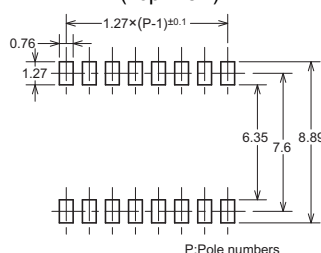
# Dimensions

- 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)

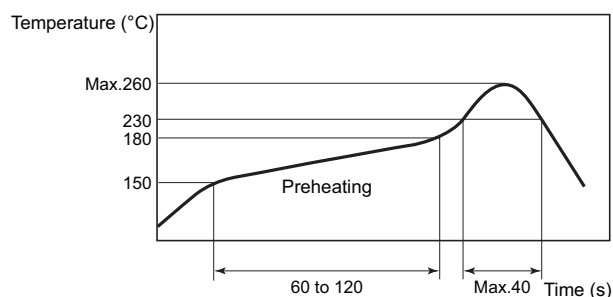


# Precautions

## Correct Use

### Soldering

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

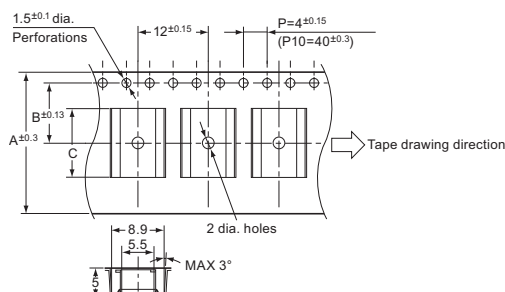


- Do not manually solder the switches.
- Subject the switches to a reflow solder process only once.

### Washing

A6HR switches are non-washable models.

## Packing Specifications

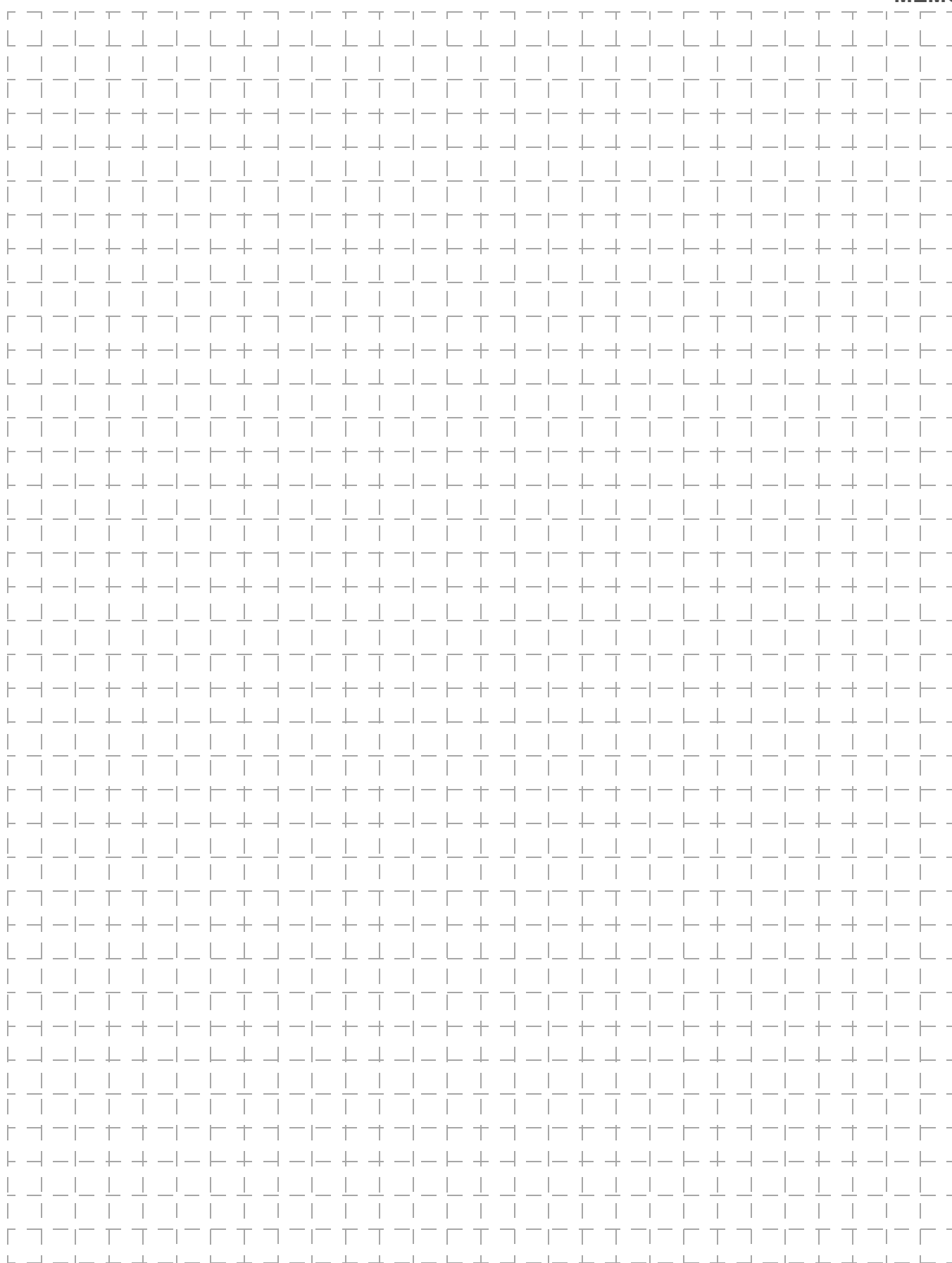


| No. of poles    | 2      | 4     | 6      | 8      | 10     |
|-----------------|--------|-------|--------|--------|--------|
| Dimension       |        |       |        |        |        |
| <b>A ± 0.3</b>  | 16     | 16    | 16     | 24     | 24     |
| <b>B ± 0.13</b> | 7.5    | 7.5   | 7.5    | 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