

### 6 mm Square Long Travel 2 terminals SMD Light Touch Switches

Type: **EVPAS**



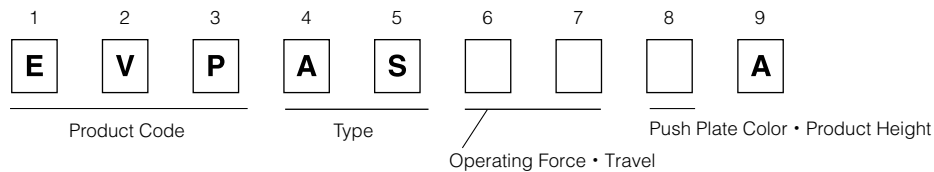
#### ■ Features

- External dimensions : 6.0 mm×6.1 mm, Height 5.0 mm (Including the push plate)
- Steady and low contact resistance (100 mΩ max.)
- Excellent solderability (J-bent-type terminals)

#### ■ Recommended Applications

- Operating switches for car electronic equipments.
- Input on operating switches for telephones, electronic musical instruments, etc.

#### ■ Explanation of Part Numbers(Standard specification only)



#### ■ Specifications

|                               |                                 |  |             |                                       |
|-------------------------------|---------------------------------|--|-------------|---------------------------------------|
| Type                          |                                 | Snap action/Push-on type SPST  |             |                                       |
| Electrical                    | Rating                          | 10 μA 2 V DC to 50 mA 12 V DC (Resistive load)   |             |                                       |
|                               | Contact Resistance              | 100 mΩ max.  |             |                                       |
|                               | Insulation Resistance           | 100 MΩ min. (at 100 V DC)  |             |                                       |
|                               | Dielectric Withstanding Voltage | 250 V AC for 1 minute  |             |                                       |
|                               | Bouncing                        | 10 ms max. (ON, OFF)   |             |                                       |
| Mechanical                    | Type                            | Standard type  |             | Narrow tolerance operating force type |
|                               | Operating Force                 | 1.6 N±0.5 N  | —           | —                                     |
|                               |                                 | 2.0 N±0.6 N  | —           | —                                     |
|                               |                                 | —  | 2.2 N±0.6 N | —                                     |
|                               |                                 | 2.5 N±0.6 N  | 2.5 N±0.6 N | —                                     |
|                               |                                 | 3.0 N±0.8 N  | —           | 3.0 N±0.6 N                           |
|                               |                                 | 3.5 N±1.0 N  | —           | —                                     |
|                               |                                 | —  | —           | 3.6 N±0.8 N                           |
| Travel                        | 1.3 mm±0.2 mm                   | 1.0 mm±0.2 mm  |             |                                       |
| Endurance                     | Operating Life                  | 1.6 N, 2.0 N, 2.2 N, 2.5 N type: 100,000 cycles min.<br>3.0 N type: 200,000 cycles min.<br>3.5 N type: 100,000 cycles min.<br>3.0 N, 3.6 N with Narrow tolerance type: 300,000 cycles min. |             |                                       |
| Operating Temperature         |                                 | -40 °C to +90 °C   |             |                                       |
| Storage Temperature           |                                 | -40 °C to +90 °C (Bulk)<br>-20 °C to +60 °C (Taping)   |             |                                       |
| Minimum Quantity/Packing Unit |                                 | 2,000 pcs. Embossed Taping (Reel Pack)   |             |                                       |
| Quantity/Carton               |                                 | 10,000 pcs.  |             |                                       |

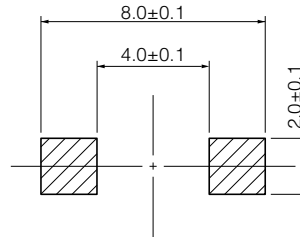
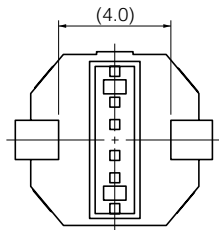
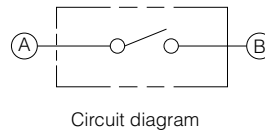
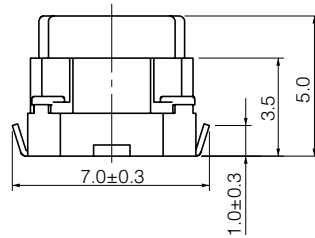
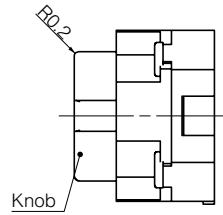
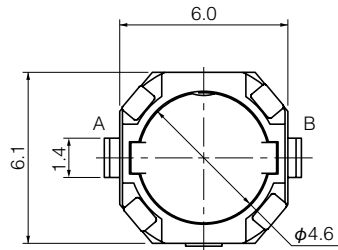
Design and specifications are each subject to change without notice. Ask factory for the current technical specifications before purchase and/or use.  
Should a safety concern arise regarding this product, please be sure to contact us immediately.

■ Dimensions in mm (not to scale)

EVPAS

(Embossed Taping)

General dimension tolerance : ± 0.2  
( ) dimensions are reference dimensions.



PWB land pattern for reference

| Part Numbers | Operating Force | Travel | Height | Push Plate Color | Operating Life |
|--------------|-----------------|--------|--------|------------------|----------------|
| EVPASCB1A    | 2.2 N           | 1.0 mm | 5.0 mm | Black            | 100,000 cycles |
| EVPASDB1A    | 2.5 N           | 1.0 mm | 5.0 mm | Black            | 100,000 cycles |
| EVPASAC1A    | 1.6 N           | 1.3 mm | 5.0 mm | Black            | 100,000 cycles |
| EVPASBC1A    | 2.0 N           | 1.3 mm | 5.0 mm | Black            | 100,000 cycles |
| EVPASDC1A    | 2.5 N           | 1.3 mm | 5.0 mm | Black            | 100,000 cycles |
| EVPASKC1A    | 3.0 N           | 1.3 mm | 5.0 mm | Black            | 200,000 cycles |
| EVPASJC1A    | 3.5 N           | 1.3 mm | 5.0 mm | Black            | 100,000 cycles |

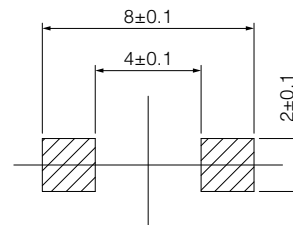
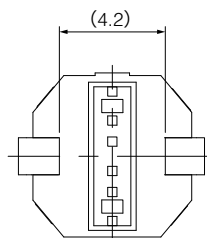
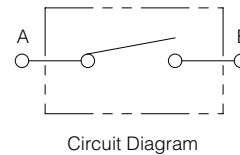
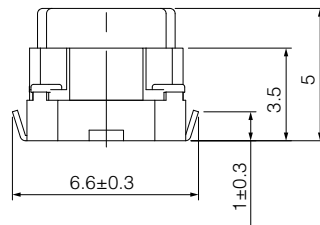
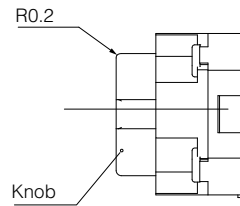
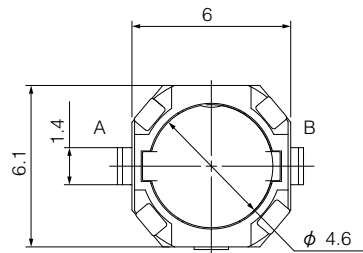
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### ■ Dimensions in mm (not to scale)

#### EVPAS

General dimension tolerance :  $\pm 0.2$   
 ( ) dimensions are reference dimensions.

(Embossed Taping)  
 (Narrow tolerance operating force type)



Land pattern plan

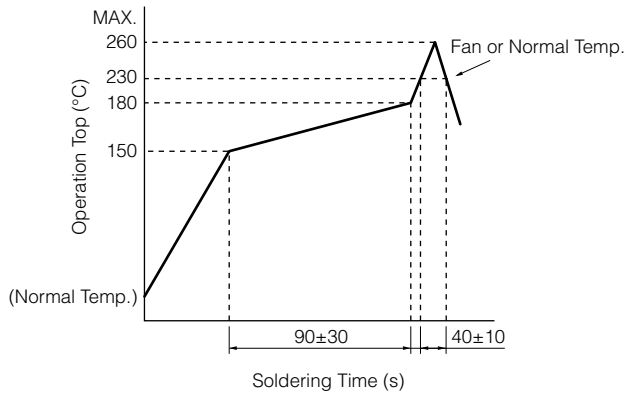
Knob color : BLACK

Solder thickness  $t=0.15\pm0.03$

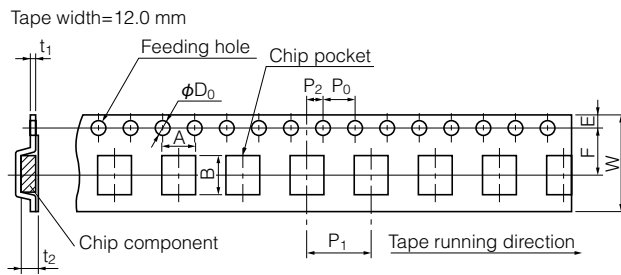
| Part Numbers | Operating Force | Travel | Height | Push Plate Color | Operating Life |
|--------------|-----------------|--------|--------|------------------|----------------|
| EVPAS4D1A    | 3.0 N           | 1.0 mm | 5.0 mm | Black            | 300,000 cycles |
| EVPAS3D1A    | 3.6 N           | 1.0 mm | 5.0 mm | Black            | 300,000 cycles |

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## ■ Recommended Reflow Soldering Conditions



## ● Embossed Carrier Taping



Taping condition : Lack of products in the middle of taping should be one MAX, but total quantity specified in the specifications should be secured.  
Peeling off strength of top tape : It should be within 0.2N to 1.0N at 165 degree in peeling off angle.  
Joint of carrier tape : One joint per one reel may exist.

Unit: mm

| Part No. | Height | A       | B       | W        | F       | E         | $P_1$   | $P_2$   | $P_0$   | $D_0$ Dia.                       | $t_1$   | $t_2$     |
|----------|--------|---------|---------|----------|---------|-----------|---------|---------|---------|----------------------------------|---------|-----------|
| EVPAS    | 5.0    | 6.8±0.2 | 7.7±0.2 | 12.0±0.3 | 5.5±0.1 | 1.75±0.10 | 8.0±0.1 | 2.0±0.1 | 4.0±0.1 | 1.5 <sup>+0.1</sup> <sub>0</sub> | 0.4±0.1 | 5.25±0.20 |

## Requests to customers

Please refer to "the latest product specifications" when designing your product.

Requests to customers :

<https://industrial.panasonic.com/ac/e/salespolicies/>

## Safety Precautions

When using our products, no matter what sort of equipment they might be used for, be sure to confirm the applications and environmental conditions with our specifications in advance.

Please contact .....

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