

### 3.5 mm×2.9 mm Side-operational Half Dive /SMD Light Touch Switches

Type: **EVPAN**



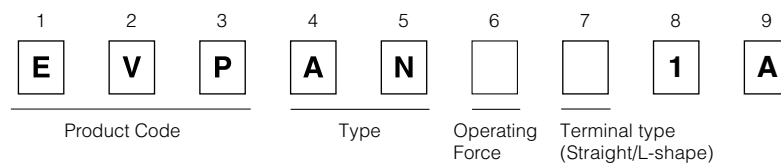
#### ■ Features

- External dimensions : 3.5 mm×2.9 mm (Excluding the push plate), Height 1.2 mm
- Printed circuit board being as low as 0.7 mm
- High mount ability

#### ■ Recommended Applications

- Operation switches for portable electronic equipment (Mobile phones, Digital still cameras, Camcorders, Portable audio players, etc.)

#### ■ Explanation of Part Numbers


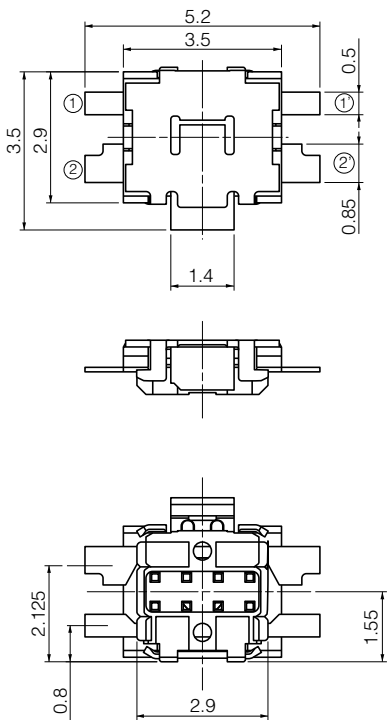
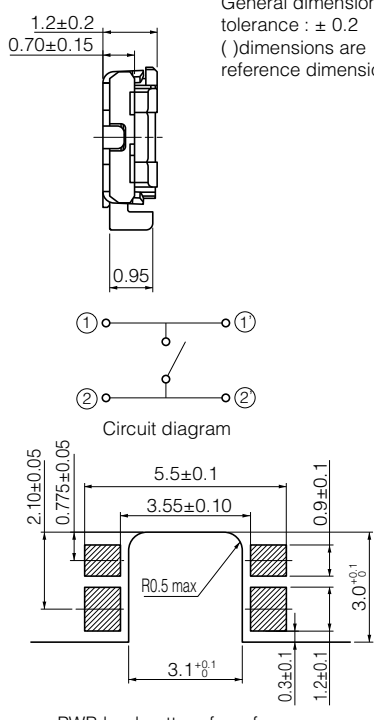
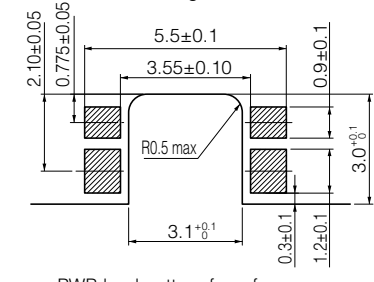

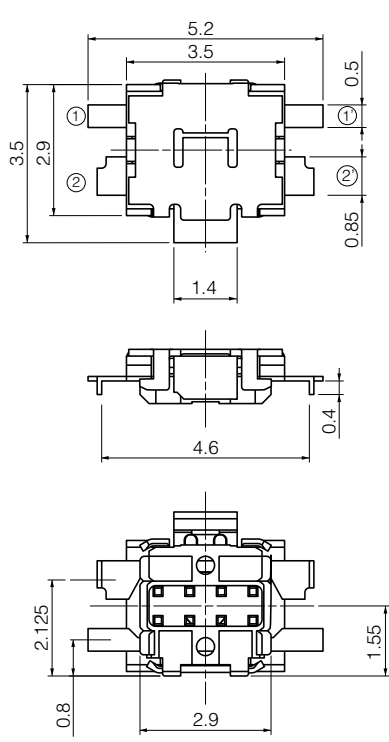
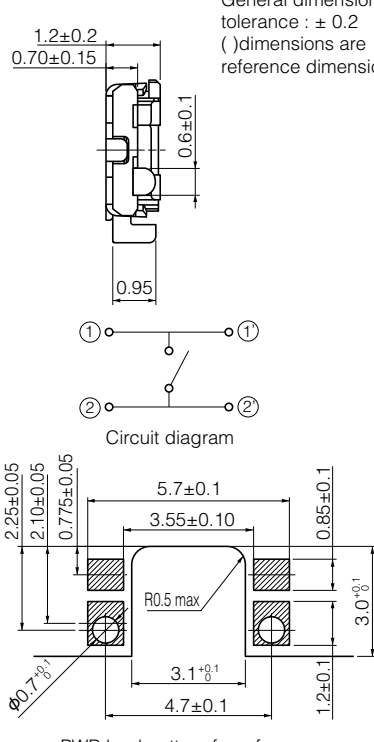
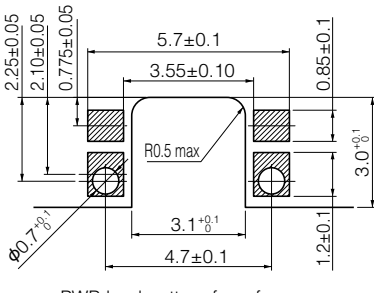


#### ■ Specifications

Type		Snap action / Push-on type SPST
Electrical	Rating	10 $\mu$ A 2 V DC to 50 mA 12 V DC (Resistive load)
	Contact Resistance	500 m $\Omega$ max.
	Insulation Resistance	100 M $\Omega$ min. (at 100 V DC)
	Dielectric Withstanding Voltage	250 V AC for 1 minute
	Bouncing	10 ms max. (ON, OFF)
Mechanical	Operating Force	1.6 N, 2.2 N
	Push Travel	0.2 mm
	Push Strength	70 N (1 minute)
Endurance	Operating Life	100,000 cycles min.
Operating Temperature		-20 °C to +70 °C
Storage Temperature		-40 °C to +85 °C (Bulk) -20 °C to +60 °C (Taping)
Minimum Quantity/Packing Unit		7,000 pcs. Embossed Taping (Reel Pack)
Quantity/Carton		35,000 pcs.

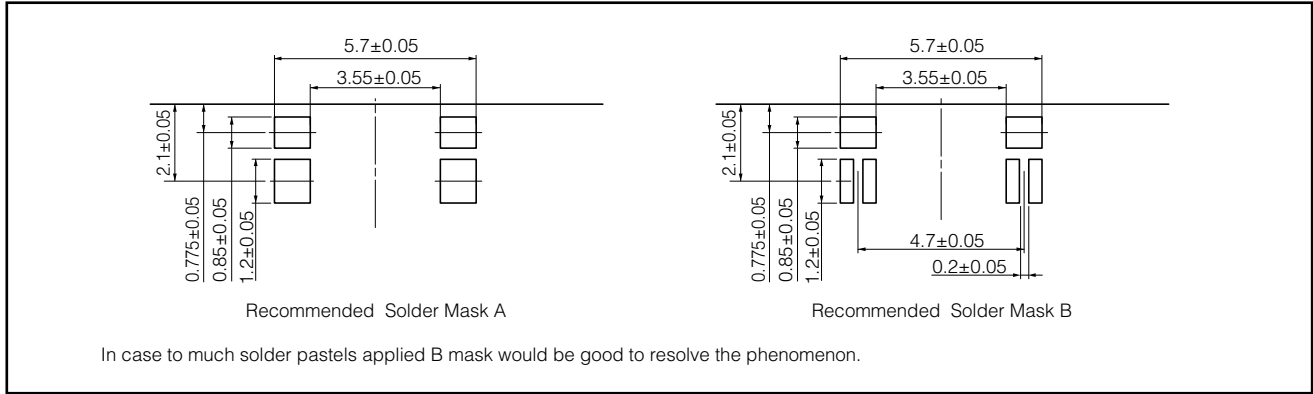
Design and specifications are each subject to change without notice. Ask factory for the current technical specifications before purchase and/or use. Should a safety concern arise regarding this product, please be sure to contact us immediately.

■ Dimensions in mm (not to scale)

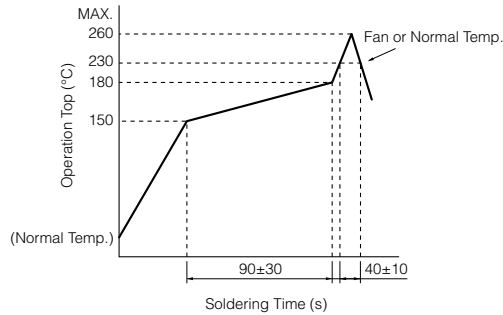
<p>EVPANA EVPAND</p> <p>(Embossed Taping)</p> <p>Straight terminals</p> 	<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;">  </div> <div style="width: 45%;"> <p>General dimension tolerance : ± 0.2 ( ) dimensions are reference dimensions.</p>  <p>Circuit diagram</p>  <p>PWB land pattern for reference</p> </div> </div>			
<p>Part Numbers</p>	<p>Operating Force</p>	<p>Height</p>	<p>Push Plate Color</p>	<p>Operating Life</p>
<p>EVPANAA1A</p>	<p>1.6 N</p>	<p>0.7 mm</p>	<p>Black</p>	<p>100,000 cycles</p>
<p>EVPANDA1A</p>	<p>2.2 N</p>	<p>0.7 mm</p>	<p>Black</p>	<p>100,000 cycles</p>
<p>EVPANBA1A</p>	<p>1.6 N</p>	<p>0.7 mm</p>	<p>Black</p>	<p>500,000 cycles</p>
<p>EVPAND EVPANB</p> <p>(Embossed Taping)</p> <p>L-shape terminals</p> 	<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;">  </div> <div style="width: 45%;"> <p>General dimension tolerance : ± 0.2 ( ) dimensions are reference dimensions.</p>  <p>Circuit diagram</p>  <p>PWB land pattern for reference</p> </div> </div>			
<p>Part Numbers</p>	<p>Operating Force</p>	<p>Height</p>	<p>Push Plate Color</p>	<p>Operating Life</p>
<p>EVPANDE1A</p>	<p>2.2 N</p>	<p>0.7 mm</p>	<p>Black</p>	<p>100,000 cycles</p>
<p>EVPANBE1A</p>	<p>1.6 N</p>	<p>0.7 mm</p>	<p>Black</p>	<p>500,000 cycles</p>

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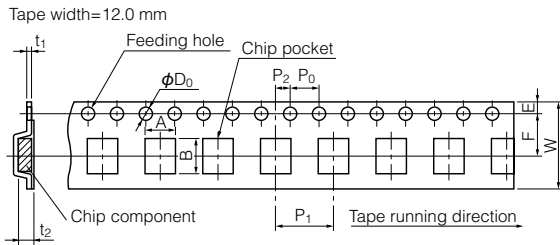
## Recommended Solder Mask



## 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.

## Straight terminals

Unit: mm

Part No.	Height	A	B	W	F	E	P <sub>1</sub>	P <sub>2</sub>	P <sub>0</sub>	D <sub>0</sub> Dia.	t <sub>1</sub>	t <sub>2</sub>
EVPAN	1.2	5.6±0.2	4.5±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>	0.3±0.1	1.35±0.20

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## 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 .....

**Panasonic Corporation**

Electromechanical Control Business Division

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