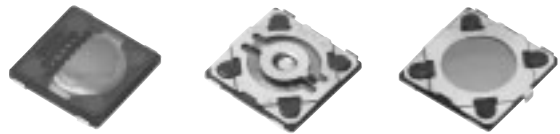


### 4 mm Square SMD Light Touch Switches

Type: **EVQP6/EVQ6P6/EVQ7P6/EVQ9P6**



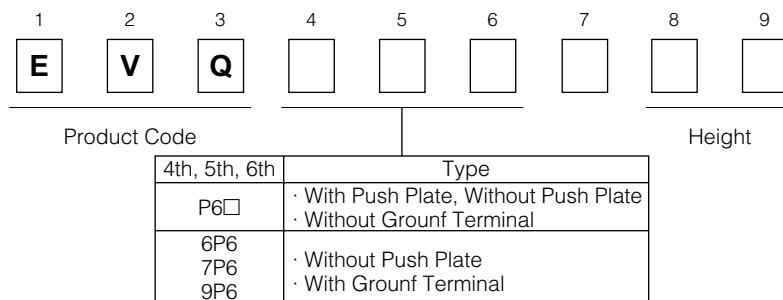
#### ■ Features

- External dimensions : 4.1 mm×4.1 mm  
Height :Without Push Plate 0.35 mm, With Push Plate 0.58 mm  
:Without Push Plate-With Ground Terminal 0.43 mm
- Long-life :1000000 cycles min.  
(Operating Force 1.6 N Type)
- Dust-proof structure

#### ■ Recommended Applications

- Operating switches for portable electronic equipment  
(Mobile phones, Camcorders, Portable audio players, etc.).

#### ■ Explanation of Part Numbers



#### ■ Product Chart

Height Packaging Operating Force	Without Push Plate H=0.35 mm	With Push Plate H=0.58 mm	Without Push Plate With Ground Terminal H=0.43 mm
	Embossed	Embossed	Embossed
1.0 N	—	—	EVQ7P6
1.6 N	EVQP6D	EVQP6L	EVQ6P6
2.4 N	EVQP6P	EVQP6Y	EVQ9P6

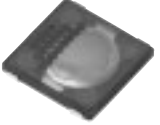
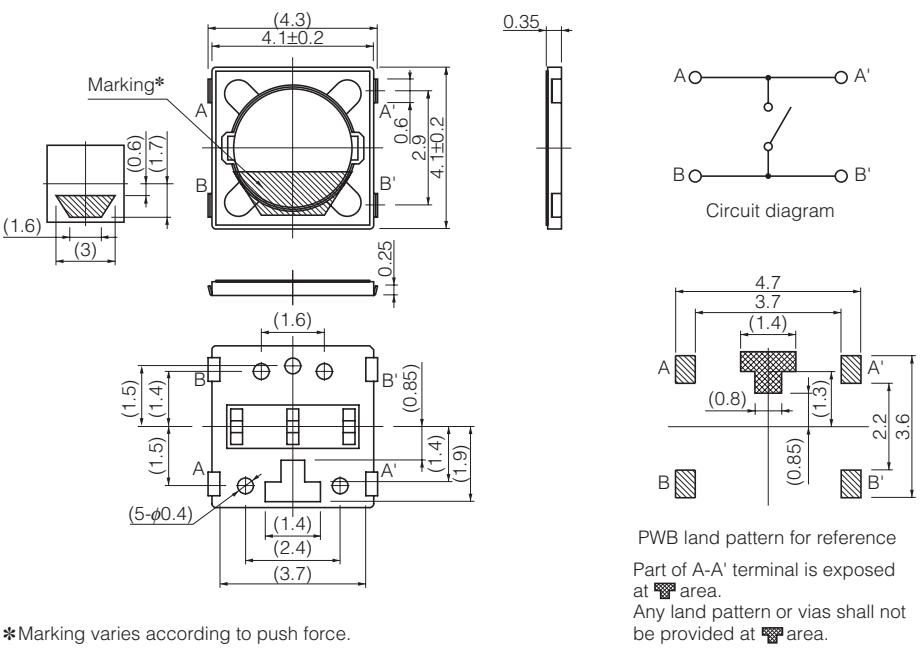






#### ■ Specifications

Type		Snap action / Push-on type SPST	
		Without Push Plate	With Push Plate
Electrical	Rating	10 μA 2 Vdc to 20 mA 15 Vdc (Resistive load)	
	Contact Resistance	500 mΩ max.	
	Insulation Resistance	50 MΩ min.	
	Dielectric Withstanding Voltage	100 Vac for 1 minute	
	Bouncing	3 ms max. (ON) 10 ms max. (OFF)	
Mechanical	Operating Force	1.0 N, 1.6 N, 2.4 N	
	Travel	0.2 mm (EVQ7P6 : 0.15 mm)	
Endurance	Operating Life	1.0 N, 1.6 N : 1000000 cycles min. 2.4 N : 500000 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		10000 pcs. Embossed Taping (Reel Pack)	
Quantity/Carton		50000 pcs.	

Note: Non washable

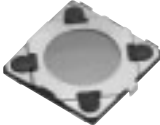
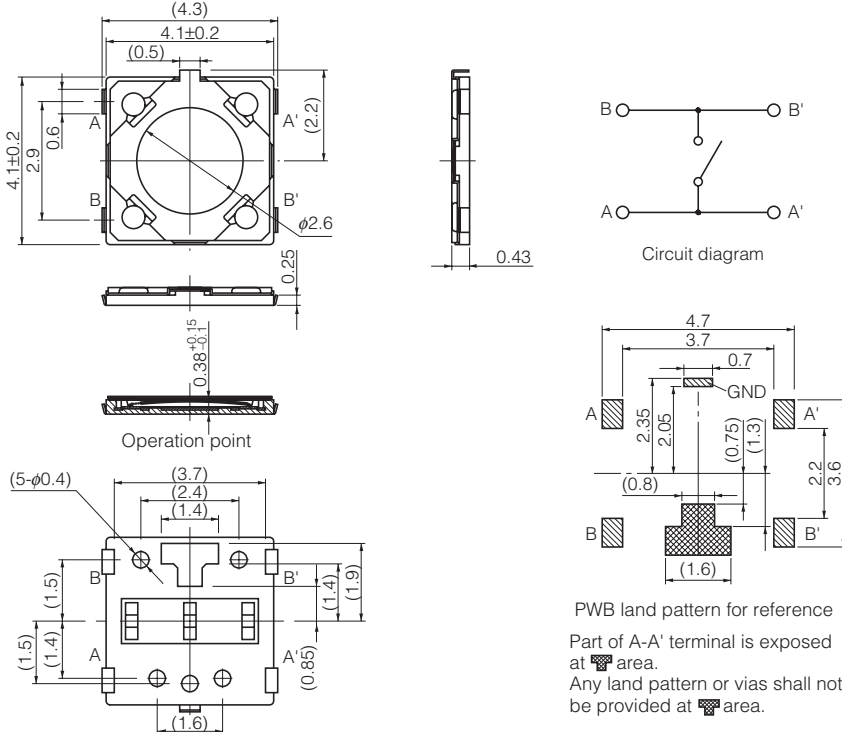


Design and specifications are each subject to change without notice. Ask factory for the current technical specifications before purchase and/or use.  
Should a safety concern arise regarding this product, please be sure to contact us immediately.

### ■ Dimensions in mm (not to scale)

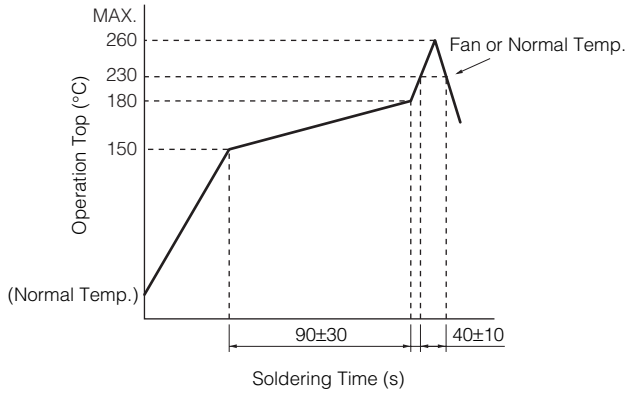
<p>No. 1</p> <p><b>EVQP6D</b> <b>EVQP6P</b></p> <p>(Embossed Taping)</p> <p>Surface mount For reflow soldering Without push plate</p> 	 <p style="text-align: center;">*Marking varies according to push force.</p> <p style="text-align: right;">Circuit diagram</p> <p style="text-align: right;">PWB land pattern for reference Part of A-A' terminal is exposed at  area. Any land pattern or vias shall not be provided at  area.</p>		
<p>Part Numbers</p> <p>EVQP6DB35</p> <p>EVQP6PB35</p>	<p>Operating Force</p> <p>1.6 N</p> <p>2.4 N</p>	<p>Height</p> <p>0.35 mm</p> <p>0.35 mm</p>	<p>Operating Life</p> <p>1000000 cycles</p> <p>500000 cycles</p>
<p>No. 2</p> <p><b>EVQP6L</b> <b>EVQP6Y</b></p> <p>(Embossed Taping)</p> <p>Surface mount For reflow soldering With push plate</p> 	 <p style="text-align: right;">Circuit diagram</p> <p style="text-align: right;">PWB land pattern for reference Part of A-A' terminal is exposed at  area. Any land pattern or vias shall not be provided at  area.</p>		
<p>Part Numbers</p> <p>EVQP6LB55</p> <p>EVQP6YB55</p>	<p>Operating Force</p> <p>1.6 N</p> <p>2.4 N</p>	<p>Height</p> <p>0.58 mm</p> <p>0.58 mm</p>	<p>Operating Life</p> <p>1000000 cycles</p> <p>500000 cycles</p>

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.

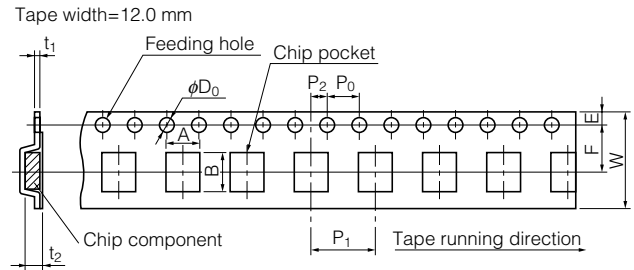
■ Dimensions in mm (not to scale)

<p>No. 3</p> <p>EVQ7P6 EVQ6P6 EVQ9P6</p> <p>(Embossed Taping)</p> <p>Surface mount For reflow soldering Without push plate With Ground Terminal</p> 	 <p>Circuit diagram</p> <p>PWB land pattern for reference Part of A-A' terminal is exposed at  area. Any land pattern or vias shall not be provided at  area.</p>		
<p>Part Numbers</p>	<p>Operating Force</p>	<p>Height</p>	<p>Operating Life</p>
<p>EVQ7P6B40</p>	<p>1.0 N</p>	<p>0.43 mm</p>	<p>1000000 cycles</p>
<p>EVQ6P6B40</p>	<p>1.6 N</p>	<p>0.43 mm</p>	<p>1000000 cycles</p>
<p>EVQ9P6B40</p>	<p>2.4 N</p>	<p>0.43 mm</p>	<p>500000 cycles</p>

### Recommended Reflow Soldering Conditions



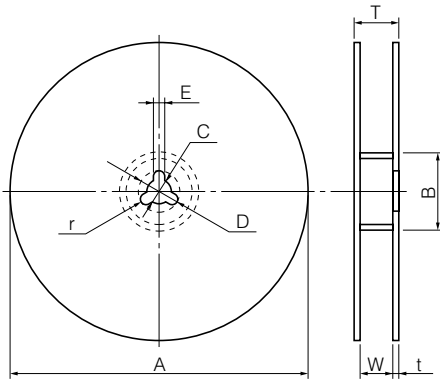
### Embossed Carrier Taping



Unit: mm

Part No.	Height	A	B	W	F	E	$P_1$	$P_2$	$P_0$	$D_0$ Dia.	$t_1$	$t_2$
EVQP6	0.35/0.58	4.0±0.2	5.0±0.2	12.0 <sup>+0.3</sup> <sub>-0.1</sub>	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>	0.30±0.05	0.5/0.7 <sup>+0.2</sup> <sub>-0.1</sub>
EVQ6P6	0.43											
EVQ7P6												
EVQ9P6												

### Standard Reel Dimensions in mm (not to scale)

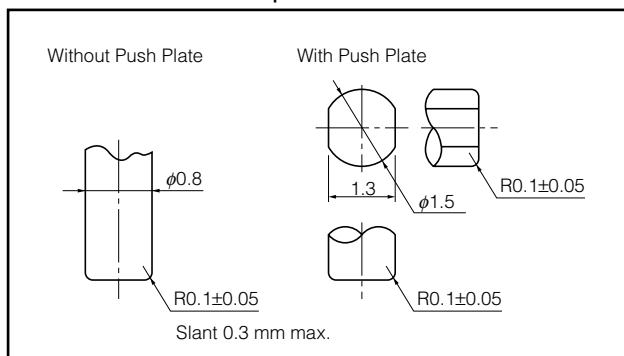


Item	A	B	C	D	E
Rate (mm)	$\phi 380.0 \pm 2.0$	$\phi 80.0 \pm 1.0$	$\phi 13.0 \pm 0.5$	$\phi 21.0 \pm 1.0$	2.0±0.5

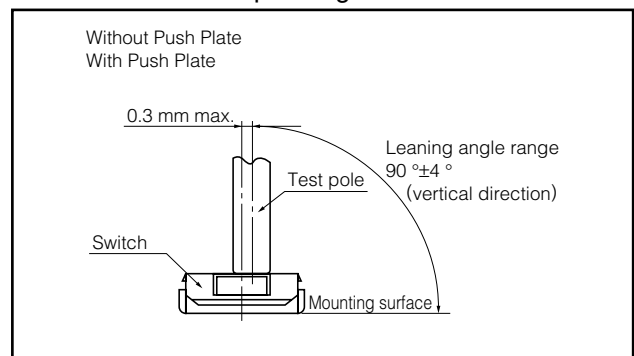
  

Item	W	T	t	r
Rate (mm)	13.5±1.5	17.5±1.0	1.0 to 3.0	1.0±0.5

### Recommended Shape of Test Pole



### Recommended Operating Conditions



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.

00 Oct. 2012