

### 6 mm Square Thin Type SMD Light Touch Switches

Type: **EVQP0**  
**EVQQ2**  
**EVQ6Q2**  
**EVQ7Q2**



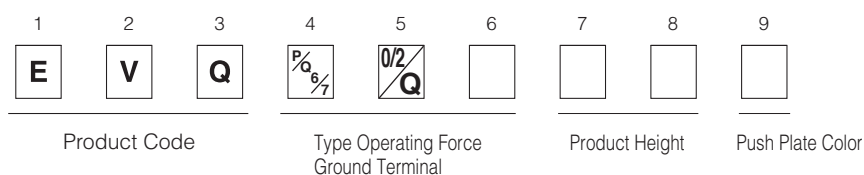
#### ■ Features

- External dimensions : 6.5 mm×6.0 mm, Height 1.8 mm  
(Excluding the push plate)
- With or without ground terminal, height, operating force
- Overstroke travel

#### ■ Recommended Applications

- Operating switches for other electronic equipment
- Operation switches for PC mouse
- Car audio systems
- Game

#### ■ Explanation of Part Numbers



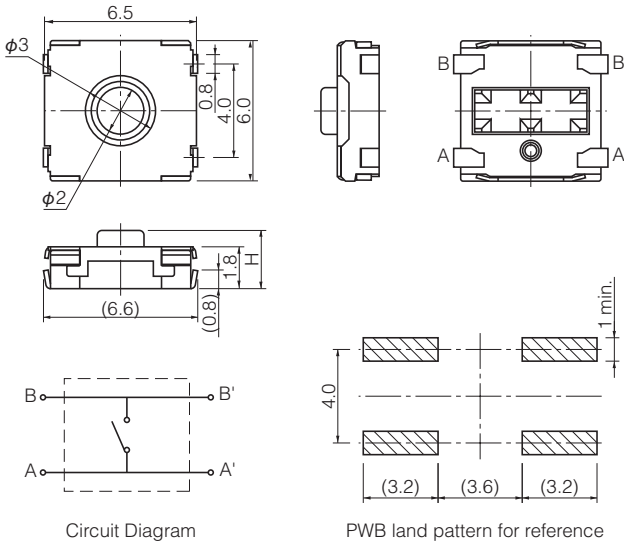
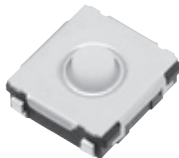
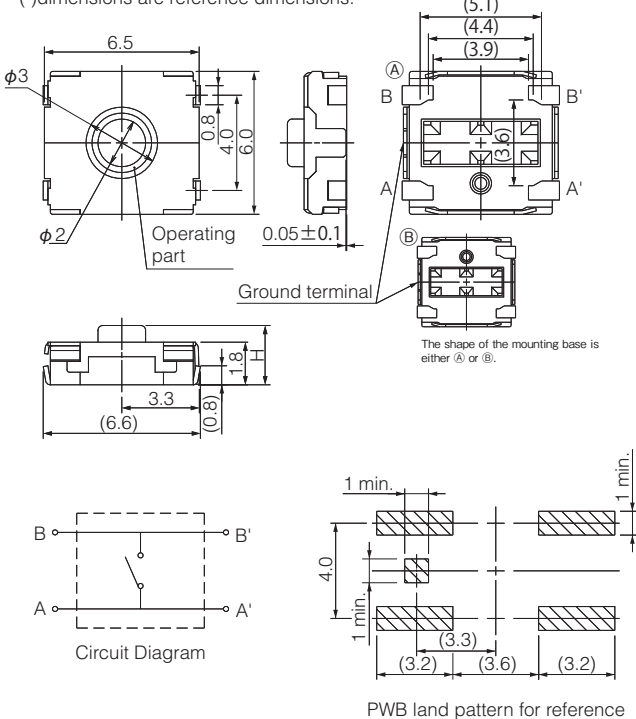
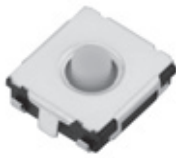
#### ■ Specifications

Travel Type		Short Push Travel	Overstroke Travel
Type		Snap action/Push-on type SPST	
Electrical	Rating	10 $\mu$ A 2 V DC to 20 mA 15 V DC (Resistive load)	
	Contact Resistance	100 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	0.5 N, 0.8 N, 1.0 N, 1.3 N, 1.6 N, 2.6 N, 3.5 N	0.6 N, 1.0 N
	Travel	0.5 N, 0.8 N, 1.0 N 0.2mm 1.3 N, 1.6 N, 2.6 N, 3.5 N 0.25mm	0.30 mm
Endurance	Operating Life	0.5 N, 0.8 N : 2,000,000 cycles min. 1.0 N, 1.3 N, 1.6 N : 1,000,000 cycles min. 2.6 N : 200,000 cycles min. 3.5 N : 100,000 cycles min.	0.6 N : 2,000,000 cycles min. 1.0 N : 1,000,000 cycles min.
Operating Temperature		-40 °C to +85 °C	
Storage Temperature		-40 °C to +85 °C (Bulk) -20 °C to +60 °C (Taping)	
Minimum Quantity/Packing Unit		H=2.0 mm	4,000 pcs. Embossed Taping (Reel Pack)
		H=2.5 mm, 3.1 mm	2,000 pcs. Embossed Taping (Reel Pack)
Quantity/Carton		H=2.0 mm	20,000 pcs.
		H=2.5 mm, 3.1 mm	10,000 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)

No. 1					
EVQP0		(General dimension tolerance : $\pm 0.2$ ) ( ) dimensions are reference dimensions.			
Overstroke travel With J-bent terminals Without Ground Terminal					
					
Part Numbers	Operating Force	H=Height	Push Plate Color	Ground Terminal	Operating Life
EVQP0N02B	0.6 N	2.5 mm	Blue	Without	2,000,000 cycles
EVQP0Q02Q	1.0 N	2.5 mm	Gray	Without	1,000,000 cycles
No. 2					
EVQP0		(General dimension tolerance : $\pm 0.2$ ) ( ) dimensions are reference dimensions.			
Overstroke travel With J-bent terminals With Ground Terminal					
					
Part Numbers	Operating Force	H=Height	Push Plate Color	Ground Terminal	Operating Life
EVQP0P02B	0.6 N	2.5 mm	Blue	With	2,000,000 cycles
EVQP0S02Q	1.0 N	2.5 mm	Gray	With	1,000,000 cycles

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### ■ Dimensions in mm (not to scale)

No. 3

EVQQ2/6Q2

Short travel  
With J-bent terminals  
Without  
Ground Terminal

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

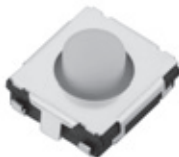
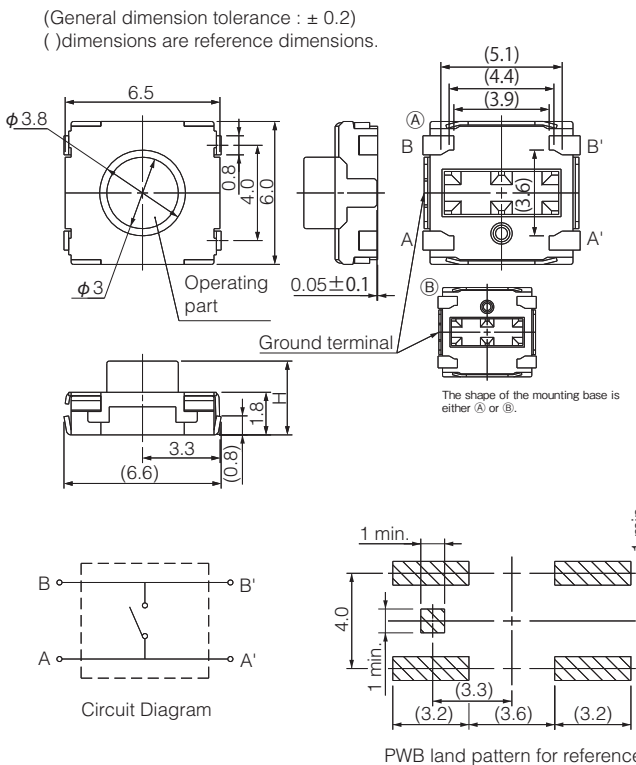
The figure contains several technical drawings of the EVQQ2/6Q2 switch:

- Top View:** A square component with a central circular feature. Dimensions include a width of 6.5, a height of 6.0, a central hole diameter of  $\phi 3$ , and a corner radius of  $\phi 3.8$ . A small dimension of 0.8 is shown near the center.
- Side View:** Shows the profile of the switch with a total height of H, a base thickness of 1.8, and a mounting hole diameter of  $\phi 3$ .
- Bottom View:** Shows the underside of the component with a width of 6.6 and a height of 0.8.
- Circuit Diagram:** A schematic showing a switch with terminals A, A', B, and B'. The switch is shown in the open position.
- PWB land pattern for reference:** A diagram showing the dimensions for the printed wiring board (PWB) land pattern. It includes a central area of 4.0 by 4.0, with side extensions of 3.2 and 3.6, and a minimum spacing of 1 mm.

Part Numbers	Operating Force	H=Height	Push Plate Color	Ground Terminal	Operating Life
EVQQ2B01W	0.5 N	2.0 mm	White	Without	2,000,000 cycles
EVQQ2B02W	0.5 N	2.5 mm	White	Without	2,000,000 cycles
EVQQ2B03W	0.5 N	3.1 mm	White	Without	2,000,000 cycles
EVQ6Q201W	0.8 N	2.0 mm	White	Without	2,000,000 cycles
EVQ6Q202W	0.8 N	2.5 mm	White	Without	2,000,000 cycles
EVQ6Q203W	0.8 N	3.1 mm	White	Without	2,000,000 cycles
EVQQ2F01W	1.0 N	2.0 mm	White	Without	1,000,000 cycles
EVQQ2F02W	1.0 N	2.5 mm	White	Without	1,000,000 cycles
EVQQ2F03W	1.0 N	3.1 mm	White	Without	1,000,000 cycles
EVQQ2K01W	1.3 N	2.0 mm	White	Without	1,000,000 cycles
EVQQ2K02W	1.3 N	2.5 mm	White	Without	1,000,000 cycles
EVQQ2K03W	1.3 N	3.1 mm	White	Without	1,000,000 cycles
EVQQ2P01W	1.6 N	2.0 mm	White	Without	1,000,000 cycles
EVQQ2P02W	1.6 N	2.5 mm	White	Without	1,000,000 cycles
EVQQ2P03W	1.6 N	3.1 mm	White	Without	1,000,000 cycles
EVQQ2U01W	2.6 N	2.0 mm	White	Without	200,000 cycles
EVQQ2U02W	2.6 N	2.5 mm	White	Without	200,000 cycles
EVQQ2U03W	2.6 N	3.1 mm	White	Without	200,000 cycles
EVQQ2Y01W	3.5 N	2.0 mm	White	Without	100,000 cycles
EVQQ2Y02W	3.5 N	2.5 mm	White	Without	100,000 cycles
EVQQ2Y03W	3.5 N	3.1 mm	White	Without	100,000 cycles

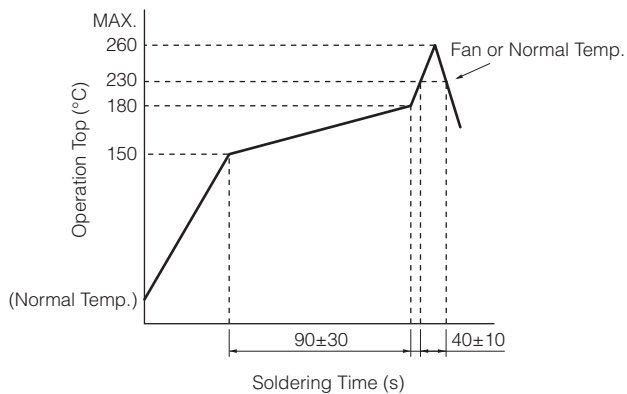
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### ■ Dimensions in mm (not to scale)

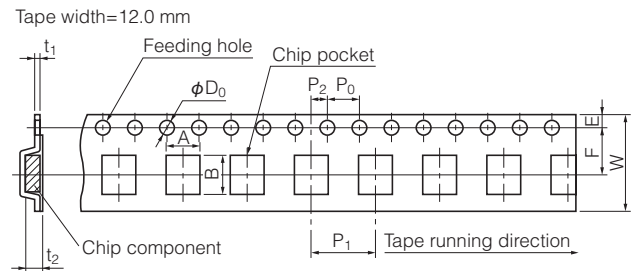
<div>No. 4</div> <div>EVQQ2/7Q2</div> <div>Short travel With J-bent terminals With Ground Terminal</div> <div></div>	<div>(General dimension tolerance : <math>\pm 0.2</math>) ( ) dimensions are reference dimensions.</div> <div></div> <div>The shape of the mounting base is either (A) or (B).</div> <div>Circuit Diagram</div> <div>PWB land pattern for reference</div>				
Part Numbers	Operating Force	H=Height	Push Plate Color	Ground Terminal	Operating Life
EVQQ2D01W	0.5 N	2.0 mm	White	With	2,000,000 cycles
EVQQ2D02W	0.5 N	2.5 mm	White	With	2,000,000 cycles
EVQQ2D03W	0.5 N	3.1 mm	White	With	2,000,000 cycles
EVQ7Q201W	0.8 N	2.0 mm	White	With	2,000,000 cycles
EVQ7Q202W	0.8 N	2.5 mm	White	With	2,000,000 cycles
EVQ7Q203W	0.8 N	3.1 mm	White	With	2,000,000 cycles
EVQQ2H01W	1.0 N	2.0 mm	White	With	1,000,000 cycles
EVQQ2H02W	1.0 N	2.5 mm	White	With	1,000,000 cycles
EVQQ2H03W	1.0 N	3.1 mm	White	With	1,000,000 cycles
EVQQ2M01W	1.3 N	2.0 mm	White	With	1,000,000 cycles
EVQQ2M02W	1.3 N	2.5 mm	White	With	1,000,000 cycles
EVQQ2M03W	1.3 N	3.1 mm	White	With	1,000,000 cycles
EVQQ2S01W	1.6 N	2.0 mm	White	With	1,000,000 cycles
EVQQ2S02W	1.6 N	2.5 mm	White	With	1,000,000 cycles
EVQQ2S03W	1.6 N	3.1 mm	White	With	1,000,000 cycles
EVQQ2W01W	2.6 N	2.0 mm	White	With	200,000 cycles
EVQQ2W02W	2.6 N	2.5 mm	White	With	200,000 cycles
EVQQ2W03W	2.6 N	3.1 mm	White	With	200,000 cycles
EVQQ2201W	3.5 N	2.0 mm	White	With	100,000 cycles
EVQQ2202W	3.5 N	2.5 mm	White	With	100,000 cycles
EVQQ2203W	3.5 N	3.1 mm	White	With	100,000 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.

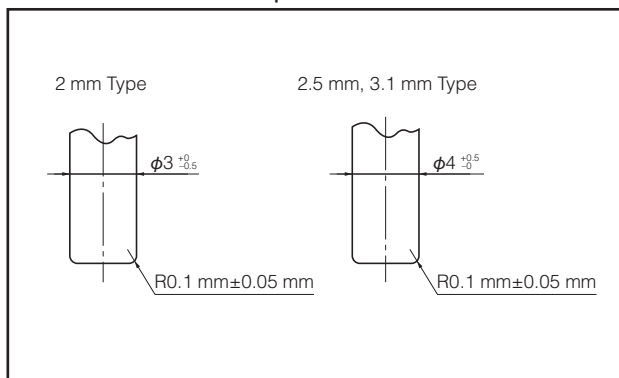
Peeling off strength of top tape : It should be within 0.2N to 1.0N at 165 degree in peeling off angle.

Joint of carrier tape : One joint per one reel may exist.

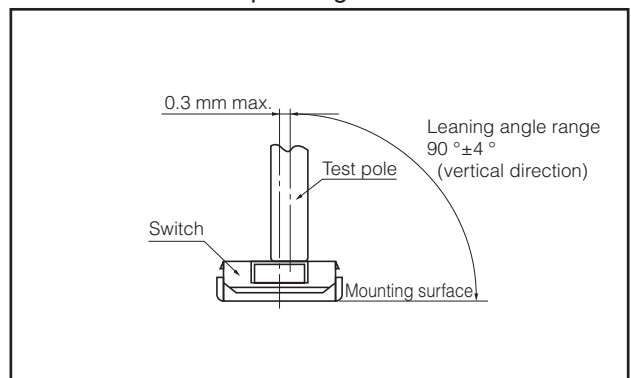
Unit: mm

Part No.	Height	A	B	W	F	E	P <sub>1</sub>	P <sub>2</sub>	P <sub>0</sub>	D <sub>0</sub> Dia	t <sub>1</sub>	t <sub>2</sub>
EVQQ2	2.0	6.7±0.2	7.4±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>	0.30±0.05	2.2±0.2
EVQ6Q2	2.5/3.1											3.2±0.2
EVQ7Q2												2.8±0.2
EVQP0	2.5											

### ■ Recommended Shape of Test Pole



### ■ Recommended Operating Conditions



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