

6 mm Square Thin Type SMD Light Touch Switches

Type: **EVQP0**
EVQQ2



■ 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

1	2	3	4	5	6	7	8	9
E	V	Q	P/Q	0/2				
Product Code			Type Operating Force Ground Terminal		Product Height		Push Plate Color	

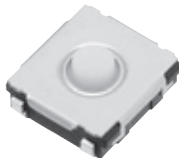
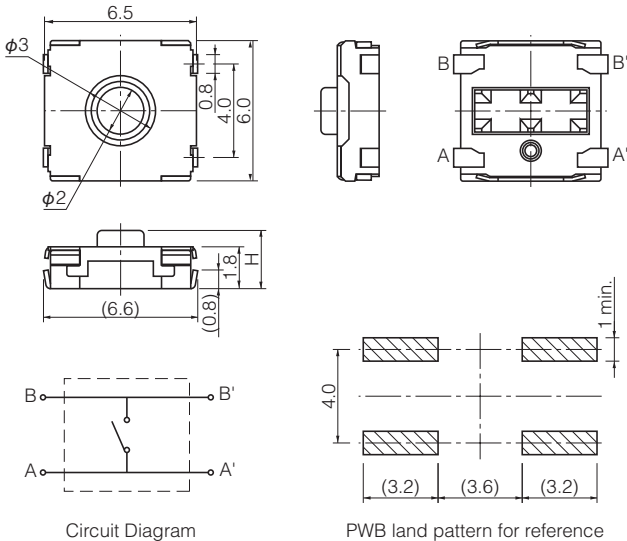
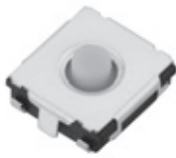
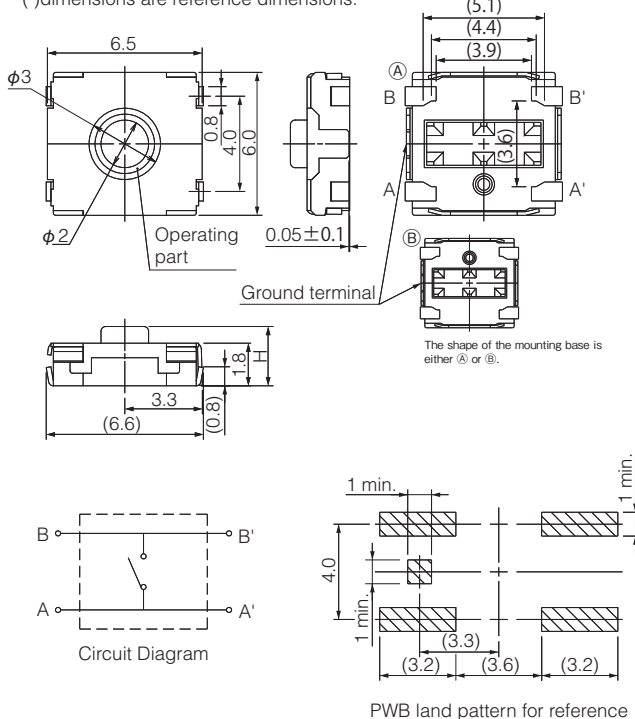
■ Specifications

Travel Type		Short Push Travel	Overstroke Travel
Type		Snap action/Push-on type SPST	
Electrical	Rating	10 μ A 2 V DC to 20 mA 15 V DC (Resistive load)	
	Contact Resistance	100 m Ω max.	
	Insulation Resistance	100 M Ω 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, 1.0 N, 1.3 N, 1.6 N, 2.6 N, 3.5 N	0.6 N, 1.0 N
	Travel	0.25 mm (0.20 mm : 0.5N, 1.0N)	0.30 mm
Endurance	Operating Life	0.5 N : 2,000,000 cycles min. 1.0 N, 1.3 N, 1.6 N : 1,000,000 cycles min. 2.6 N : 2,000,00 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 Overstroke travel : 0.30 mm With J-bent terminals Without Ground Terminal 		(General dimension tolerance : ± 0.2) () dimensions are reference dimensions.  Circuit Diagram PWB land pattern for reference				
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 Overstroke travel : 0.30 mm With J-bent terminals With Ground Terminal 		(General dimension tolerance : ± 0.2) () dimensions are reference dimensions.  Circuit Diagram PWB land pattern for reference				
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

Short travel 0.25 mm
With J-bent terminals
Without
Ground Terminal

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

The figure contains several technical drawings:

- Top View:** Shows a square component with a central circular feature. Dimensions include a width of 6.5 mm, a height of 6.0 mm, a central hole diameter of $\phi 3$, and a mounting hole diameter of $\phi 3.8$. A small dimension of 0.8 mm is also indicated.
- Side View:** Shows the profile of the switch with a total height of H mm, a base thickness of 1.8 mm, and a mounting tab width of 0.8 mm. A reference dimension of (6.6) mm is shown for the base width.
- Circuit Diagram:** A schematic showing a single switch with terminals A, A', B, and B'.
- PWB land pattern for reference:** A diagram showing the footprint on a printed wiring board. It includes a central 4.0 mm wide area and three side pads with widths of (3.2) mm, (3.6) mm, and (3.2) mm. A minimum spacing of 1 mm is indicated between the pads.

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
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)

No. 4

EVQQ2

Short travel 0.25 mm
With J-bent terminals
With
Ground Terminal

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

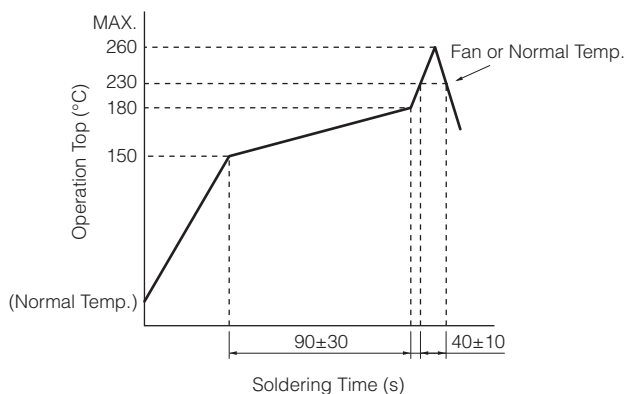
Circuit Diagram

PWB land pattern for reference

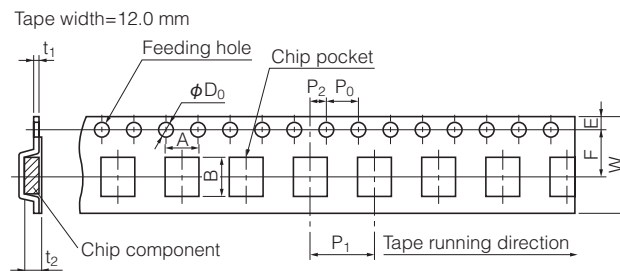
Part Numbers	Operating Force	H=Height	Push Plate Color	Ground Terminal	Operating Life
EVQQ2D01W	0.5 N	2.0 mm	White	With	2,000,000 cycles
EVQQ2D02W	0.5 N	2.5 mm	White	With	2,000,000 cycles
EVQQ2D03W	0.5 N	3.1 mm	White	With	2,000,000 cycles
EVQQ2H01W	1.0 N	2.0 mm	White	With	1,000,000 cycles
EVQQ2H02W	1.0 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.

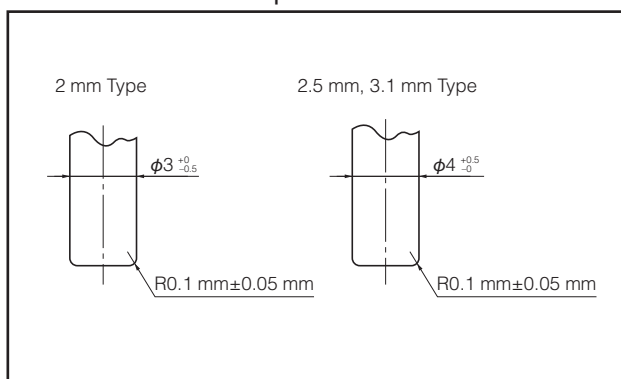
Peeling off strength of top tape : It should be within 0.2N to 1.0N at 165 degree in peeling off angle.

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

Unit: mm

Part No.	Height	A	B	W	F	E	P_1	P_2	P_0	D_0 Dia	t_1	t_2
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 $^{+0.1}_{-0}$	0.30±0.05	2.2±0.2
	2.5/3.1											3.2±0.2
EVQP0	2.5											2.8±0.2

■ Recommended Shape of Test Pole



■ Recommended Operating Conditions

