

6.0 mm Square Reflow Light Touch Switches

Japan

Type: **EVQP0**
EVQQ2



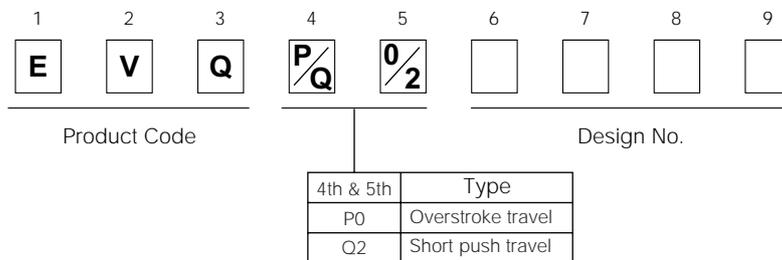
■ Features

- Easy operation with push plate
- Wide product variety: With or without ground terminal, height, operating force
- Overstroke travel

■ Recommended Applications

- Control panels of home electrical appliances
- Operation switches for PC mouse

■ Explanation of Part Numbers



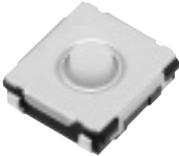
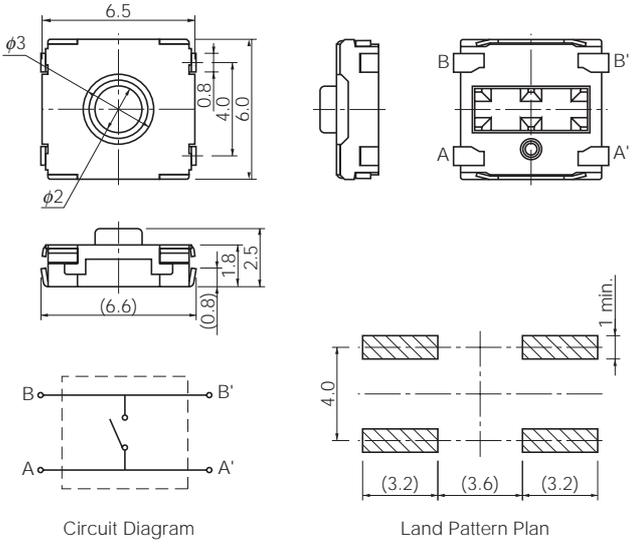
■ Specifications

Type		Snap action/Push-on type SPST	
Electrical	Rating	20 mA 15 Vdc max. (Resistive load)	
	Contact Resistance	100 mΩ max.	
	Insulation Resistance	100 MΩ min. (at 100 Vdc)	
	Dielectric Withstanding Voltage	250 Vac for 1 minute	
	Bouncing	10 ms max. (ON, OFF)	
Mechanical	Operating Force	EVQP0	0.6 N, 1.0 N
		EVQQ2	0.5 N, 1.0 N, 1.3 N, 1.6 N, 2.6 N, 3.5 N, 5.0 N
	Travel	Short push travel 0.25 mm, Overstroke travel 0.35 mm	
Endurance	Operating Life	EVQP0	0.6 N : 2000000 cycles min. 1.0 N : 1000000 cycles min.
		EVQQ2	0.5 N : 2000000 cycles min. 1.0 N, 1.3 N, 1.6 N : 1000000 cycles min. 2.6 N : 200000 cycles min. 3.5 N : 100000 cycles min. 5.0 N : 30000 cycles min.
	Operating Temperature	-20 °C to +70 °C (45 % to 85 % RH)	
	Storage Temperature	-40 °C to +85 °C (Bulk) -20 °C to +60 °C (Taping)	
Minimum Quantity/Packing Unit		H=2.0 mm	4000 pcs. Embossed Taping (Reel Pack)
		H=2.5 mm, 3.1 mm	2000 pcs. Embossed Taping (Reel Pack)
Quantity/Carton		H=2.0 mm	20000 pcs.
		H=2.5 mm, 3.1 mm	10000 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.

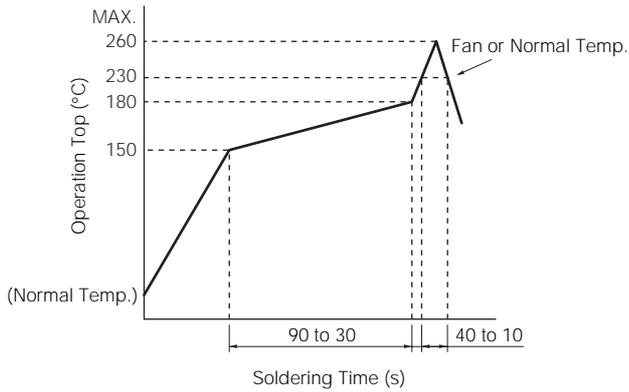
■ Dimensions in mm (not to scale)

<p>No. 1</p> <p>EVQP0</p> <p>Overstroke travel : 0.35 mm With J-bent terminals</p> 	 <p>The technical drawings include: a top view showing a square push plate with a diameter of 6.5 mm and a central circular feature with a diameter of 2.0 mm; a side view showing a height of 2.5 mm and a base diameter of 6.6 mm; a circuit diagram showing a single switch with terminals A, A', B, and B'; and a land pattern plan showing a 4.0 mm wide area with three 3.2 mm wide pads and a 3.6 mm wide central gap.</p>				
<p>Part Numbers</p>	<p>Operating Force</p>	<p>Height</p>	<p>Push Plate Color</p>	<p>Ground Terminal</p>	<p>Operating Life</p>
<p>EVQP0N02B</p>	<p>0.6 N</p>	<p>2.5 mm</p>	<p>Blue</p>	<p>Without</p>	<p>2000000 cycles</p>
<p>EVQP0P02B</p>	<p>0.6 N</p>	<p>2.5 mm</p>	<p>Blue</p>	<p>With</p>	<p>2000000 cycles</p>
<p>EVQP0Q02Q</p>	<p>1.0 N</p>	<p>2.5 mm</p>	<p>Blue</p>	<p>Without</p>	<p>1000000 cycles</p>
<p>EVQP0S02Q</p>	<p>1.0 N</p>	<p>2.5 mm</p>	<p>Blue</p>	<p>With</p>	<p>1000000 cycles</p>

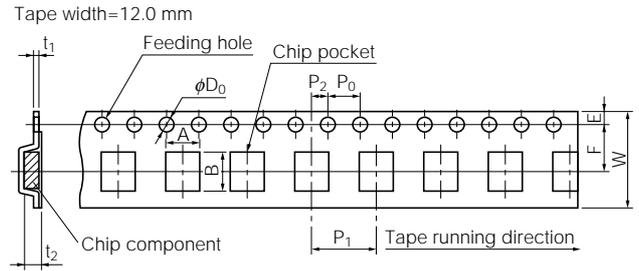
■ Dimensions in mm (not to scale)

No. 2												
EVQQ2 Short push travel : 0.25 mm With J-bent terminals							<table border="1"> <thead> <tr> <th>Height</th> </tr> </thead> <tbody> <tr> <td>H</td> </tr> <tr> <td>2.0±0.2</td> </tr> <tr> <td>2.5±0.2</td> </tr> <tr> <td>3.1±0.2</td> </tr> </tbody> </table>	Height	H	2.0±0.2	2.5±0.2	3.1±0.2
Height												
H												
2.0±0.2												
2.5±0.2												
3.1±0.2												
		<p>Circuit Diagram</p>		<p>Land Pattern Plan</p>								
Part Numbers	Operating Force	H=Height	Push Plate Color	Ground Terminal	Operating Life							
EVQQ2B01W	0.5 N	2.0 mm	White	Without	200000 cycles							
EVQQ2B02W	0.5 N	2.5 mm	White	Without	200000 cycles							
EVQQ2B03W	0.5 N	3.1 mm	White	Without	200000 cycles							
EVQQ2D01W	0.5 N	2.0 mm	White	With	200000 cycles							
EVQQ2D02W	0.5 N	2.5 mm	White	With	200000 cycles							
EVQQ2D03W	0.5 N	3.1 mm	White	With	200000 cycles							
EVQQ2F01W	1.0 N	2.0 mm	White	Without	100000 cycles							
EVQQ2F02W	1.0 N	2.5 mm	White	Without	100000 cycles							
EVQQ2F03W	1.0 N	3.1 mm	White	Without	100000 cycles							
EVQQ2H01W	1.0 N	2.0 mm	White	With	100000 cycles							
EVQQ2H02W	1.0 N	2.5 mm	White	With	100000 cycles							
EVQQ2H03W	1.0 N	3.1 mm	White	With	100000 cycles							
EVQQ2K01W	1.3 N	2.0 mm	White	Without	100000 cycles							
EVQQ2K02W	1.3 N	2.5 mm	White	Without	100000 cycles							
EVQQ2K03W	1.3 N	3.1 mm	White	Without	100000 cycles							
EVQQ2M01W	1.3 N	2.0 mm	White	With	100000 cycles							
EVQQ2M02W	1.3 N	2.5 mm	White	With	100000 cycles							
EVQQ2M03W	1.3 N	3.1 mm	White	With	100000 cycles							
EVQQ2P01W	1.6 N	2.0 mm	White	Without	100000 cycles							
EVQQ2P02W	1.6 N	2.5 mm	White	Without	100000 cycles							
EVQQ2P03W	1.6 N	3.1 mm	White	Without	100000 cycles							
EVQQ2S01W	1.6 N	2.0 mm	White	With	100000 cycles							
EVQQ2S02W	1.6 N	2.5 mm	White	With	100000 cycles							
EVQQ2S03W	1.6 N	3.1 mm	White	With	100000 cycles							
EVQQ2U01W	2.6 N	2.0 mm	White	Without	200000 cycles							
EVQQ2U02W	2.6 N	2.5 mm	White	Without	200000 cycles							
EVQQ2U03W	2.6 N	3.1 mm	White	Without	200000 cycles							
EVQQ2W01W	2.6 N	2.0 mm	White	With	200000 cycles							
EVQQ2W02W	2.6 N	2.5 mm	White	With	200000 cycles							
EVQQ2W03W	2.6 N	3.1 mm	White	With	200000 cycles							
EVQQ2Y01W	3.5 N	2.0 mm	White	Without	100000 cycles							
EVQQ2Y02W	3.5 N	2.5 mm	White	Without	100000 cycles							
EVQQ2Y03W	3.5 N	3.1 mm	White	Without	100000 cycles							
EVQQ2201W	3.5 N	2.0 mm	White	With	100000 cycles							
EVQQ2202W	3.5 N	2.5 mm	White	With	100000 cycles							
EVQQ2203W	3.5 N	3.1 mm	White	With	100000 cycles							

Recommended Reflow Soldering Conditions



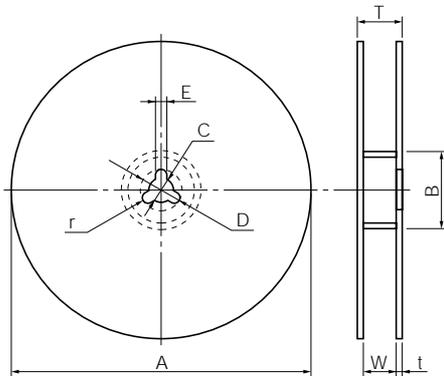
Embossed Carrier Taping



Unit: mm

Part No.	Height	A	B	W	F	E	P1	P2	P0	D0 Dia	t1	t2
EVQP0, EVQQ2	2.0	6.7±0.2	7.5±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 ^{+0.1}	0.30±0.05	2.2±0.2
	2.5/3.1											3.2±0.2

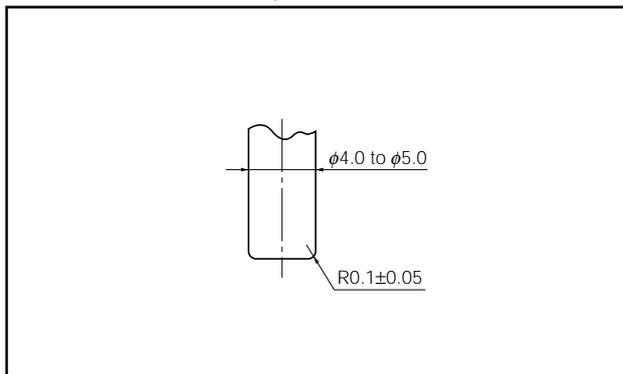
Standard Reel Dimensions in mm (not to scale)



Item	A	B	C	D	E
Rate (mm)	φ380.0±2.0	φ80.0±1.0	φ13.0±0.2	φ21.0±0.8	2.0±0.5

Item	W	T	t	r
Rate (mm)	13.5±1.0	17.5±1.0	—	—

Recommended Shape of Test Pole



Recommended Operating Conditions

