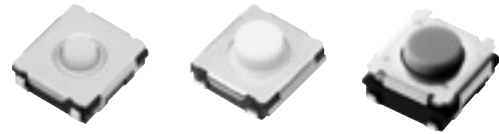


6 mm Square Thin Type SMD Light Touch Switches 6mm Square Middle Travel SMD Light Touch Switch

Type: **EVQP0**
EVQQ2
EVPBF



■ Features

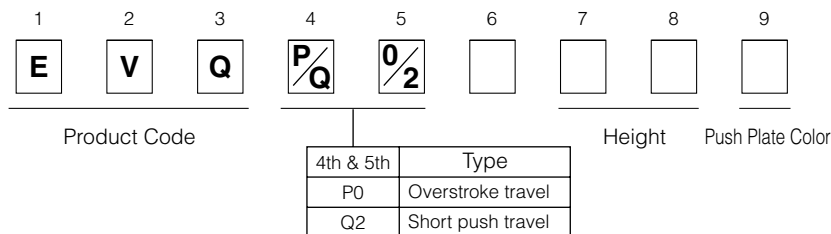
- External dimensions : 6.5 mm×6.0 mm, Height 1.8 mm (Excluding the push plate)
- External dimensions : 6.0 mm×6.0 mm, Height 2.5 mm (Excluding the push plate, Middle Travel)
- With or without ground terminal, height, operating force
- Overstroke travel
- Middlestroke travel type

■ Recommended Applications

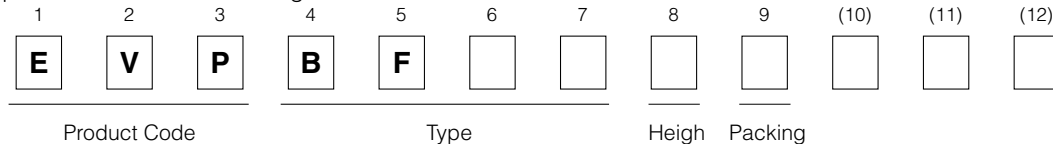
- Operating switches for other electronic equipment
- Operation switches for PC mouse
- Car audio systems
- Game

■ Explanation of Part Numbers

6 mm Square Thin Type SMD Light Touch Switches



6mm Square Middle Travel SMD Light Touch Switch



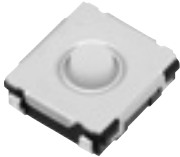
■ Specifications

Travel Type		Short Push Travel	Overstroke Travel	Middlestroke Travel
Type		Snap action/Push-on type SPST		
Electrical	Rating	10 μ A 2 Vdc to 20 mA 15 Vdc (Resistive load)		
	Contact Resistance	100 m Ω max.		500 m Ω max.
	Insulation Resistance	100 M Ω min. (at 100 Vdc)		
	Dielectric Withstanding Voltage	250 Vac 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	2.0 N
	Travel	0.25 mm (0.2 mm : 0.5N, 1.0N)	0.3 mm	0.25 mm
Endurance	Operating Life	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.	0.6 N : 2000000 cycles min. 1.0 N : 1000000 cycles min.	1000000 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 4000 pcs. Embossed Taping (Reel Pack)	H=3.5mm 3000 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.	15000 pcs.	
		H=2.5 mm, 3.1 mm 10000 pcs.		

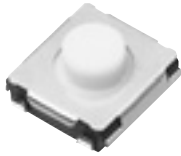
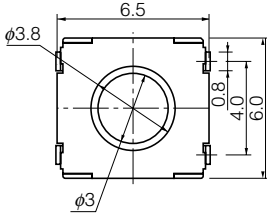
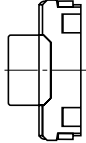
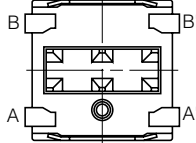
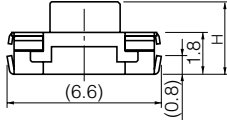
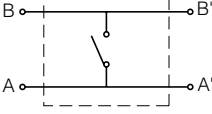
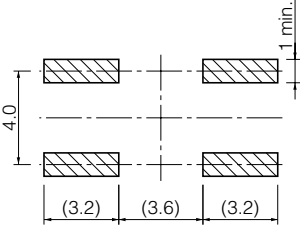
Note: Non washable

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.

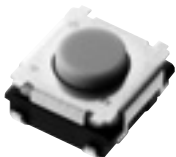
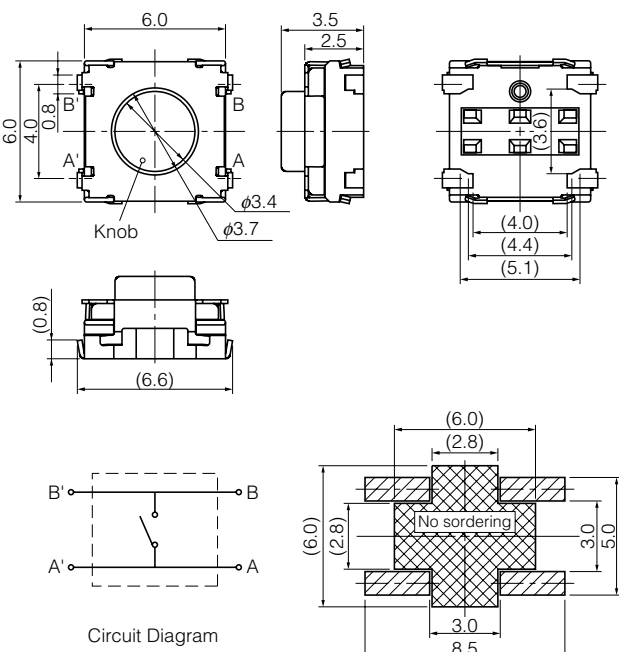
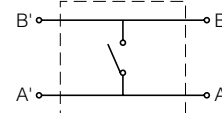
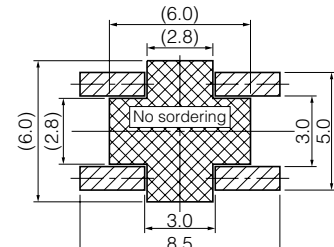





■ Dimensions in mm (not to scale)

<p>No. 1</p> <p>EVQP0</p> <p>Overstroke travel : 0.3 mm With J-bent terminals</p> 	<p>(General dimension tolerance : ± 0.2) () dimensions are reference dimensions.</p> <p>Circuit Diagram</p> <p>PWB land pattern for reference</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>Gray</p>	<p>Without</p>	<p>1000000 cycles</p>
<p>EVQP0S02Q</p>	<p>1.0 N</p>	<p>2.5 mm</p>	<p>Gray</p>	<p>With</p>	<p>1000000 cycles</p>

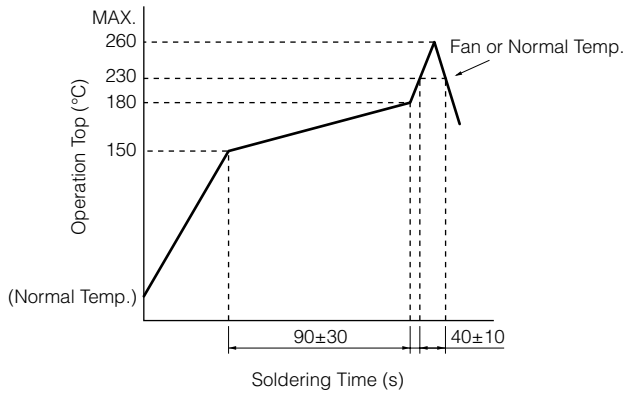
■ Dimensions in mm (not to scale)

No. 2						Height					
EVQQ2 Short travel 0.25 mm With J-bent terminals		(General dimension tolerance : ± 0.2) () dimensions are reference dimensions.				<table border="1"> <tr><th>H</th></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> </table>		H	2.0±0.2	2.5±0.2	3.1±0.2
		H									
2.0±0.2											
2.5±0.2											
3.1±0.2											
											
											
		Circuit Diagram		PWB land pattern for reference							
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						

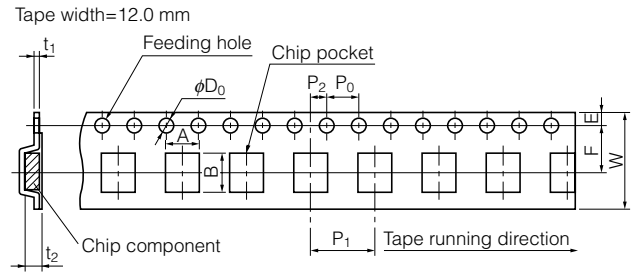
■ 形状寸法 (mm)

<p>No. 3</p> <p>EVPBF</p> <p>Middlestroke Travel 0.25 mm With J-bent terminals</p> 	<p>(General dimension tolerance : ± 0.2) () dimensions are reference dimensions.</p>  <p>Circuit Diagram</p>  <p>PWB land pattern for reference</p>  <p>  : Recommended land pattern area.  : No soldering area. </p> <ul style="list-style-type: none"> • Any land pattern or via holes shall not be provided at  area. • If it's necessary to design land pattern or via holes at  area, please apply resist to them to protect their metal part completely. • If their metal parts are not protected completely, short circuit failure may occur by solder ball. • Beside, there should be convexoconcave by designing additional pattern, it may cause switch tilt, influence on solder-ability or flux intrusion after reflow soldering. • Therefore, please study any influence of additional land pattern or via holes at  area in advance. 				
Part Numbers	Operating Force	Height	Push Plate Color	Ground Terminal	Operating Life
EVPBFAC1A000	2.0 N	3.5 mm	Gray	Without	1000000 cycles

Recommended Reflow Soldering Conditions



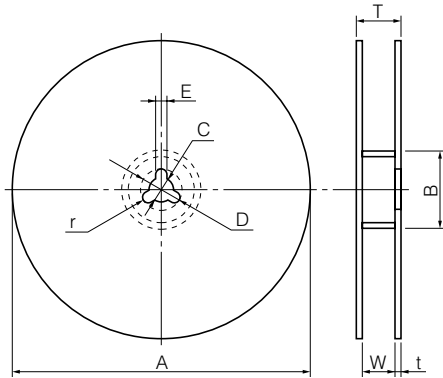
Embossed Carrier Taping



Unit: mm

Part No.	Height	A	B	W	F	E	P1	P2	P0	D0 Dia	t1	t2
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}	0.30±0.05	2.2±0.2
	2.5/3.1											3.2±0.2
EVQP0	2.5											2.8±0.2
EVPBF	3.5											3.7±0.1

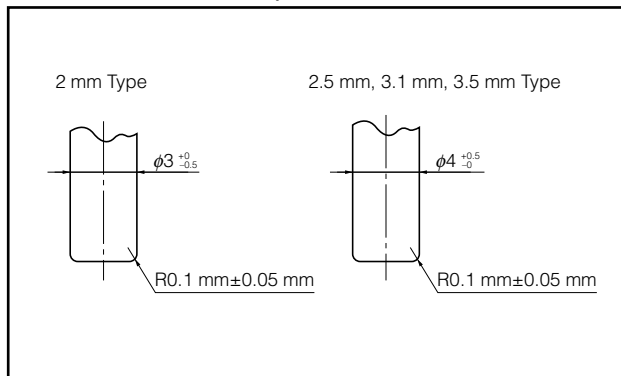
Standard Reel Dimensions in mm (not to scale)



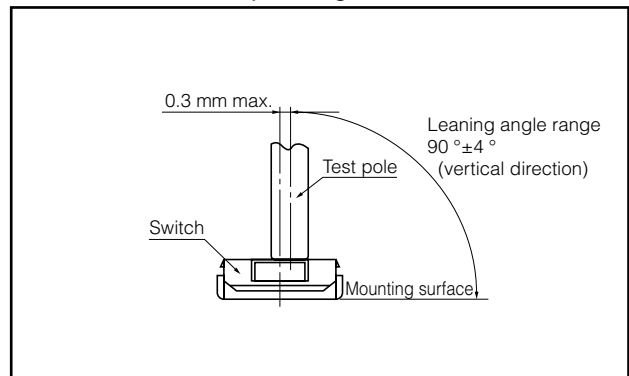
Item	A	B	C	D	E
Rate (mm)	φ380.0±2.0	φ80.0±1.0	φ13.0±0.5	φ21.0±1.0	2.0±0.5

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

Recommended Shape of Test Pole



Recommended Operating Conditions



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