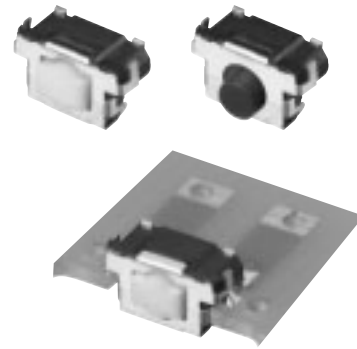


### 6.2 mm×2.5 mm Side-operational Edge Mount / SMD Light Touch Switches

Type: **EVQP4/EVQP8**



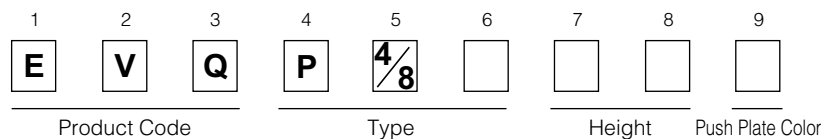
#### ■ Features

- External dimensions : 6.2 mm×2.55 mm (Excluding the push plate), Height 3.5 mm (EVQP4 Type : Printed circuit board being as low as 1.35 mm)
- Side-operational middle stroke type ( 0.7 mm ) with a high operating force (5.0 N)
- Improved soldering strength in the operating direction when mounted on PC board edge

#### ■ Recommended Applications

- Operation switches for portable electronic equipment (Mobile phones, Digital still cameras, Camcorders, Portable audio players, etc.)
- Keyless entry (car electronics)
- Car audio equipment

#### ■ Explanation of Part Numbers


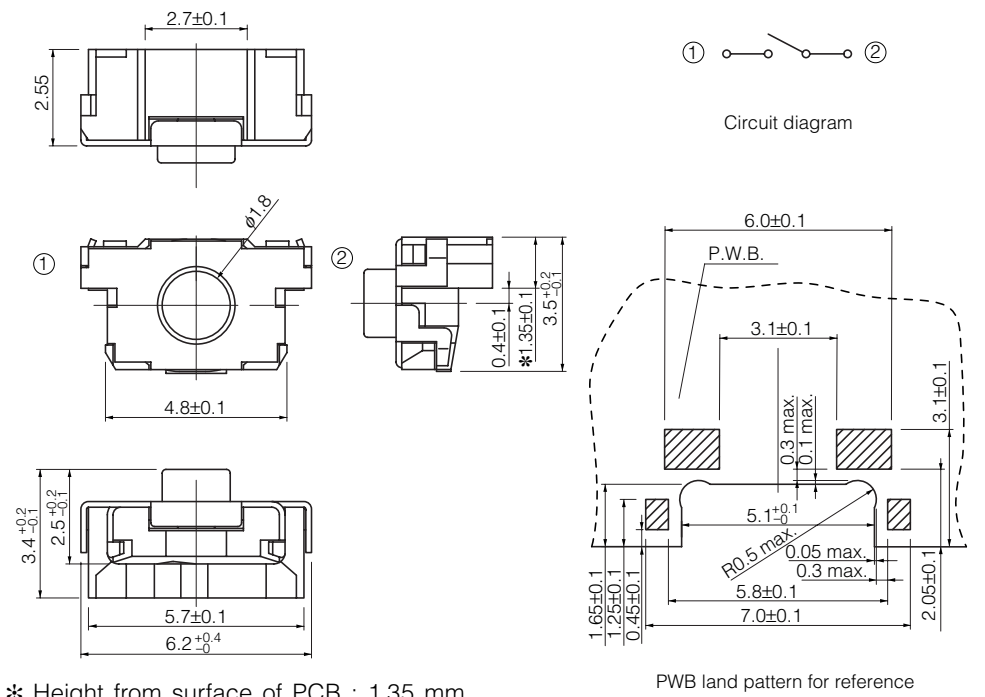

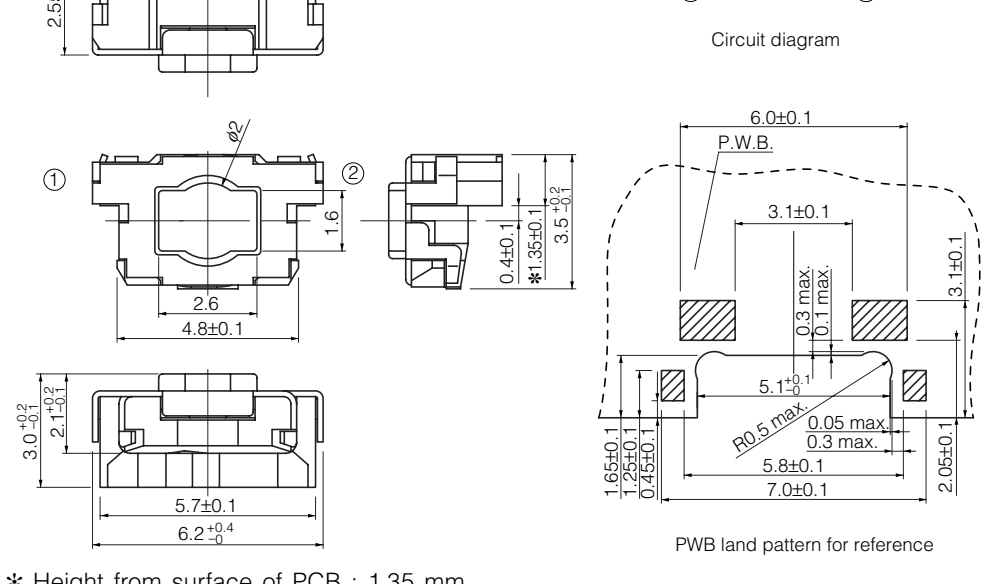


#### ■ Specifications

Travel Type		Middle Push Travel	Short Push Travel
Type		Snap action / Push-on type SPST	
Electrical	Rating	10 $\mu$ A 2 Vdc to 20 mA 15 Vdc (Resistive load)	
	Contact Resistance	100 m $\Omega$ max.	
	Insulation Resistance	100 M $\Omega$ min. (at 100 Vdc)	
	Dielectric Withstanding Voltage	250 Vac (1 minute)	
	Bouncing	10 ms max. (ON, OFF)	
Mechanical	Operating Force	2.5 N, 3.5 N, 5.0 N	1.0 N, 1.6 N, 2.4 N, 3.5 N
	Travel	0.70 mm±0.2 mm	0.25 mm <sup>+0.05</sup> / <sub>-0.15</sub> mm
	Push Strength	50 N (1 minute)	
Endurance	Operating Life	2.5 N: 1000000 cycles min.	1.0 N, 1.6 N: 1000000 cycles min.
		3.5 N: 500000 cycles min.	2.4 N: 500000 cycles min.
		5.0 N: 200000 cycles min.	3.5 N: 200000 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		2500 pcs. Embossed Taping (Reel Pack)	
Quantity/Carton		12500 pcs.	


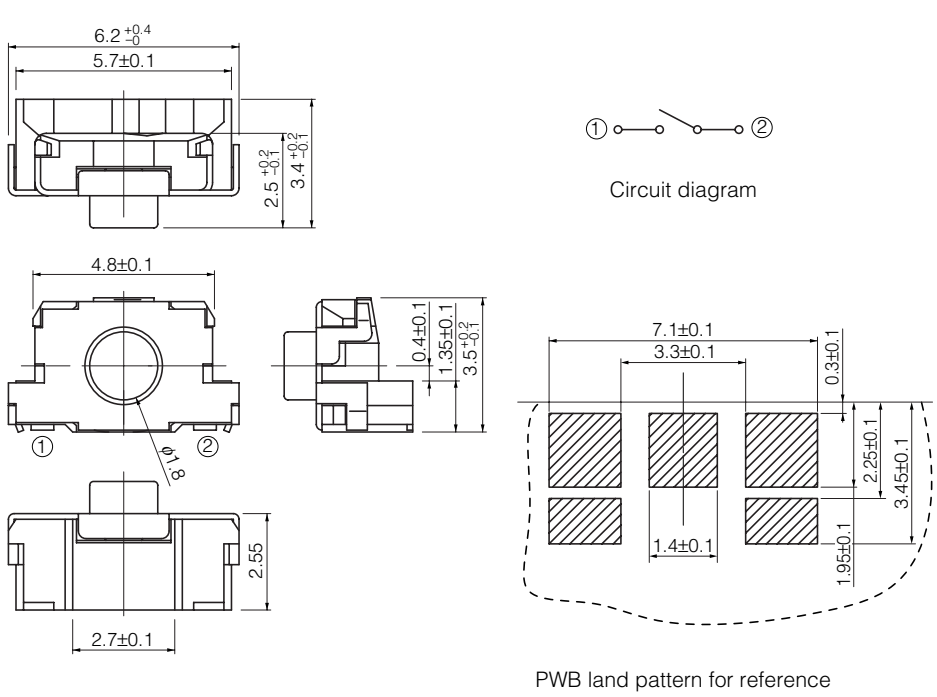

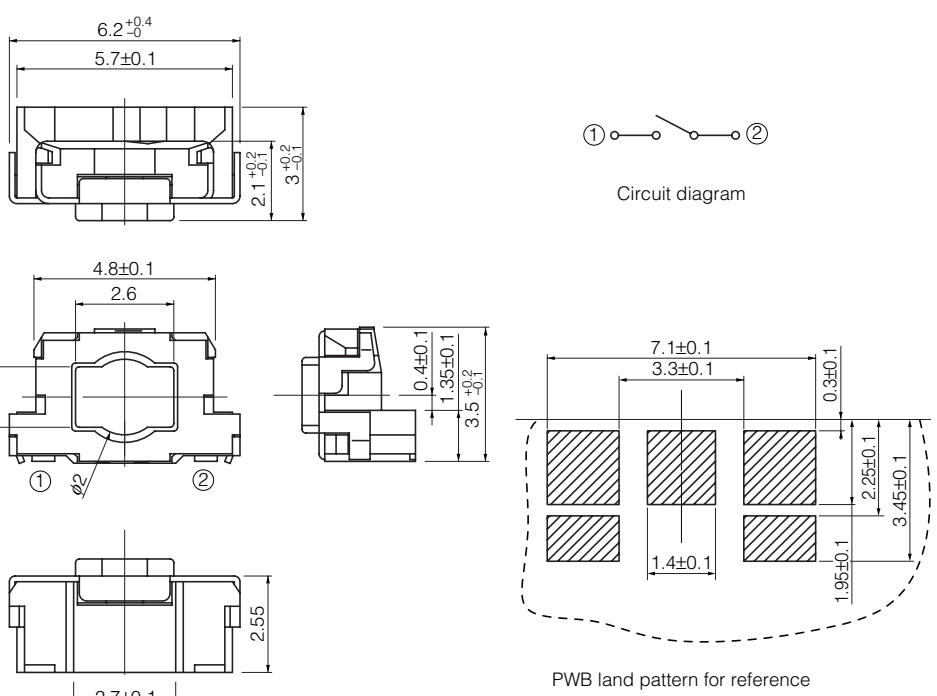
Design and specifications are each subject to change without notice. Ask factory for the current technical specifications before purchase and/or use. Should a safety concern arise regarding this product, please be sure to contact us immediately.

■ Dimensions in mm (not to scale)

<p>No. 1</p> <p>EVQP4</p> <p>Middle push travel</p> 	 <p>* Height from surface of PCB : 1.35 mm</p>			
<p>Part Numbers</p>	<p>Operating Force</p>	<p>Height</p>	<p>Push Plate Color</p>	<p>Operating Life</p>
<p>EVQP4HB3B</p>	<p>2.5 N</p>	<p>3.5 mm</p>	<p>Blue</p>	<p>1000000 cycles</p>
<p>EVQP4KB3Q</p>	<p>3.5 N</p>	<p>3.5 mm</p>	<p>Grey</p>	<p>500000 cycles</p>
<p>EVQP4MB3K</p>	<p>5.0 N</p>	<p>3.5 mm</p>	<p>Black</p>	<p>200000 cycles</p>
<p>No. 2</p> <p>EVQP4</p> <p>Short push travel</p> 	 <p>* Height from surface of PCB : 1.35 mm</p>			
<p>Part Numbers</p>	<p>Operating Force</p>	<p>Height</p>	<p>Push Plate Color</p>	<p>Operating Life</p>
<p>EVQP40B3M</p>	<p>1.0 N</p>	<p>3.5 mm</p>	<p>Natural</p>	<p>1000000 cycles</p>
<p>EVQP42B3M</p>	<p>1.6 N</p>	<p>3.5 mm</p>	<p>Natural</p>	<p>1000000 cycles</p>
<p>EVQP44B3M</p>	<p>2.4 N</p>	<p>3.5 mm</p>	<p>Natural</p>	<p>500000 cycles</p>
<p>EVQP46B3M</p>	<p>3.5 N</p>	<p>3.5 mm</p>	<p>Natural</p>	<p>200000 cycles</p>

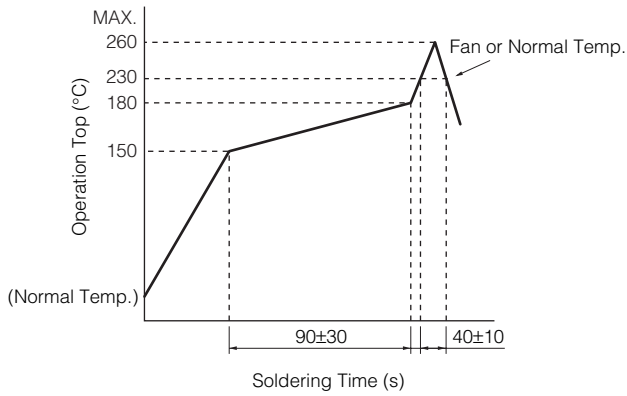
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■ Dimensions in mm (not to scale)

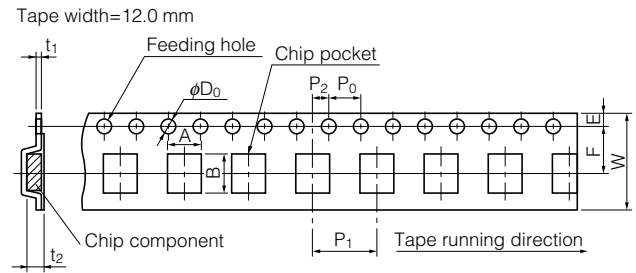
<p>No. 3</p> <p>EVQP8</p> <p>Middle push travel</p> 	 <p>Circuit diagram</p> <p>PWB land pattern for reference</p>			
<p>Part Numbers</p>	<p>Operating Force</p>	<p>Height</p>	<p>Push Plate Color</p>	<p>Operating Life</p>
<p>EVQP8H03B</p>	<p>2.5 N</p>	<p>3.5 mm</p>	<p>Blue</p>	<p>1000000 cycles</p>
<p>EVQP8K03Q</p>	<p>3.5 N</p>	<p>3.5 mm</p>	<p>Grey</p>	<p>500000 cycles</p>
<p>EVQP8M03K</p>	<p>5.0 N</p>	<p>3.5 mm</p>	<p>Black</p>	<p>200000 cycles</p>
<p>No. 4</p> <p>EVQP8</p> <p>Short push travel</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>Operating Life</p>
<p>EVQP8003M</p>	<p>1.0 N</p>	<p>3.5 mm</p>	<p>Natural</p>	<p>1000000 cycles</p>
<p>EVQP8203M</p>	<p>1.6 N</p>	<p>3.5 mm</p>	<p>Natural</p>	<p>1000000 cycles</p>
<p>EVQP8403M</p>	<p>2.4 N</p>	<p>3.5 mm</p>	<p>Natural</p>	<p>500000 cycles</p>
<p>EVQP8603M</p>	<p>3.5 N</p>	<p>3.5 mm</p>	<p>Natural</p>	<p>200000 cycles</p>

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### ■ Recommended Reflow Soldering Conditions



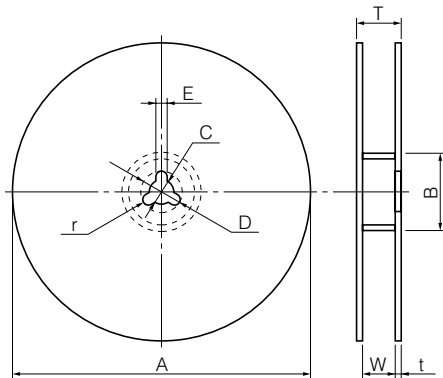
### ● Embossed Carrier Taping



Unit: mm

Part No.	Height	A	B	W	F	E	$P_1$	$P_2$	$P_0$	$D_0$ Dia.	$t_1$	$t_2$
EVQP4	3.5	6.5±0.2	3.9±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>	0.4±0.1	3.75±0.20
EVQP8			3.65±0.20									

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



Item	A	B	C	D	E
Rate (mm)	$\phi 370.0 \pm 2.0$	$\phi 50.0$ min.	$\phi 13.0 \pm 0.5$	$\phi 21.0 \pm 1.0$	2.0±0.5

Item	W	T	t	r
Rate (mm)	14.0±1.5	—	1.0 to 3.0	1.0±0.5