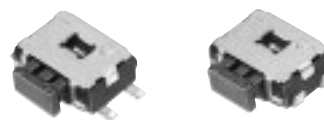


### Small-sized Side-operational SMD Light Touch Switches

Type: **EVQPU**



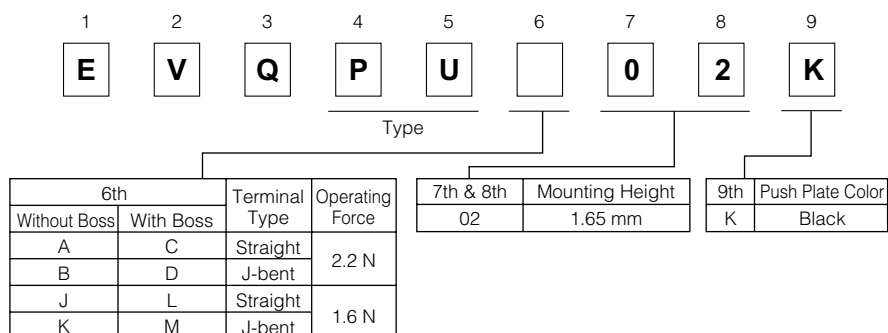
#### ■ Features

- External dimensions : 4.7 mm×3.5 mm, Height 1.65 mm
- A wide range of terminal type : J-bent, Straight

#### ■ Recommended Applications

- Car navigation, Car audio

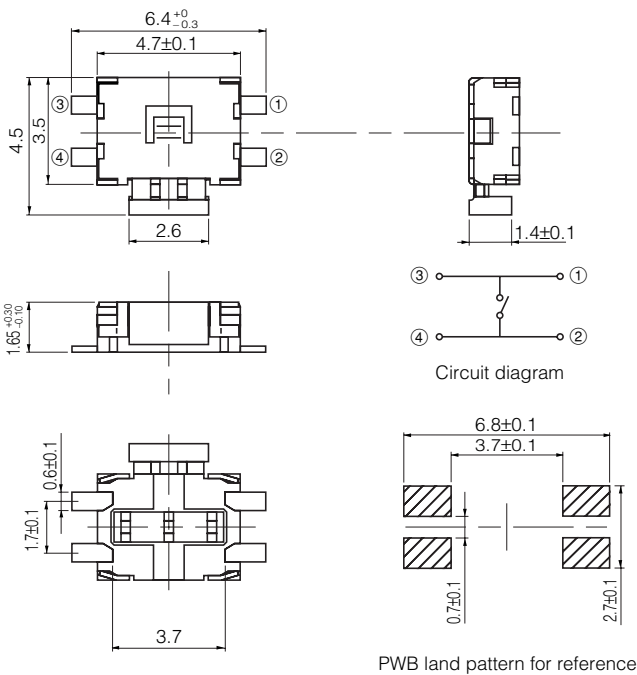
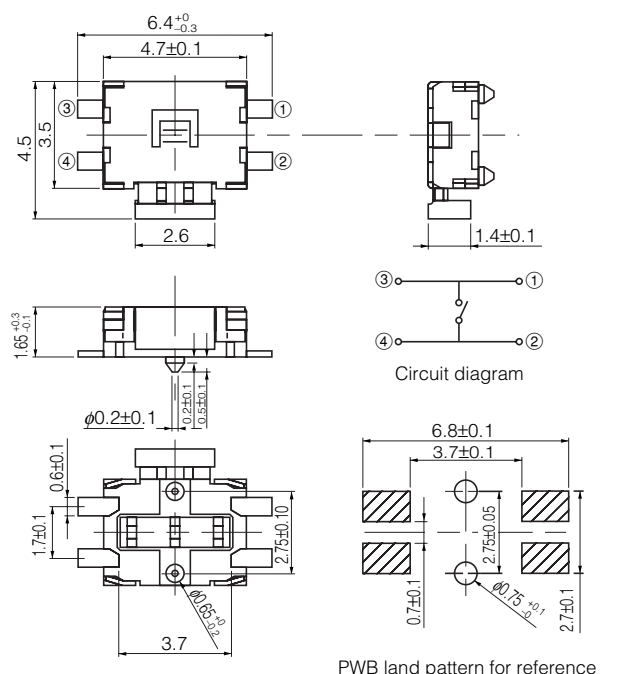
#### ■ Explanation of Part Numbers



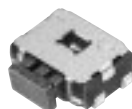
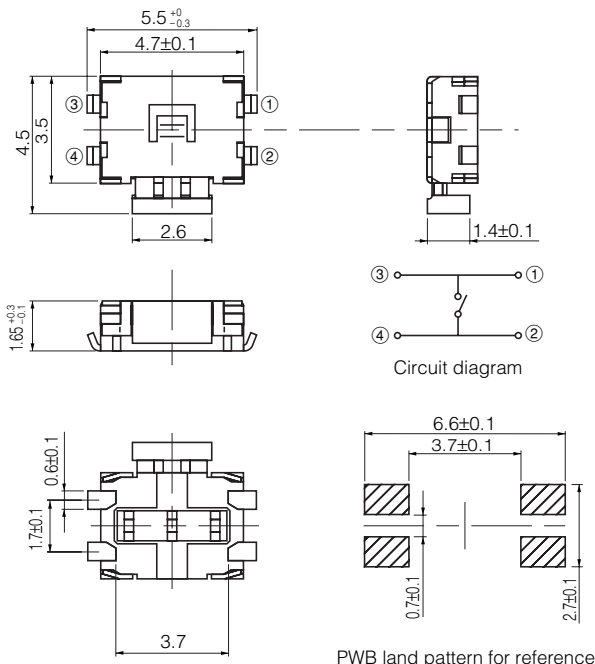
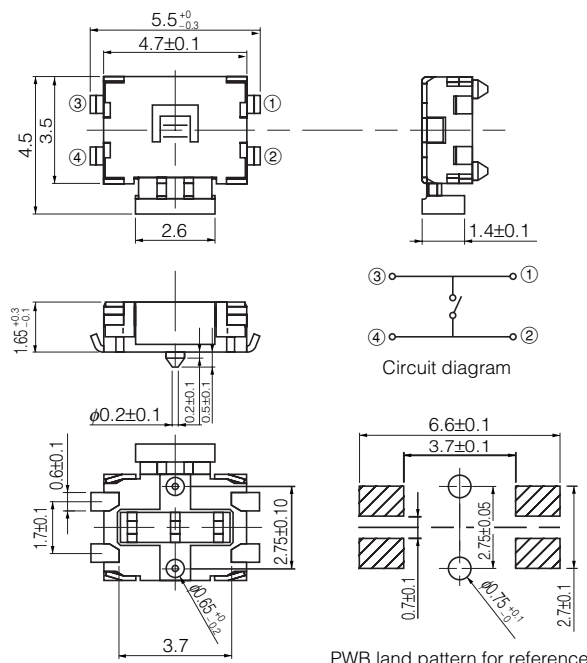
#### ■ Specifications

|                               |                                 |                                                   |
|-------------------------------|---------------------------------|---------------------------------------------------|
| Type                          | Snap action / Push-on type SPST |                                                   |
| Electrical                    | Rating                          | 10 $\mu$ A 2 Vdc to 50 mA 12 Vdc (Resistive load) |
|                               | Contact Resistance              | 500 m $\Omega$ max.                               |
|                               | Insulation Resistance           | 100 M $\Omega$ min. (at 100 Vdc)                  |
|                               | Dielectric Withstanding Voltage | 250 Vac for 1 minute                              |
|                               | Bouncing                        | 10 ms max. (ON, OFF)                              |
| Mechanical                    | Operating Force                 | 1.6 N <sup>+0.7</sup> <sub>-0.4</sub> N           |
|                               | Travel                          | 0.3 mm <sup>+0.1</sup> <sub>-0.2</sub> mm         |
|                               | Push Strength                   | 30 N (1 minute)                                   |
| Endurance                     | Operating Life                  | 100000 cycles min.                                |
| Operating Temperature         |                                 | -20 °C to +70 °C                                  |
| Storage Temperature           |                                 | -40 °C to +85 °C (Bulk)                           |
|                               |                                 | -20 °C to +60 °C (Taping)                         |
| Minimum Quantity/Packing Unit |                                 | 4000 pcs. Embossed Taping (Reel Pack)             |
| Quantity/Cartron              |                                 | 20000 pcs.                                        |

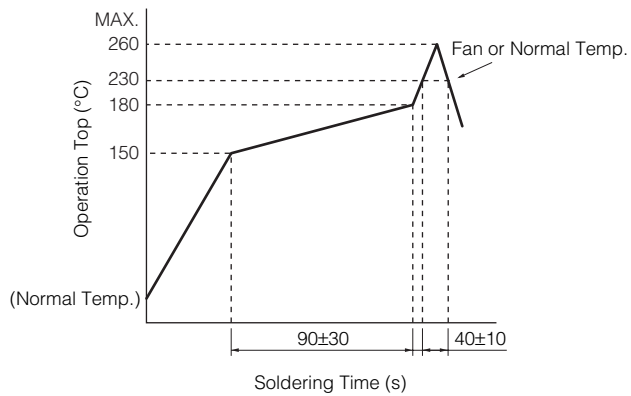
### ■ Dimensions in mm (not to scale)

|                                                                                                                                                                                                                             |                 |                                                                                                                                           |                  |                |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------|------------------|----------------|
| <div>No. 1</div> <div>EVQPUJ<br/>EVQPUA</div> <div>(Embossed Taping)</div> <div>With straight terminals<br/>Without boss</div> <div></div> |                 | <div></div> <div>PWB land pattern for reference</div>   |                  |                |
| Part Numbers                                                                                                                                                                                                                | Operating Force | Height                                                                                                                                    | Push Plate Color | Operating Life |
| EVQPUJ02K                                                                                                                                                                                                                   | 1.6 N           | 1.65 mm                                                                                                                                   | Black            | 100000 cycles  |
| EVQPUA02K                                                                                                                                                                                                                   | 2.2 N           | 1.65 mm                                                                                                                                   | Black            | 100000 cycles  |
| <div>No. 2</div> <div>EVQPUL<br/>EVQPUC</div> <div>(Embossed Taping)</div> <div>With straight terminals<br/>With boss</div> <div></div>  |                 | <div></div> <div>PWB land pattern for reference</div> |                  |                |
| Part Numbers                                                                                                                                                                                                                | Operating Force | Height                                                                                                                                    | Push Plate Color | Operating Life |
| EVQPUL02K                                                                                                                                                                                                                   | 1.6 N           | 1.65 mm                                                                                                                                   | Black            | 100000 cycles  |
| EVQPUC02K                                                                                                                                                                                                                   | 2.2 N           | 1.65 mm                                                                                                                                   | Black            | 100000 cycles  |

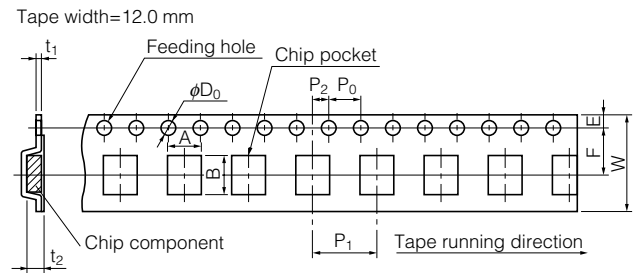
### ■ Dimensions in mm (not to scale)

|                                                                                                                                                                                                                           |                 |                                                                                                                                           |                  |                |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------|------------------|----------------|
| <div>No. 3</div> <div>EVQPUK<br/>EVQPUB</div> <div>(Embossed Taping)</div> <div>With J-bent terminals<br/>Without boss</div> <div></div> |                 | <div></div> <div>PWB land pattern for reference</div>   |                  |                |
| Part Numbers                                                                                                                                                                                                              | Operating Force | Height                                                                                                                                    | Push Plate Color | Operating Life |
| EVQPUK02K                                                                                                                                                                                                                 | 1.6 N           | 1.65 mm                                                                                                                                   | Black            | 100000 cycles  |
| EVQPUB02K                                                                                                                                                                                                                 | 2.2 N           | 1.65 mm                                                                                                                                   | Black            | 100000 cycles  |
| <div>No. 4</div> <div>EVQPUM<br/>EVQPUD</div> <div>(Embossed Taping)</div> <div>With J-bent terminals<br/>With boss</div> <div></div>  |                 | <div></div> <div>PWB land pattern for reference</div> |                  |                |
| Part Numbers                                                                                                                                                                                                              | Operating Force | Height                                                                                                                                    | Push Plate Color | Operating Life |
| EVQPUM02K                                                                                                                                                                                                                 | 1.6 N           | 1.65 mm                                                                                                                                   | Black            | 100000 cycles  |
| EVQPUD02K                                                                                                                                                                                                                 | 2.2 N           | 1.65 mm                                                                                                                                   | Black            | 100000 cycles  |

### ■ Recommended Reflow Soldering Conditions



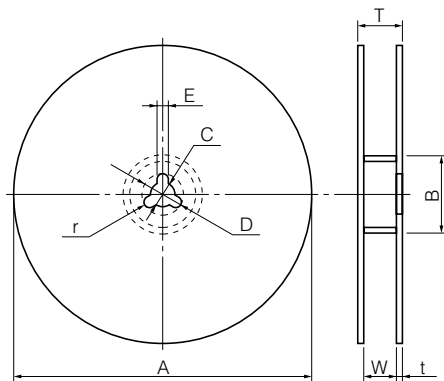
### ● Embossed Carrier Taping



Unit: mm

| Part No. | Height | A             | B               | W              | F               | E               | $P_1$         | $P_2$         | $P_0$         | $D_0$ Dia.        | $t_1$           | $t_2$         |
|----------|--------|---------------|-----------------|----------------|-----------------|-----------------|---------------|---------------|---------------|-------------------|-----------------|---------------|
| EVQPU    | 1.65   | $7.0 \pm 0.2$ | $5.75 \pm 0.20$ | $12.0 \pm 0.3$ | $5.78 \pm 0.20$ | $1.75 \pm 0.10$ | $8.0 \pm 0.1$ | $2.0 \pm 0.1$ | $4.0 \pm 0.1$ | $1.5^{+0.1}_{-0}$ | $0.35 \pm 0.05$ | $2.4 \pm 0.2$ |

### ● 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. | $\phi 13.0 \pm 0.5$ | $\phi 21.0 \pm 1.0$ | $2.0 \pm 0.5$ |

| Item      | W              | T | t          | r             |
|-----------|----------------|---|------------|---------------|
| Rate (mm) | $14.0 \pm 1.5$ | — | 1.0 to 3.0 | $1.0 \pm 0.5$ |