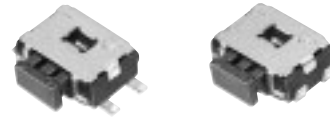


Small-sized Side-operational SMD Light Touch Switches

Type: **EVQPU**



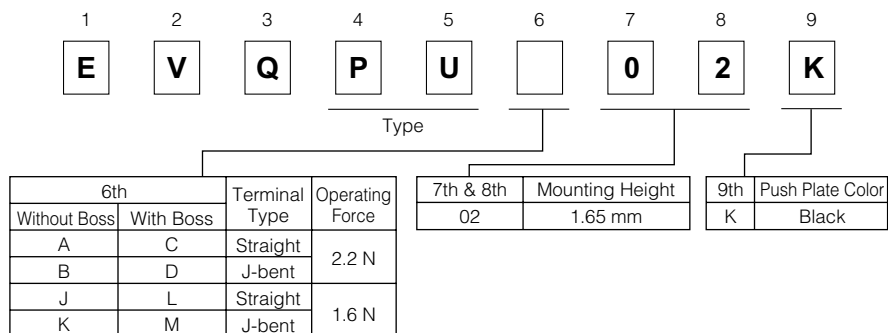
■ Features

- 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


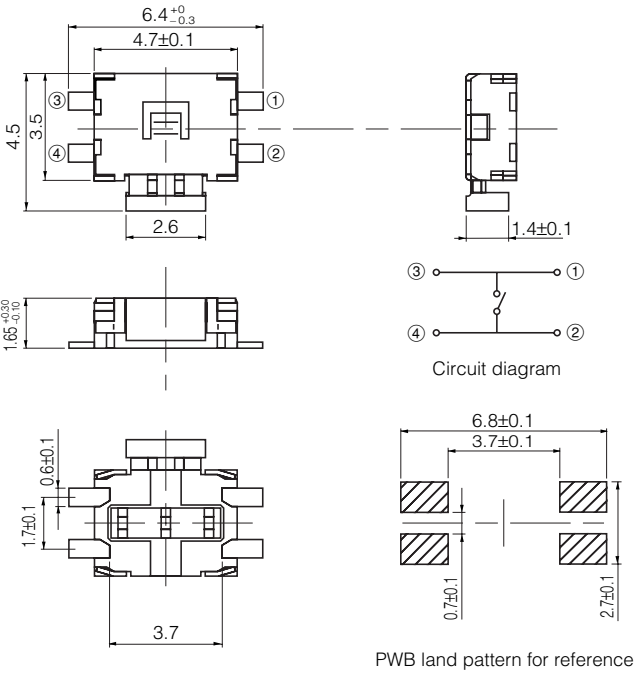

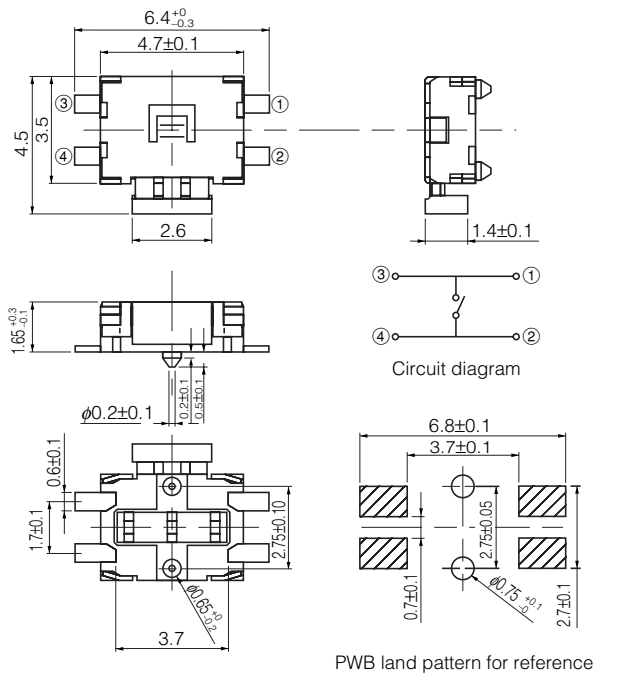
■ Explanation of Part Numbers



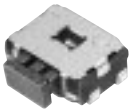
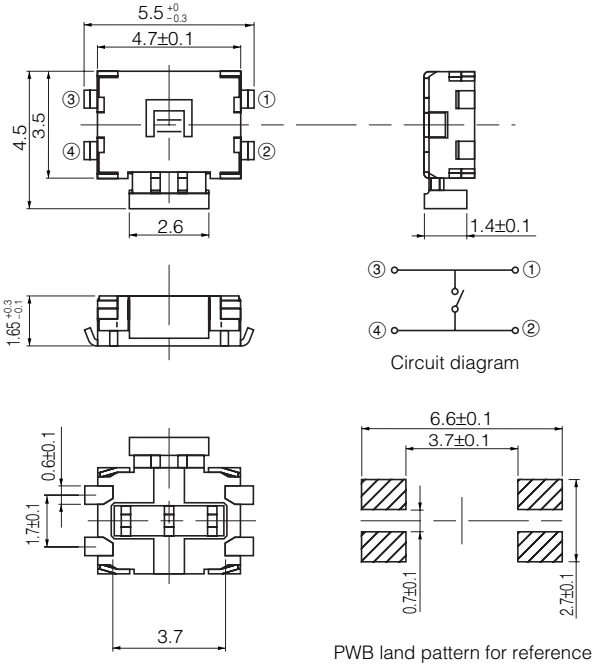

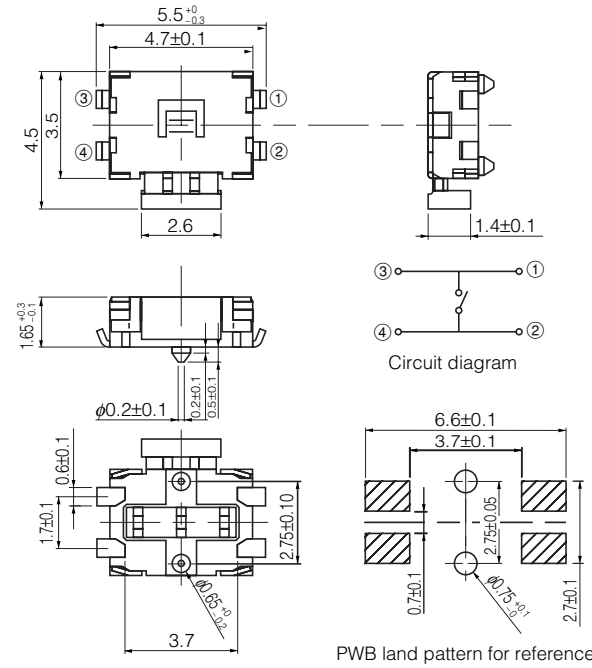
■ Specifications

| Type | Snap action / Push-on type SPST | |
|-------------------------------|---------------------------------|--|
| Electrical | Rating | 10 μ A 2 Vdc to 50 mA 12 Vdc (Resistive load) |
| | Contact Resistance | 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 | 1.6 N ^{+0.7} _{-0.4} N 2.2 N ^{+0.8} _{-0.7} N |
| | Travel | 0.3 mm ^{+0.1} _{-0.2} 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/Carton | | 20000 pcs. |

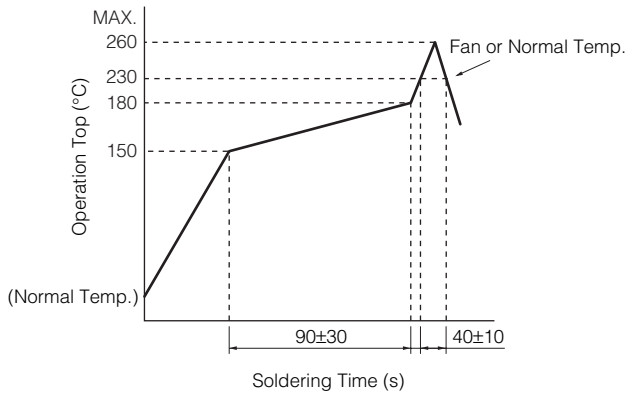
■ Dimensions in mm (not to scale)

| | | | | |
|--|---|----------------|-------------------------|-----------------------|
| <p>No. 1</p> <p>EVQPUJ EVQPUA</p> <p>(Embossed Taping)</p> <p>With straight terminals Without boss</p>  |  <p>Technical drawings for No. 1 showing dimensions and circuit diagram. Dimensions include: 6.4⁺⁰_{-0.3}, 4.7±0.1, 4.5, 3.5, 2.6, 1.65^{+0.30}_{-0.10}, 1.7±0.1, 0.6±0.1, 3.7, 1.4±0.1, 6.8±0.1, 3.7±0.1, 0.7±0.1, 2.7±0.1. Circuit diagram shows terminals ①, ②, ③, ④. PWB land pattern for reference shows dimensions 6.8±0.1, 3.7±0.1, 0.7±0.1, 2.7±0.1.</p> | | | |
| <p>Part Numbers</p> | <p>Operating Force</p> | <p>Height</p> | <p>Push Plate Color</p> | <p>Operating Life</p> |
| <p>EVQPUJ02K</p> | <p>1.6 N</p> | <p>1.65 mm</p> | <p>Black</p> | <p>100000 cycles</p> |
| <p>EVQPUA02K</p> | <p>2.2 N</p> | <p>1.65 mm</p> | <p>Black</p> | <p>100000 cycles</p> |
| <p>No. 2</p> <p>EVQPUL EVQPUC</p> <p>(Embossed Taping)</p> <p>With straight terminals With boss</p>  |  <p>Technical drawings for No. 2 showing dimensions and circuit diagram. Dimensions include: 6.4⁺⁰_{-0.3}, 4.7±0.1, 4.5, 3.5, 2.6, 1.65^{+0.3}_{-0.1}, 1.7±0.1, 0.6±0.1, 3.7, 1.4±0.1, 6.8±0.1, 3.7±0.1, 0.7±0.1, 2.7±0.1, 2.75±0.10, 0.2±0.1, 0.2±0.1, 0.3±0.1, 0.65^{+0.3}_{-0.2}, 2.75±0.05, 0.75^{+0.1}_{-0.2}. Circuit diagram shows terminals ①, ②, ③, ④. PWB land pattern for reference shows dimensions 6.8±0.1, 3.7±0.1, 0.7±0.1, 2.7±0.1, 2.75±0.05, 0.75^{+0.1}_{-0.2}.</p> | | | |
| <p>Part Numbers</p> | <p>Operating Force</p> | <p>Height</p> | <p>Push Plate Color</p> | <p>Operating Life</p> |
| <p>EVQPUL02K</p> | <p>1.6 N</p> | <p>1.65 mm</p> | <p>Black</p> | <p>100000 cycles</p> |
| <p>EVQPUC02K</p> | <p>2.2 N</p> | <p>1.65 mm</p> | <p>Black</p> | <p>100000 cycles</p> |

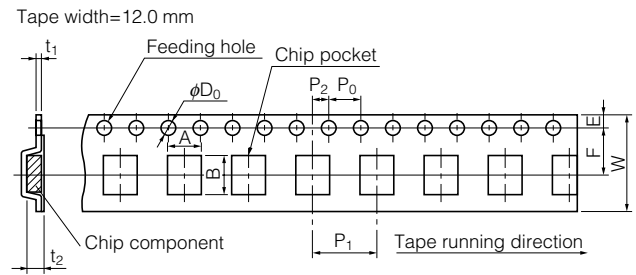
■ Dimensions in mm (not to scale)

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

■ Recommended Reflow Soldering Conditions



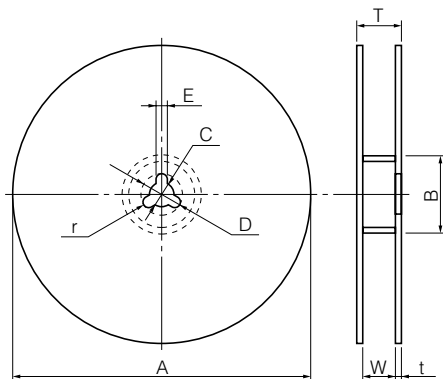
● Embossed Carrier Taping



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±0.2 | 5.75±0.20 | 12.0±0.3 | 5.78±0.20 | 1.75±0.10 | 8.0±0.1 | 2.0±0.1 | 4.0±0.1 | 1.5 ^{+0.1} ₀ | 0.35±0.05 | 2.4±0.2 |

● Standard Reel Dimensions in mm (not to scale)



| Item | A | B | C | D | E |
|-----------|------------|------------|-----------|-----------|---------|
| Rate (mm) | φ370.0±2.0 | φ50.0 min. | φ13.0±0.5 | φ21.0±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 |