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Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation, and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!


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## 4 mm Square SMD Light Touch Switches

## Type: EVQP6/EVQ6P6/EVQ7P6/EVQ9P6

## Features

- External dimensions : $4.1 \mathrm{~mm} \times 4.1 \mathrm{~mm}$

Height :Without Push Plate 0.35 mm , With Push Plate 0.58 mm
:Without Push Plate-With Ground Terminal 0.43 mm

- Long-life :1,000,000 cycles min.
(Operating Force 1.0N, 1.6 N Type)
- Dust-proof structure
- Recommended Applications
- Operating switches for portable electronic equipment (Mobile phones, Camcorders, Portable audio players, etc.).

■ Explanation of Part Numbers


Specifications

| Type |  | Snap action / Push-on type SPST |
| :---: | :---: | :---: |
| Electrical | Rating | $10 \mu \mathrm{~A} 2 \mathrm{~V}$ DC to 20 mA 15 V DC (Resistive load) |
|  | Contact Resistance | $500 \mathrm{~m} \Omega$ max. |
|  | Insulation Resistance | $50 \mathrm{M} \Omega \mathrm{min}$. (at 100 V DC) |
|  | Dielectric Withstanding Voltage | 100 V AC for 1 minute |
|  | Bouncing | $\begin{gathered} 3 \mathrm{~ms} \text { max. (ON) } \\ 10 \mathrm{~ms} \text { max. (OFF) } \\ \hline \end{gathered}$ |
| Mechanical | Operating Force | $1.0 \mathrm{~N}, 1.6 \mathrm{~N}, 2.4 \mathrm{~N}$ |
|  | Travel | 0.2 mm (EVQ7P6 : 0.15 mm ) |
| Endurance | Operating Life | $1.0 \mathrm{~N}, 1.6 \mathrm{~N}: 1,000,000$ cycles min. 2.4 N : 500,000 cycles min. |
| Operating Temperature |  | $-20^{\circ} \mathrm{C}$ to $+70{ }^{\circ} \mathrm{C}$ |
| Storage Temperature |  | $\begin{aligned} & -40^{\circ} \mathrm{C} \text { to }+85^{\circ} \mathrm{C} \text { (Bulk) } \\ & -20^{\circ} \mathrm{C} \text { to }+60^{\circ} \mathrm{C} \text { (Taping) } \end{aligned}$ |
| Minimum Quantity/Packing Unit |  | 10,000 pcs. Embossed Taping (Reel Pack) |
| Quantity/Carton |  | 50,000 pcs. |

Note: Non washable

Dimensions in mm（not to scale）

| No． 1 | General dimension tolerance ：$\pm 0.1$ |  |
| :---: | :---: | :---: |
| EVQP6D EVQP6P <br> （Embossed Taping） <br> Surface mount <br> For reflow soldering <br> Without push plate | ＊Marking varies according to push force． | PWB land pattern for reference <br> Part of A－A＇terminal is exposed at 省 area． <br> Any land pattern or vias shall not be provided at 䍜area． |
| Part Numbers | Operating Force Height | Operating Life |
| EVQP6DB35 | 1.6 N 0.35 mm | 1，000，000 cycles |
| EVQP6PB35 | 2．4 N 0.35 mm | 500，000 cycles |
| No． 2 <br> EVQP6L EVQP6Y <br> （Embossed Taping） <br> Surface mount <br> For reflow soldering With push plate | General dimension tolerance ：$\pm 0.1$ <br> （ ）dimensions are reference dimensions． | PWB land pattern for reference <br> Any land pattern or vias shall not be provided at 㺟area． |
| Part Numbers | Operating Force $\quad$ Height | Operating Life |
| EVQP6LB55 | 1.6 N 0.58 mm | 1，000，000 cycles |
| EVQP6YB55 | 2．4 N $\quad 0.58 \mathrm{~mm}$ | 500，000 cycles |

Dimensions in mm (not to scale)

| No. 3 | General dimension tolerance : $\pm 0.1$ ( )dimensions are reference dimensions. |  |  |
| :---: | :---: | :---: | :---: |
| EVQ7P6 <br> EVQ6P6 <br> EVQ9P6 <br> (Embossed Taping) <br> Surface mount <br> For reflow soldering <br> Without push plate <br> With Ground Terminal |  |  | Circuit diagram <br> PWB land pattern for reference <br> Part of B-B' terminal is exposed at 嚮 area. <br> Any land pattern or vias shall not be provided at 橿 area. |
| Part Numbers | Operating Force | Height | Operating Life |
| EVQ7P6B40 | 1.0 N | 0.43 mm | 1,000,000 cycles |
| EVQ6P6B40 | 1.6 N | 0.43 mm | 1,000,000 cycles |
| EVQ9P6B40 | 2.4 N | 0.43 mm | 500,000 cycles |

Recommended Reflow Soldering Conditions


Embossed Carrier Taping


Taping condition: Lack of products in the middle of taping should be one MAX, but total quantity specified in the specifications should be secured
Peeling off strength of top tape : It should be within 0.2 N to 1.0 N at 165 degree in peeling off angle. Joint of carrier tape : One joint per one reel may exist.

| Part No. | Height | A | B | W | F | E | $\mathrm{P}_{1}$ | P2 | Po | Do Dia. | t1 | t2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EVQP6 | 0.35/0.58 |  |  |  |  |  |  |  |  |  |  |  |
| EVQ6P6 EVQ7P6 <br> EVQ9P6 | 0.43 | $4.0 \pm 0.2$ | $5.0 \pm 0.2$ | $12.0_{-0.1}^{+0.3}$ | $5.5 \pm 0.1$ | $1.75 \pm 0.10$ | $8.0 \pm 0.1$ | $2.0 \pm 0.1$ | $4.0 \pm 0.1$ | $1.5{ }_{-0}^{+0.1}$ | $0.30 \pm 0.05$ | 0.5/0.7-0.1 |

Recommended Shape of Test Pole


## Recommended Operating Conditions

Without Push Plate
With Push Plate


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.

