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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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## $6.2 \mathrm{~mm} \times 2.5 \mathrm{~mm}$ Side-operational Edge Mount /

## SMD Light Touch Switches

тype:EVQP4/EVQP8

## - Features

- External dimensions: $6.2 \mathrm{~mm} \times 2.55 \mathrm{~mm}$ (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 | $10 \mu \mathrm{~A} 2 \mathrm{Vdc}$ to 20 mA 15 Vdc (Resistive load) |  |
|  | Contact Resistance | $100 \mathrm{~m} \Omega$ max. |  |
|  | Insulation Resistance | $100 \mathrm{M} \Omega \mathrm{min}$. (at 100 Vdc ) |  |
|  | Dielectric Withstanding Voltage | 250 Vac (1 minute) |  |
|  | Bouncing | $10 \mathrm{~ms} \mathrm{max}$. (ON, OFF) |  |
| Mechanical | Operating Force | $2.5 \mathrm{~N}, 3.5 \mathrm{~N}, 5.0 \mathrm{~N}$ | $1.0 \mathrm{~N}, 1.6 \mathrm{~N}, 2.4 \mathrm{~N}, 3.5 \mathrm{~N}$ |
|  | Travel | $0.70 \mathrm{~mm} \pm 0.2 \mathrm{~mm}$ | $0.25 \mathrm{~mm}{ }_{-0.15}^{+0.05} \mathrm{~mm}$ |
|  | Push Strength | 50 N (1 minute) |  |
| Endurance | Operating Life | $2.5 \mathrm{~N}: 1000000$ cycles min. $3.5 \mathrm{~N}: 500000$ cycles min. $5.0 \mathrm{~N}: 200000$ cycles min. | $1.0 \mathrm{~N}, 1.6 \mathrm{~N}: 1000000$ cycles min. $2.4 \mathrm{~N}: 500000$ cycles min. $3.5 \mathrm{~N}: 200000$ cycles min. |
| Operating Temperature |  | $-40^{\circ} \mathrm{C}$ to $+85^{\circ} \mathrm{C}$ |  |
| 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 |  | 2500 pcs. Embossed Taping (Reel Pack) |  |
| Quantity/Carton |  | 12500 pcs. |  |

Dimensions in mm (not to scale)

| No. 1 | $\xrightarrow{2.7 \pm 0.1}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| EVQP4 <br> Middle push travel | (1) <br> * Height from surfa | (2) <br> B: 1.35 |  | ern for reference |
| Part Numbers | Operating Force | Height | Push Plate Color | Operating Life |
| EVQP4HB3B | 2.5 N | 3.5 mm | Blue | 1000000 cycles |
| EVQP4KB3Q | 3.5 N | 3.5 mm | Grey | 500000 cycles |
| EVQP4MB3K | 5.0 N | 3.5 mm | Black | 200000 cycles |
| No. 2 |  |  |  |  |
| EVQP4 <br> Short push travel | (1) <br> * Height from surfa |  |  | attern for reference |
| Part Numbers | Operating Force | Height | Push Plate Color | Operating Life |
| EVQP40B3M | 1.0 N | 3.5 mm | Natural | 1000000 cycles |
| EVQP42B3M | 1.6 N | 3.5 mm | Natural | 1000000 cycles |
| EVQP44B3M | 2.4 N | 3.5 mm | Natural | 500000 cycles |
| EVQP46B3M | 3.5 N | 3.5 mm | Natural | 200000 cycles |

Dimensions in mm (not to scale)


Recommended Reflow Soldering Conditions


Soldering Time (s)


| Part No. | Height | A | B | W | F | E | $\mathrm{P}_{1}$ | P2 | Po | Do Dia. | t1 | t2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EVQP4 <br> EVQP8 | 3.5 | $6.5 \pm 0.2$ | 3.9 $\pm 0.2$ | $12.0 \pm 0.3$ | $5.5 \pm 0.1$ | $1.75 \pm 0.10$ | $8.0 \pm 0.1$ | $2.0 \pm 0.1$ | $4.0 \pm 0.1$ | $1.5_{-0}^{+0.1}$ | $0.4 \pm 0.1$ | $3.75 \pm 0.20$ |

- Standard Reel Dimensions in mm (not to scale)


| Item | A | B | C | D | E |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Rate $(\mathrm{mm})$ | $\phi 370.0 \pm 2.0$ | $\phi 50.0 \mathrm{~min}$. | $\phi 13.0 \pm 0.5$ | $\phi 21.0 \pm 1.0$ | $2.0 \pm 0.5$ |
| Item | W | T | t | r |  |
| Rate $(\mathrm{mm})$ | $14.0 \pm 1.5$ | - | 1.0 to 3.0 | $1.0 \pm 0.5$ |  |

