## : ©hipsmall

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!


## Contact us

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## RoHS compliant



## FEATURES

- RoHS compliant
- Easy position setting with wide switching angle
- High digit visibility
- Washable

INTERNAL STRUCTURE


| Part name |  | Material | Flammability |
| :---: | :--- | :---: | :---: |
| (1) | Marking cover | Stainless steel (SUS 304) | - |
| 2) | Cover | Stainless steel (SUS 301) |  |
| (3) | "0" ring | Silicone rubber | UL94HB |
| (4) | Rotor | Polyphenylenesulphide | UL94V-0 |
| (5) | Spacer | Stainless steel (SUS 304) |  |
| 6 | Slider contact |  | - |
| 7 | Fixed contact | Copper alloy, Gold-plated |  |
| 8 | Housing | Polyphenylenesulphide | UL94V-0 |
| (9) | Terminal pin | Copper alloy, Gold-plated | - |

PART NUMBER DESIGNATION


## LIST OF PART NUMBERS

| Circuit type | Setting position | Form of packaging | B <br> Gull wing | Pieces in package |
| :---: | :---: | :---: | :---: | :---: |
| 1 pole $\mathbf{4}$ contacts | Top setting | Taping | CS-7-14TB | $500 \mathrm{pcs} . /$ reel |
|  |  | Magazine | CS-7-14MB | $50 \mathrm{pcs} . / \mathrm{stick}$ |

※ Verify the above part numbers when placing orders.Taping and magazine version can be supplied only in reel or stick unit.

■ STANDARD SPECIFICATIONS

| Circuit type | 1 pole 4 contacts |
| :--- | :---: |
| Operating temperature range | $-40 \sim 85^{\circ} \mathrm{C}$ |
| Storage temperature range | Washable by "0"ring <br> ※ealing |
| ※lease refer to page 150, 151 |  |

ELECTRICAL CHARACTERISTICS

| Contact rating <br> Non-switching <br> Switching <br> Minimum | DC50 V 100 mA |
| :--- | :---: |
| DC5 V 100 mA |  |
| DC20 $\mathrm{mV} 1 \mu \mathrm{~A}$ |  |$|$| Contact resistance | $100 \mathrm{~m} \Omega$ maximum |
| :--- | :---: |
| Insulation resistance | $1000 \mathrm{M} \Omega(\mathrm{DC100} \mathrm{~V})$ minimum |
| Dielectric strength | $\mathrm{AC250V,60s}$ |

## ENVIRONMENTAL CHARACTERISTICS

## MECHANICAL CHARACTERISTICS

| No. of positions | 4 |
| :--- | :---: |
| Adjustment torque | $3 \sim 20 \mathrm{mN} \cdot \mathrm{m}\{31 \sim 204 \mathrm{gf} \cdot \mathrm{cm}\}$ |
| Stepping angle | $90^{\circ}$ |
| Solderability | $245 \pm 3^{\circ} \mathrm{C}, 2 \sim 3 \mathrm{~s}$ |
|  | Reflow : Peak temperature $250^{\circ} \mathrm{C}$ to $255^{\circ} \mathrm{C}$ <br> (Please refer to the profile below) |
|  | Manual soldering : $350 \pm 10^{\circ} \mathrm{C}, 3 \sim 4 \mathrm{~s}$ <br> Shear (adhesion) |
| Substrate bending heat | $5 \mathrm{~N}\{0.51 \mathrm{kgf}\} 10 \mathrm{~s}$ |
| Pull-off strength | Width 90 mm, bend $3 \mathrm{~mm}, 5 \mathrm{~s}, 1$ time |

\{ \}: Reference only

| Vibration | Amplitude 1.5 mm or <br> Acceleration $98 \mathrm{~m} / \mathrm{s}^{2}$, |
| :--- | :---: |
| $10-500-10 \mathrm{~Hz}, 3$ directions for 2 h each |  |\(\left|\begin{array}{c}490 \mathrm{~m} / \mathrm{s}^{2}, 11 \mathrm{~ms} <br>

6 directions for 3 times each\end{array}\right|\)| 10000 steps minimum, DC5 $\mathrm{V}, 100 \mathrm{~mA}$ |
| :--- |
| Lhock |
| Load life |
| Humidity (Steady state) |
| High temperature exposure |

〈Reflow profile for soldering heat evaluation>


OUTLINE DIMENSIONS


## ■ RECOMMENDED P.C.B. PAD OUTLINE DIMENSIONS



## PACKAGING SPECIFICATIONS

<Taping packaging specifications>

- Taping version is packaged in 500 pcs. per reel.
- Taping version is boxed with one reel (500 pcs.).

Orders will be accepted for units of 500 pcs., i.e., 500 , 1000, 1500, pcs., etc.

Maximum number of consecutive missing pieces $=2$ Leader length and reel dimension are shown in the diagrams below:

- Embossed tape dimensions
- Reel dimensions
(Unit: mm)
(Conforms to JIS C 0806-3)
(In accordance with EIAJ ET-7200A)



## PACKAGING SPECIFICATIONS

<Magazine packaging specifications>

- Please order the multiple numbers of the specific packing quantities.

Pieces in package : 50 pcs./stick

Magazine dimensions


