## : ©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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Snap-in sealed pushbutton switches • bushing Ø $12 \mathrm{~mm} \cdot$ momentary

## DISTINCTIVE FEATURES

## Snap-in models

Compact, lightweight
Tactile feedback
Sealed to IP54

## ENVIRONMENTAL SPECIFICATIONS

- Front panel sealing according to IEC 60529 : IP54
- Shock resistance : 100 g according to IEC 512-4, test 6c
- Vibration resistance : $10-500 \mathrm{~Hz}-10 \mathrm{~g}$ according to IEC 512-4, test 6d
- Salt spray : IEC 512-6, test 11f
- Operating temperature : $-40^{\circ} \mathrm{C}$ to $+85^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right.$ to $\left.+185^{\circ} \mathrm{F}\right)$


## ELECTRICAL SPECIFICATIONS

- Max. current/voltage rating with resistive load: 400 mA 32 VAC - 100 mA 48 VDC
- Initial contact resistance : $50 \mathrm{~m} \Omega$ max.
- Insulation resistance : $1 \mathrm{G} \Omega \mathrm{min}$. at 500 VC
- Dielectric strength : 1,000 Vrms
- Electrical life at full load :500,000 cycles


## GENERAL SPECIFICATIONS

- Panel thickness : $0.8 \mathrm{~mm}(.031) \mathrm{min} .-1.8 \mathrm{~mm}(.071) \mathrm{max}$.
- Total travel : $1.7 \mathrm{~mm}(.066) \pm 0.3 \mathrm{~mm}$
- Typical operating force : $4 \mathrm{~N} \pm 3 \mathrm{~N}$
- Low level or mechanical life : 1,000,000 cycles



## IB series

Snap-in sealed pushbutton switches • bushing $\varnothing 12 \mathrm{~mm} \cdot$ momentary

## MATERIALS

- Case : thermoplastic UL94-V0
- Actuator : polyamide 6/6
- Bushing/bezel : polyamide 6/6
- Contacts : silver, gold plated
- Terminal seal : epoxy

APEM products may be recycled at end-of-life for the re-claiming of valuable metal components.

## AGENCY APPROVAL

.9
2 A 125 VAC/250 VAC
File E83438
Availability : consult factory for details of approved models. Marking : to order switches marked UL, complete appropriate box of ordering format.

## (i9) <br> TERMINALS



Solder lug S


Straight $P$

## (4) ELECTRICAL FUNCTIONS



Function 3 (NO)

MOUNTING STANDARD BEZEL


MATRIX MOUNTING


MOUNTING REDUCED MODEL

PANEL CUT-OUT


MATRIX MOUNTING


## (5) BUILD YOUR PART NUMBER

ACTUATOR SHAPES

| R | Round, curved |
| :--- | :--- |
| P | Round, flat |

Actuator marking available on round flat models (symbol 10 mm max.). On request.

IB

SERIES

## BASIC PART NUMBER

3
Normally open
(NO)

## TERMINALS

| S | Solder lugs |
| :--- | :--- |
| P | Straight PC |

Z1 Quick-connect
$2.8 \times 0.5 \mathrm{~mm}$

CONTACTS
AD $\begin{aligned} & \text { Silver, gold } \\ & \text { plated }\end{aligned}$

$$
-
$$

| 1 | Blue |
| :---: | :--- |
| B | Dark blue |
| 2 | Black |
| 3 | Green |
| 4 | Grey |
| 5 | Yellow |
| 6 | Red |
| $7 / 1$ | White |
| 8 | Bright chrome |
| 9 | Orange |
| A | Satin chrome |

BUSHING AND BEZEL

| 00 | Black (std) |
| :--- | :--- |
| 10 | White |

OPTION

## 104 High actuator <br> Bia. 15 (.590)

234
reduced bezel, standard mounting

APPROVAL

UL detail of approved models.

## ABOUT THIS SERIES

On the following pages, you will find successively basic part numbers of switches and options in the same order as in above chart.Notice : please note that not all combinations of above numbers are available. Refer to the following pages for further information.


A sealing boot is available to protect the switches against frost and sand (P/N U5125). See "Sealing Boots" section of website.
(B) Mounting accessories : Standard hardware supplied : 1 flat seal. Plastic nut 17 mm (.669) across flats, thickness 4 mm (.157) available on request. Part number U4248.

## IB series

Snap-in sealed pushbutton switches • bushing $\varnothing 12 \mathrm{~mm} \cdot$ momentary

## SOLDER LUG TERMINALS



Curved actuator
IBR3SAD $\frac{\uparrow}{\circ \circ}$ Normally Open

Flat actuator
IBP3SAD $\frac{1}{\circ \circ}$ Normally Open

Also available with straight PC : IB•3PAD or quick-connect terminals : IB•3Z1AD

| BASIC P/N |  |
| :--- | :--- |
| 1 | Blue |
| B | Dark blue |
| 2 | Black |
| 3 | Green |
| 4 | Grey |
| 5 | Yellow |
| 6 | Red |
| $7 / 1$ | White |
| 8 | Bright chrome |
| 9 | Orange |
| A | Satin chrome |

BUSHING AND BEZEL

BASIC P/N

$\square$
$\square$

## OPTIONS

BASIC P/N


104 High actuator
234 Dia. 15 (.590) reduced bezel, standard mounting


## AGENCY APPROVAL

BASIC P/N

UL
Availability : consult factory for details of approved models.
Marking : to order switches marked UL, complete appropriate box of ordering format.

