## Specifications

Ratings:
0.1A 30VDC / 10,000 life cycles 1.0A $25 \mathrm{VDC} / 5,000$ life cycles

Operating Temp: $\quad-10^{\circ} \mathrm{C} \sim+60^{\circ} \mathrm{C}$
Contact Resistance: $\quad 50 \mathrm{~m} \Omega$ max. initial
Insulation Resistance: $100 \mathrm{M} \Omega \mathrm{min}$.
Dielectric Strength: $\quad 500 \mathrm{VAC}$ for $60+/-5 \mathrm{sec}$
Housing/plunger: UL 94HB (standard)
UL 94V0 (optional)
Changeover timing: Non-short / shorting
Plating of terminals \& Silver plated (standard)
moving contacts: Gold Plated (optional)


Ordering qty: 200pcs
Switch with chassis: 500pcs

|  | 2 Poles | 4 Poles | 6 Poles | 8 Poles | 10 Poles | 16 Poles |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Operating force: | $400+/-100 \mathrm{gf}$ | $550+/-150 \mathrm{gf}$ | $750+/-150 \mathrm{gf}$ | $750+/-150 \mathrm{gf}$ | $750+/-150 \mathrm{gf}$ | $750+/-150 \mathrm{gf}$ |
| Travel-to-Lock | 3.5 mm | 3.5 mm | 3.5 mm | 3.5 mm | 3.5 mm | 3.5 mm |
| Distance: | 2.5 mm | 2.5 mm |  |  |  |  |
|  | 1.5 mm | 1.5 mm |  |  |  |  |

## Ordering Single Switch

| PBN | S | 2 | A | 1.5 | H | B $\quad \mathbf{A g}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PBN=UL94HB | $\mathrm{S}=$ Self lock | $2=2$ Poles | Terminal | Travel to Lock | Chassis Type | $\frac{\text { Terminal shape }}{\text { A=straight terminal }}$ |
|  | $\mathrm{N}=$ Non-lock | $4=4$ Poles | Types | 1.5 mm | $\mathrm{H}=2 \mathrm{x} \varnothing$ ¢ 3.2 mm |  |
| PBV=UL94V0 <br> (2P, 4P \& 6P) |  | $6=6$ Poles | A | 2.5 mm | $\mathrm{T}=2 \times[\mathrm{M} 3 \times 0.5 \mathrm{~mm}]$ | $\mathrm{B}=$ snap -in terminal |
|  |  | $8=8$ Poles | C | 3.5 mm | C= Chassis Ear Cut |  |
|  |  | $10=10$ Poles | $\stackrel{\mathrm{S}}{ }$ |  | Nil $=$ No chassis | Contacts Plating |
|  |  | $16=16$ Poles |  |  |  | $\mathrm{Ag}=\text { silver }$ <br> $\mathrm{Au}=$ gold |

## Standard Terminals

1. Only S terminal is available for 1.5 mm and 2.5 mm travel-to-lock versions.
2. Stocking terminals: A, C \& S
3. Standard plating: Silver
4. Terminals available for Gold Plating: A, C, S
5. Terminal: Straight or Snap-in
$\mathrm{S} \quad \mathrm{M} \mathrm{C} \mathrm{A}$


## Buttons

BF series
$B C$ series


## 4 Poles Version



6 Poles Version


## Piggy Back Switches

Piggy back switches are made by two switches of different poles. For examples, a 2-pole +4 -pole switch, as shown in this drawing. You can have other combinations like ( 2 -pole +6 -pole), ( 4 -pole + 6 -pole), etc.

Application: It is often used where space is a premium in your PCB and two switches are necessary.

Mechanism: The top switch controls the front terminals while the back terminals
 are controlled by the bottom switch.

Please contact Toneluck or her sales representatives for ordering piggy back switches.

## Switches Assembly

## Chassis: cut ear



## Chassis with screw holes



Standard Pitch distances $(P): 10 \mathrm{~mm}, 12.5 \mathrm{~mm}, 15 \mathrm{~mm}, 17.5 \mathrm{~mm}, 20 \mathrm{~mm}, 25 \mathrm{~mm}, 30 \mathrm{~mm}$.

## Ordering Switch Assembly

For Gang Switch (Switch assembly) ordering, please refer to Appendix A in this catalogue.

## Optional Terminal Types

The following terminals are also available, however, they require longer delivery lead-time. The MOQ requirement is 10 kpcs per order for these optional terminals. Should you need any other terminals which you can't find in this catalog, please contact Toneluck or her sales representatives.


## Low Force 2-Pole Switch

There is a low force 2-pole push button switch with 150 gf operating force available. Please refer to the following ordering instruction:

| PBL | S | 2 | A | 1.5 | H | B Ag |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | S = Self lock | $2=2$ Poles | Terminal | Travel to Lock | Chassis Type | Terminal shape |
|  | $\mathrm{N}=$ Non-lock | only | Types | $1.5 \mathrm{~mm}$ | $\mathrm{H}=2 \mathrm{x} \varnothing 3.2 \mathrm{~mm}$ | A=straight terminal |
|  |  |  | A | 2.5 mm | $\mathrm{T}=2 \times[\mathrm{M} 3 \times 0.5 \mathrm{~mm}]$ | $\mathrm{B}=$ snap - in terminal |
|  |  |  | C | 3.5 mm | C= Chassis Ear Cut |  |
|  |  |  | $\begin{gathered} \mathrm{M} \\ \mathrm{~S} \end{gathered}$ |  | Nil = No chassis | Contacts Plating |
|  |  |  |  |  |  | $\mathrm{Ag}=$ silver |
|  |  |  |  |  |  | Au=gold |

## Appendix-A

## Switch Assembly Ordering Form

|  |  | Toneluck Salesman |
| :--- | :--- | :---: |
|  |  | Date : |
| Purchaser: |  |  |
| Project Ref: |  | Your Email : |
| Sales Rep.: | $\square$ | Est. Monthly Qty : |

## Format:

| PBN | 5 | 17.5 |  |
| :---: | :---: | :---: | :---: |
| PBA | No. of switches | Pitch ( mm ) | Mounting Chassis |
| PBN |  | 10.0 | $\mathrm{H}=$ Mounting holes is $2 \times \emptyset 3.2 \mathrm{~mm}$ |
| MPN |  | 12.5 | T = M3 Screw, $2 \times$ (M3x 0.5 mm ) |
| PWL |  | 15.0 | $\mathrm{C}=$ Mounting chassis ear cut |
|  |  | 17.5 |  |
|  |  | 20.0 |  |
|  |  | 25.0 | XXXX : Assigned by Toneluck |



| Key <br> No. | Switch Part Number | Function (select one only by 'x' |  |  | Pitch <br> $(p)$ | Button P/N |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Self Lock | Non-lock | Inter-lock | Reset |  |  |  |
| 2 |  |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |  |
| 5 |  |  |  |  |  |  |  |
| 6 |  |  |  |  |  |  |  |
| 7 |  |  |  |  |  |  |  |
| 8 |  |  |  |  |  |  |  |
| Remarks: |  |  |  |  |  |  |  |

## To be filled by Toneluck:



