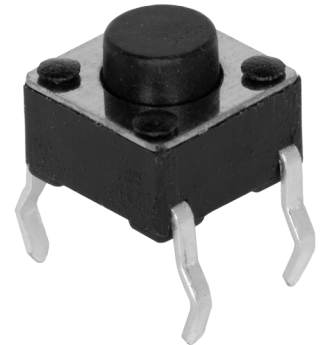


**SERIES:** TS02 | **DESCRIPTION:** TACTILE SWITCH**FEATURES**

- through hole
- long crimped pins
- short crimped pins

**SPECIFICATIONS**

| parameter             | conditions/description                                                                                    | min  | typ                         | max  | units                      |
|-----------------------|-----------------------------------------------------------------------------------------------------------|------|-----------------------------|------|----------------------------|
| rated voltage         |                                                                                                           | 1    |                             | 12   | Vdc                        |
| rated current         |                                                                                                           | 0.01 |                             | 50   | mA                         |
| withstanding voltage  | for 1 minute                                                                                              |      | 250                         |      | Vac                        |
| contact resistance    | applying load of 2 times operating force at 5 Vdc, 10 mA                                                  |      |                             | 100  | mΩ                         |
| insulation resistance | at 100 Vdc for 1 minute                                                                                   | 100  |                             |      | MΩ                         |
| operating force       | see force table                                                                                           |      |                             |      |                            |
| actuator travel       |                                                                                                           | 0.15 | 0.25                        | 0.35 | mm                         |
| operating temperature |                                                                                                           | -30  |                             | 80   | °C                         |
| storage temperature   |                                                                                                           | -40  |                             | 90   | °C                         |
| life                  | rated load, 2 cycles/second, 1.5 times operating force<br>100 gf models<br>160 gf models<br>260 gf models |      | 100,000<br>80,000<br>60,000 |      | cycles<br>cycles<br>cycles |
| vibration             | 10~55~10 Hz, 1.5 mm amplitude, 2 hours on each XYZ                                                        |      |                             |      |                            |
| flammability rating   | see material table                                                                                        |      |                             |      |                            |
| RoHS                  | yes                                                                                                       |      |                             |      |                            |

**SOLDERABILITY**

| parameter      | conditions/description | min | typ | max | units |
|----------------|------------------------|-----|-----|-----|-------|
| hand soldering | for maximum 3 seconds  |     |     | 350 | °C    |
| wave soldering | for maximum 5 seconds  |     |     | 260 | °C    |

**PART NUMBER KEY****TS02 - 66 - XX - BK - XXX - XXX - D**

Base Number

Actuator Height above PCB:

|              |                |                |
|--------------|----------------|----------------|
| 43 = 4.3 mm  | 80 = 8.0 mm    | 130 = 13.0 mm  |
| 50 = 5.0 mm  | 90 = 9.0 mm    | *140 = 14.0 mm |
| *55 = 5.5 mm | 95 = 9.5 mm    | 150 = 15.0 mm  |
| 60 = 6.0 mm  | 100 = 10.0 mm  | 153 = 15.3 mm  |
| 70 = 7.0 mm  | 110 = 11.0 mm  | *160 = 16.0 mm |
| 73 = 7.3 mm  | *120 = 12.0 mm | 170 = 17.0 mm  |

Push Force:

|              |
|--------------|
| 100 = 100 gf |
| 160 = 160 gf |
| 260 = 260 gf |

Terminals:

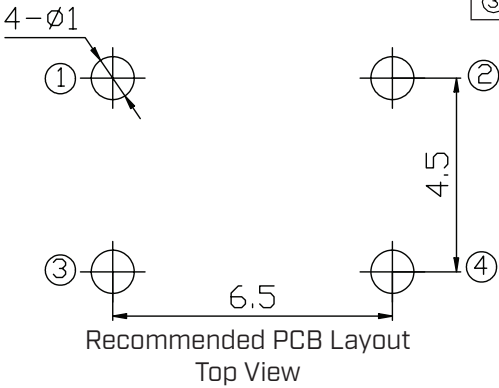
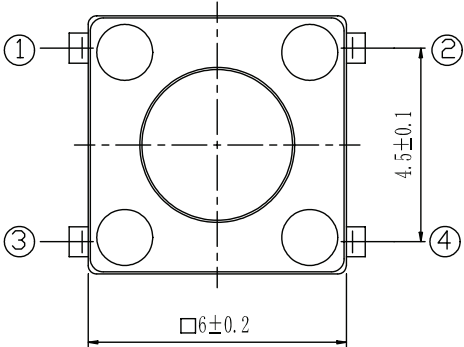
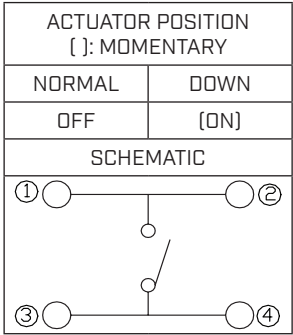
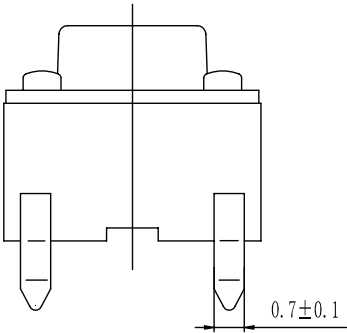
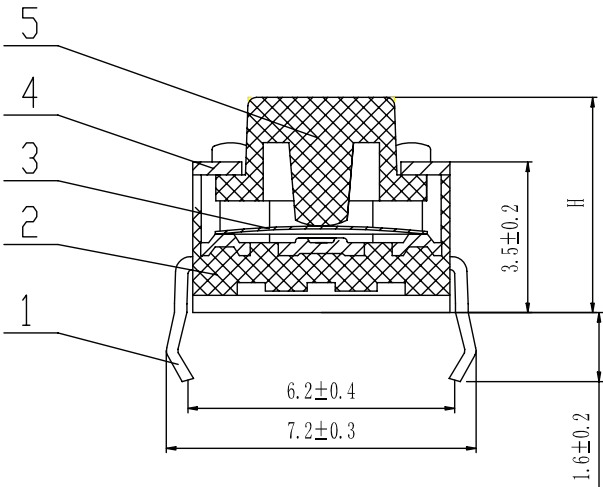
|                     |
|---------------------|
| SCR = Short Crimped |
| LCR = Long Crimped  |

Note: \*Only available with LCR (long crimped) terminals.

MECHANICAL DRAWING (SCR VERSION)

units: mm  
tolerance:  $\pm 0.2$  mm  
unless otherwise noted

| ITEM | DESCRIPTION | MATERIAL        | PLATING/COLOR |
|------|-------------|-----------------|---------------|
| 1    | terminals   | brass           | silver        |
| 2    | housing     | PA66 (UL94HB)   | black         |
| 3    | contacts    | phosphor bronze | silver        |
| 4    | cover       | stainless steel |               |
| 5    | stem        | PA66 (UL94HB)   | black         |

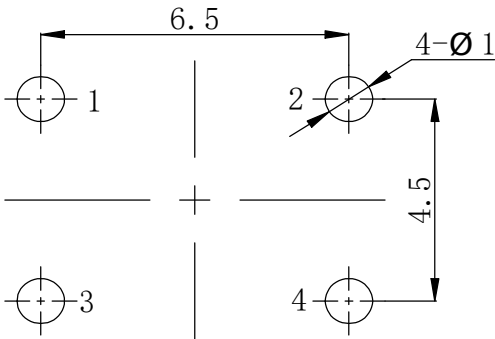
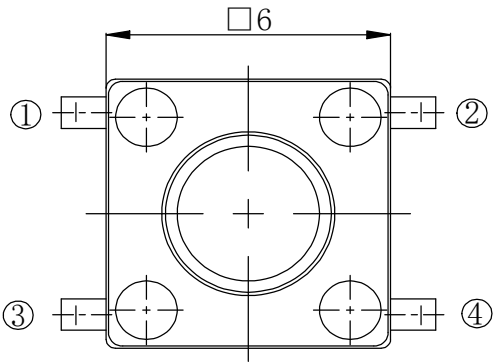
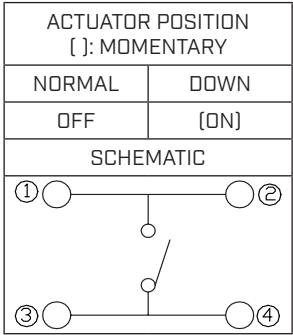
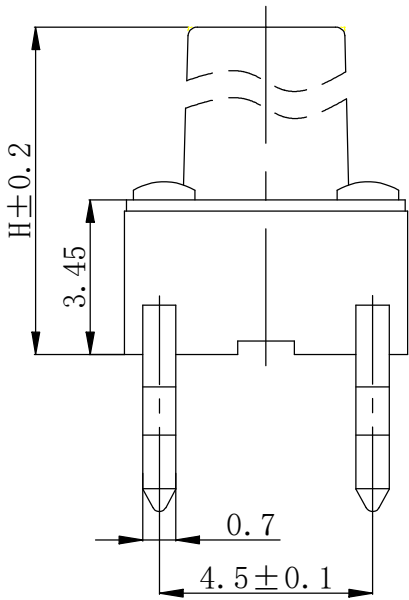
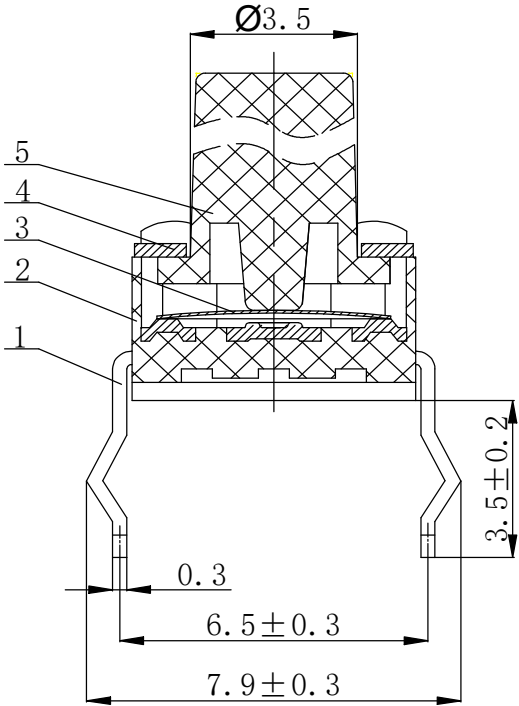


| Operting Force Table |                 |                  |
|----------------------|-----------------|------------------|
| Model                | Press Force [N] | Return Force [N] |
| 100                  | $1.0 \pm 0.3$   | $> 0.2$          |
| 160                  | $1.6 \pm 0.5$   | $> 0.2$          |
| 260                  | $2.6 \pm 0.5$   | $> 0.2$          |

MECHANICAL DRAWING (LCR VERSION)

units: mm  
tolerance: ±0.2 mm  
unless otherwise noted

| ITEM | DESCRIPTION | MATERIAL        | PLATING/COLOR |
|------|-------------|-----------------|---------------|
| 1    | terminals   | brass           | silver        |
| 2    | housing     | PA66 [UL94HB]   | black         |
| 3    | contacts    | stainless steel | silver        |
| 4    | cover       | stainless steel |               |
| 5    | stem        | PA66 [UL94HB]   | black         |



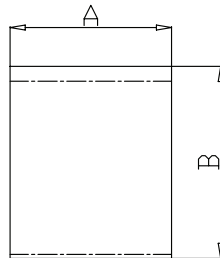
Recommended PCB Layout  
Top View

| Operting Force Table |                 |                  |
|----------------------|-----------------|------------------|
| Model                | Press Force [N] | Return Force [N] |
| 100                  | $1.0 \pm 0.3$   | $>0.2$           |
| 160                  | $1.6 \pm 0.5$   | $>0.2$           |
| 260                  | $2.6 \pm 0.5$   | $>0.2$           |

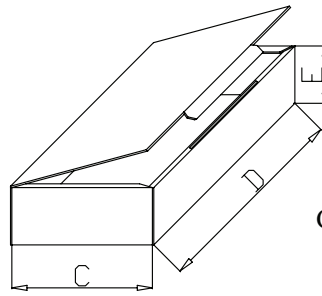
## PACKAGING

units: mm

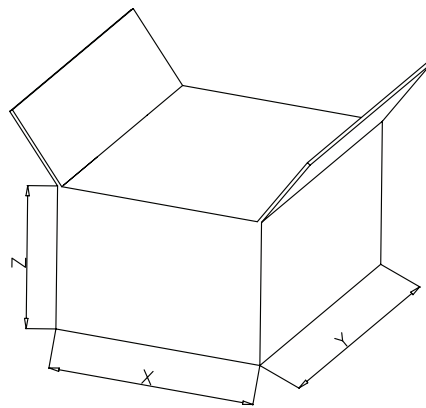
Bag Size: 190 x 160 mm  
Carton Box Size: 445 x 350 x 280 mm  
Bag QTY: 1,000 pcs per box  
Carton Box QTY: 60,000 pcs per bag



A=160mm、B=190mm



C=160mm、D=216mm、E=48mm



X=350mm、Y=455、Z=280mm

REVISION HISTORY

| rev. | description                       | date       |
|------|-----------------------------------|------------|
| 1.0  | initial release                   | 09/21/2021 |
| 1.01 | logo, datasheet style update      | 08/05/2022 |
| 1.02 | CUI Devices rebranded to Same Sky | 09/12/2024 |
| 1.03 | changed terminal plating          | 11/03/2025 |

The revision history provided is for informational purposes only and is believed to be accurate.



Same Sky offers a one (1) year limited warranty. Complete warranty information is listed on our website.

Same Sky reserves the right to make changes to the product at any time without notice. Information provided by Same Sky is believed to be accurate and reliable. However, no responsibility is assumed by Same Sky for its use, nor for any infringements of patents or other rights of third parties which may result from its use.

Same Sky products are not authorized or warranted for use as critical components in equipment that requires an extremely high level of reliability. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.

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