CUI Devices is now Same Sky! Learn More

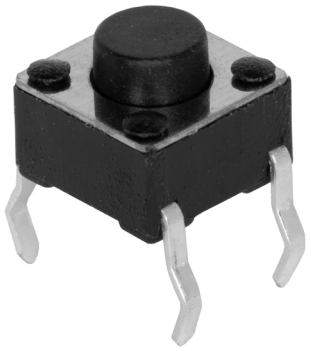
same sky



# SERIES: TS02 | DESCRIPTION: TACTILE SWITCH

## FEATURES

- through hole
- long crimped pins
- short crimped pins



RoHS

## 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 | | <br>100,000<br>80,000<br>60,000 | | <br>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:
43 = 4.3 mm
50 = 5.0 mm
*55 = 5.5 mm
60 = 6.0 mm
70 = 7.0 mm
73 = 7.3 mm
80 = 8.0 mm
90 = 9.0 mm
95 = 9.5 mm
100 = 10.0 mm
110 = 11.0 mm
*120 = 12.0 mm
130 = 13.0 mm
*140 = 14.0 mm
150 = 15.0 mm
153 = 15.3 mm
*160 = 16.0 mm
170 = 17.0 mm

Push Force:
100 = 100 gf
160 = 160 gf
260 = 260 gf

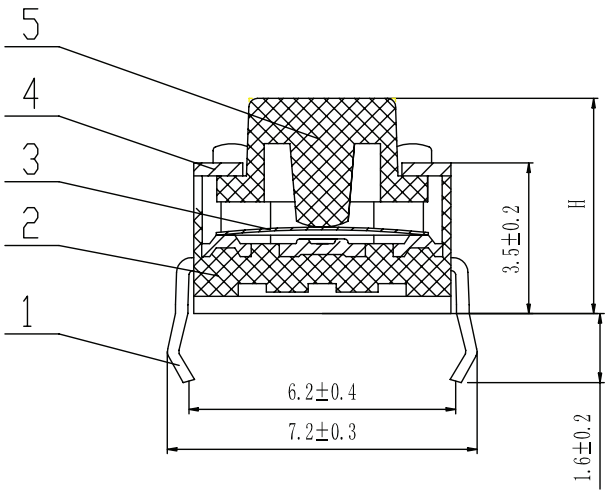
Terminals:
SCR = Short Crimped
LCR = Long Crimped

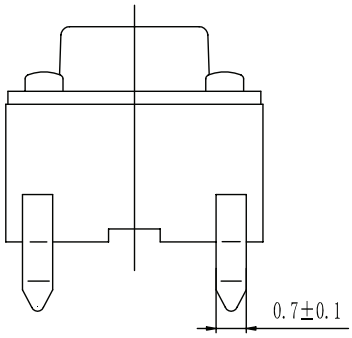
Note: *Only available with LCR (long crimped) terminals.

## MECHANICAL DRAWING (SCR VERSION)

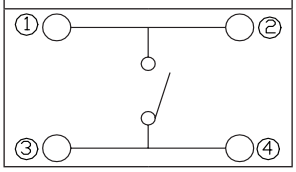
units: mm
tolerance: ±0.2 mm
unless otherwise noted

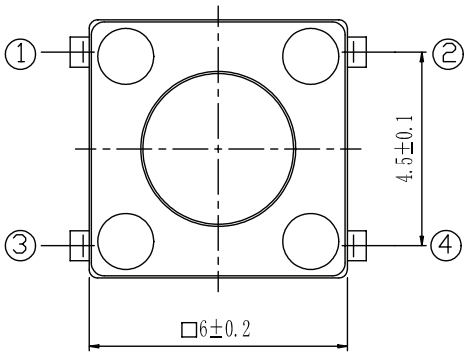
| ITEM | DESCRIPTION | MATERIAL | PLATING/COLOR |
|---|---|---|---|
| 1 | terminals | brass | silver |
| 2 | housing | PA66 (UL94HB) | black |
| 3 | contacts | phosphor bronze | silver |
| 4 | cover | stainless steel | |
| 5 | stem | PA66 (UL94HB) | black |

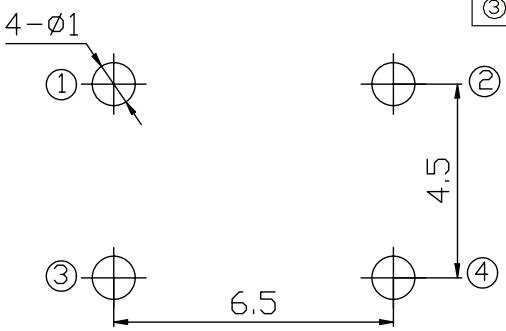



| ACTUATOR POSITION<br>[ ]: MOMENTARY | |
|---|---|
| NORMAL | DOWN |
| OFF | [ON] |
| SCHEMATIC | |



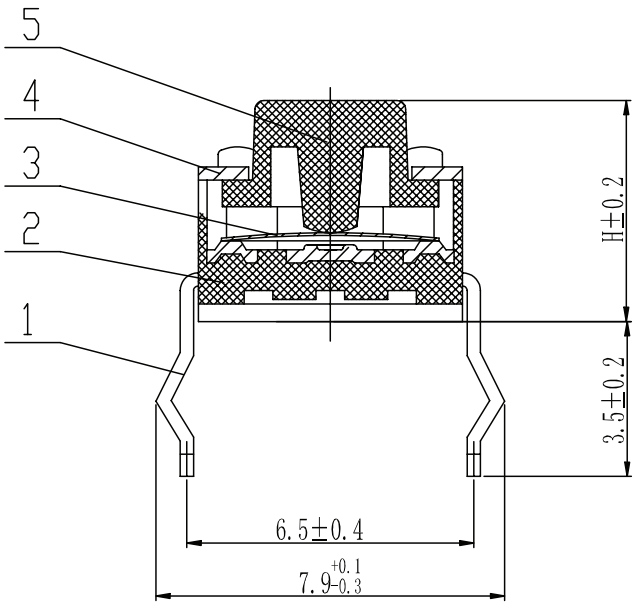

Recommended PCB Layout
Top View

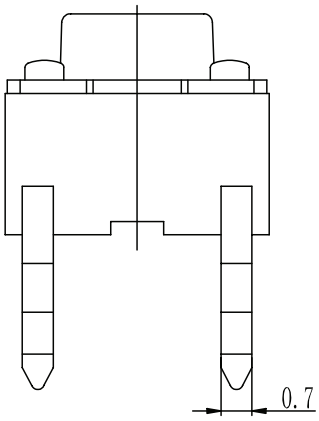
| Operting Force Table | | |
|---|---|---|
| Model | Press Force (N) | Return Force (N) |
| 100 | 1.0±0.3 | >0.2 |
| 160 | 1.6±0.5 | >0.2 |
| 260 | 2.6±0.5 | >0.2 |

## MECHANICAL DRAWING (LCR VERSION)

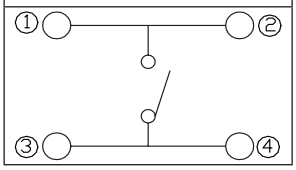
units: mm
tolerance: ±0.2 mm
unless otherwise noted

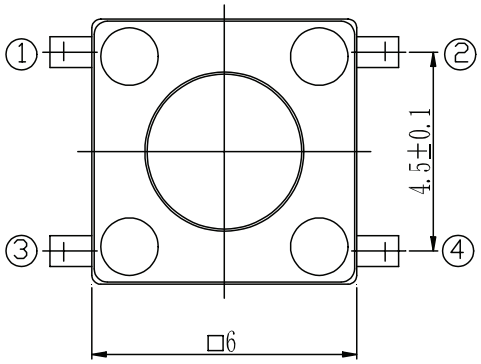
| ITEM | DESCRIPTION | MATERIAL | PLATING/COLOR |
|---|---|---|---|
| 1 | terminals | brass | silver |
| 2 | housing | PA66 (UL94HB) | black |
| 3 | contacts | phosphor bronze | silver |
| 4 | cover | stainless steel | |
| 5 | stem | PA66 (UL94HB) | black |

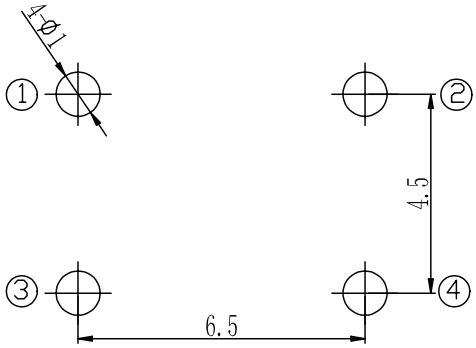



| ACTUATOR POSITION [ ]: MOMENTARY | |
|---|---|
| NORMAL | DOWN |
| OFF | [ON] |
| SCHEMATIC | |



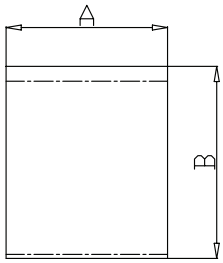

Recommended PCB Layout
Top View

| Operting Force Table | | |
|---|---|---|
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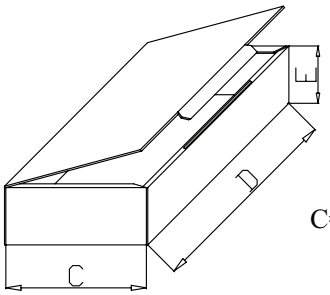
## PACKAGING

units: mm

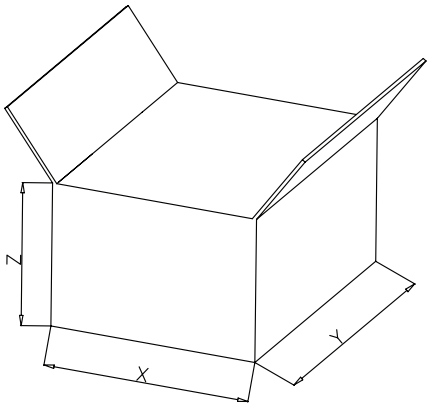
Bag Size: 190 x 160 mm
Carton Box Size: 445 x 350 x 280 mm
Bag QTY: 1,000 pcs per box
Carton Box QTY: 60,000 pcs per bag




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 |

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

same sky

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