

**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:

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

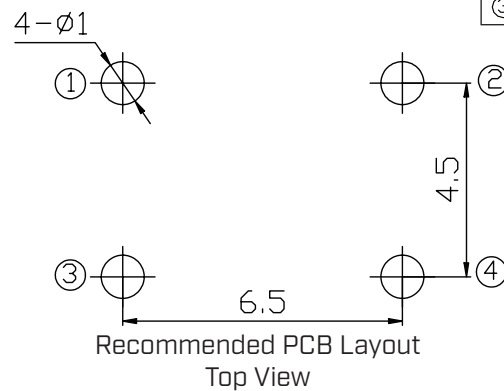
Terminals:  
 SCR = Short Crimped  
 LCR = Long Crimped

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         |



| Operating 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:  $\pm 0.2$  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         |



| 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 |

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



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