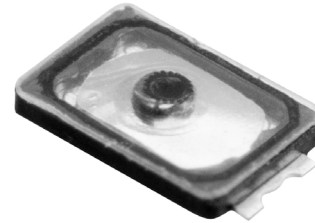




SERIES: TS19 | DESCRIPTION: TACTILE SWITCH

FEATURES

- surface mount
- IP67
- 100K & 300K life cycle options



SPECIFICATIONS

| parameter | conditions/description | min | typ | max | units |
|-----------------------|--|------|---------|------|--------|
| rated voltage | | 1 | | 12 | Vdc |
| rated current | | 0.01 | | 50 | mA |
| withstanding voltage | for 1 minute | | 100 | | Vac |
| contact resistance | applying load of 2 times operating force at 5 Vdc, 10 mA | | | 500 | mΩ |
| insulation resistance | at 100 Vdc for 1 minute | 100 | | | MΩ |
| operating force | see force table | | | | |
| actuator travel | 70 gf models | 0.05 | 0.10 | 0.15 | mm |
| | 120 gf models | 0.06 | 0.11 | 0.16 | mm |
| | 180 & 240 gf models | 0.08 | 0.13 | 0.18 | mm |
| operating temperature | | -30 | | 85 | °C |
| storage temperature | | -40 | | 90 | °C |
| life | rated load, 60 cycles/min, 1.5 times operating force | | | | |
| | 100,000 cycle models | | 100,000 | | cycles |
| | 300,000 cycle models | | 300,000 | | cycles |
| vibration | 10~55~10 Hz, 1.5 mm amplitude, 2 hours on each XYZ | | | | |
| flammability rating | see material table | | | | |
| RoHS | yes | | | | |
| IP level | IP67 | | | | |

PART NUMBER KEY

TS19 - 32 - 06 - BK - XXX - X - SMT - TR -67

Base Number

Push Force:
 *70 = 70 gf
 120 = 120 gf
 180 = 180 gf
 240 = 240 gf

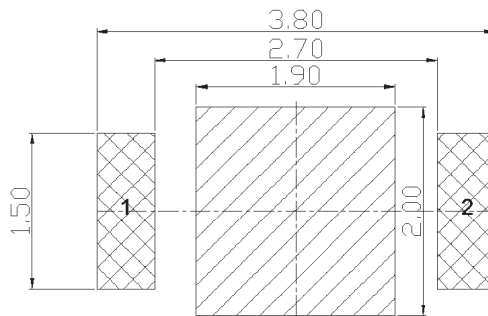
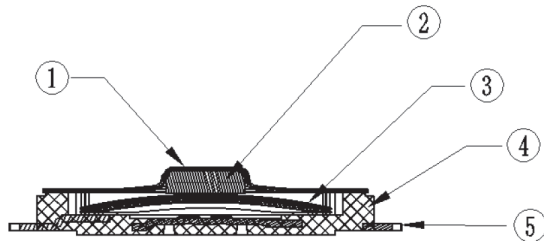
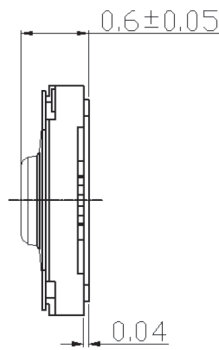
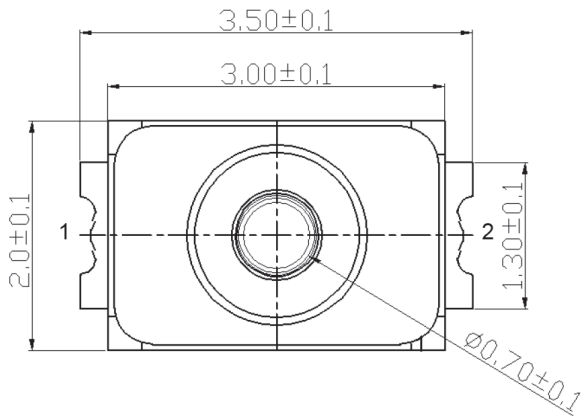
Life Cycles:
 1=100,000 cycles
 3=300,000 cycles

Note: *Only available with 100,000 cycle life.

MECHANICAL DRAWING

units: mm
 tolerance: ± 0.1 mm
 unless otherwise noted

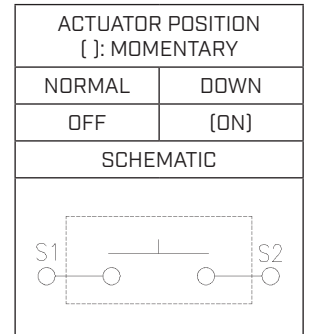
| ITEM | DESCRIPTION | MATERIAL | PLATING/COLOR |
|------|-------------|----------|---------------|
| 1 | membrane | PA | natural |
| 2 | push | PA | black |
| 3 | contacts | SUS | silver |
| 4 | case | PA | black |
| 5 | terminals | copper | silver |



: Land Pattern Area

: Brazing Prohibited Area

Recommended PCB Layout
 Top View



| Model | Press Force [gf] | Return Force [gf] |
|-------|------------------|-------------------|
| 70 | 70 \pm 50 | >20 |
| 120 | 120 \pm 50 | >20 |
| 180 | 180 \pm 50 | >20 |
| 240 | 240 \pm 50 | >20 |

SOLDERABILITY

| parameter | conditions/description | min | typ | max | units |
|-------------------------------|------------------------|-----|-----|-----|-------|
| hand soldering | for maximum 3 seconds | | | 350 | °C |
| reflow soldering ¹ | see reflow profile | | | 260 | °C |

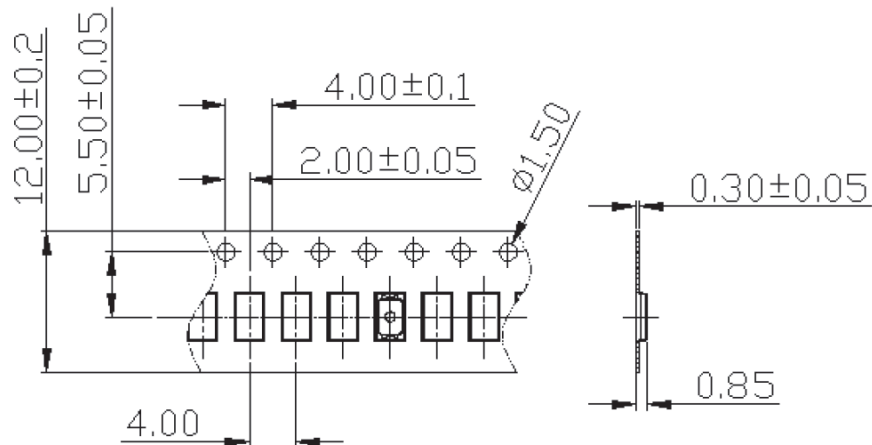
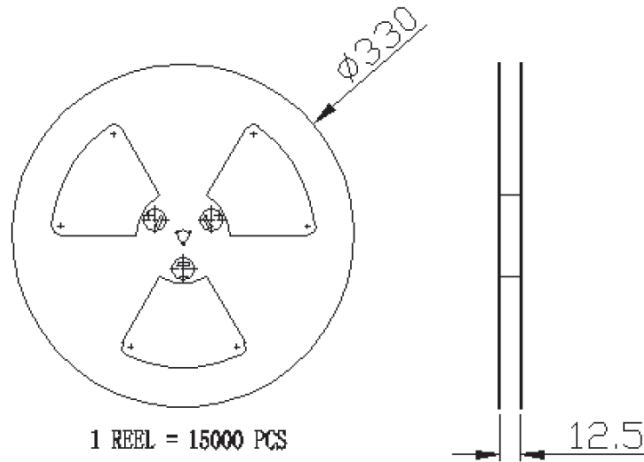
Notes: 1. Do not exceed 2 reflow cycles.



PACKAGING

units: mm

Reel Size: Ø330 mm
 Reel QTY: 15,000 pcs per reel
 Carton Size: 440 x 350 x 350 mm
 Carton QTY: 225,000 pcs per carton



REVISION HISTORY

| rev. | description | date |
|------|------------------------------|------------|
| 1.0 | initial release | 05/10/2022 |
| 1.01 | logo, datasheet style update | 08/05/2022 |

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



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

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