

SERIES: TS19 | DESCRIPTION: TACTILE SWITCH

FEATURES

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



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 | | 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 120 gf models 180 & 240 gf models | 0.05 0.06 0.08 | 0.10 0.11 0.13 | 0.15 0.16 0.18 | mm mm 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 300,000 cycle models | | 100,000 300,000 | | cycles 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
 Life Cycles: 1=100,000 cycles

3=300,000 cycles

.....

120 = 120 gf

180 = 180 gf 240 = 240 gf

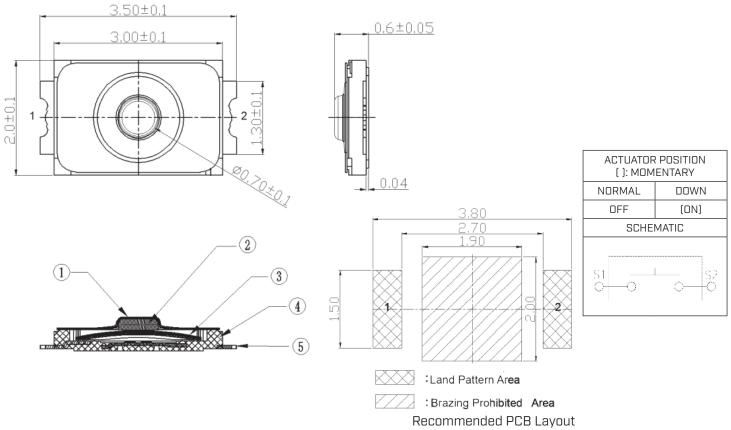
.....

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 |
| | | | |



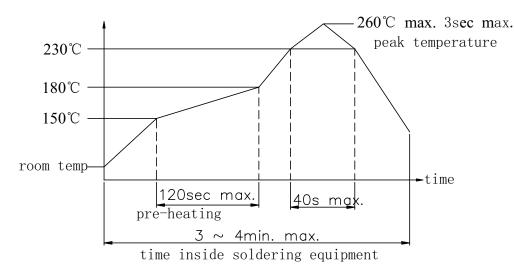
Top View

| Operating Force Table | | | |
|-----------------------|------------------|-------------------|--|
| Model | Press Force (gf) | Return Force (gf) | |
| 70 | 70±50 | >20 | |
| 120 | 120±50 | >20 | |
| 180 | 180±50 | >20 | |
| 240 | 240±50 | >20 | |

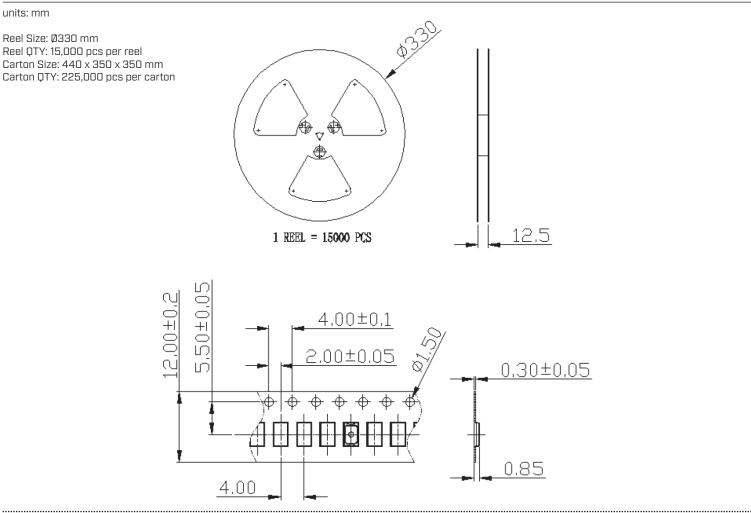
SOLDERABILITY

| 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



cuidevices.com

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.



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

CUI Devices 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.