

NanoT Series

The Most Compact Tactile Switch



Description

NanoT is a series of Ultra-miniature, low profile, waterproof tactile switches. Both top and side actuated options with SMT and PIP terminal available. The compact size of top actuated version just 2.1 x 1.65 x 0.55mm, and side actuated version just 2.2 x 1.7 x 1.7mm, make them the smallest tactile solution available in the market for sophisticated applications powered by smart wearables, portable medical devices as well as IoT devices.

Features & Benefits

- Ultra Compact Size
- SMT or PIP versions
- IP67
- Long life cycles
- PFAS free
- Laser welding technology
- PIP edge-mount for side actuated version allow excellent resistance to shear testing

Applications

- Hearing Aids
- Headsets
- Sports Watch
- IoT portable device

Specifications

Function	Momentary action
Contact Arrangement	1 make contact = SPST, NO
Terminals	SMT / PIP
Contact Material	Silver plated

Electronic Characteristics

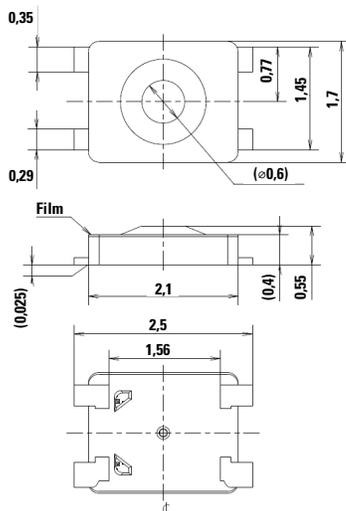
Max Power	0.3 VA DC
Voltage	15V
Current	20mA
Dielectric Strength	250Vrms
Contact Resistance	500mΩ Max.
Bounce Time	On/Off 10ms Max.

Environmental Characteristics

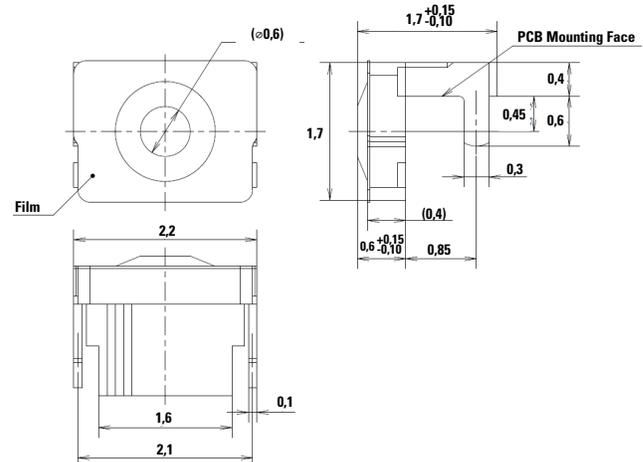
Operating Temperature	-40 to 85°C
Storage Temperature	-40 to 85°C

Dimensions (mm)

Top Actuated (AS Version)



Side Actuated (BP Version)



Notes:
General Tolerance: ± 0.1mm

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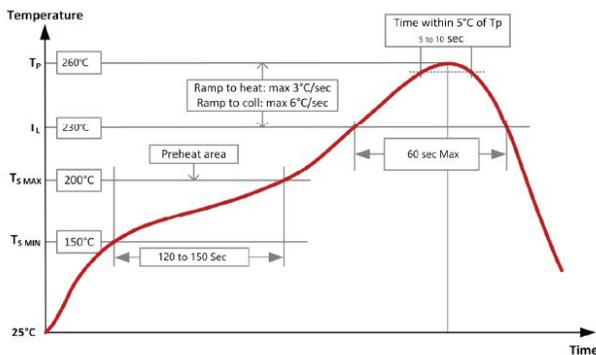
Mechanical Characteristics

Part Number	Style	Force (gf)	Life Cycles	Travel (mm)
NanoT 100 AS	Top Actuated with SMT termination	100 +40/-30	200,000	0.1 ± 0.05
NanoT 160 AS	Top Actuated with SMT termination	160 +/- 50	300,000	0.1 ± 0.05
NanoT 240 AS	Top Actuated with SMT termination	240 +/- 60	200,000	0.1 ± 0.05
NanoT 100 BP	Side actuated with PIP* termination	100 +40/-30	200,000	0.1 ± 0.05
NanoT 160 BP	Side actuated with PIP* termination	160 +/- 50	300,000	0.1 ± 0.05
NanoT 240 BP	Side actuated with PIP* termination	240 +/- 60	200,000	0.1 ± 0.05

Notes:

1. PIP: Pin in Paste also called Pin Through Paste.

Soldering Profile



T_P	Peal package body Temperature
T_L	Liquidous Temperature
T_S	Preheat/Soak Temperature

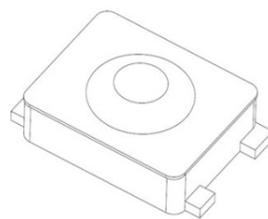
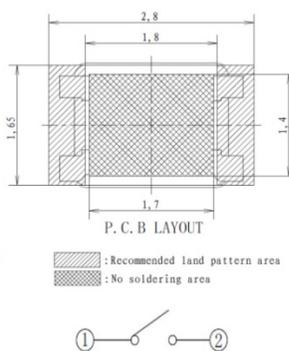
Soldering This component is suited to the following methods:
 Cleaning according to typical washing processes
 Lead free reflow soldering process in accordance with 61760-1

Recommendation:

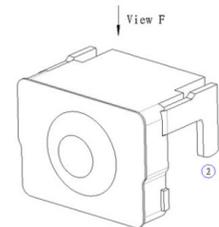
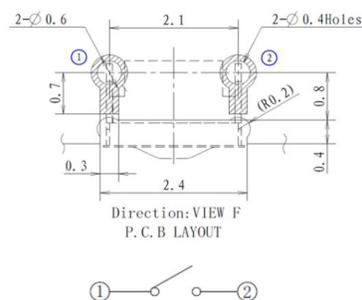
Number of reflow pass: 2 cycles
 The thickness of solder paste on the PCB board is $0.08 \pm 0.01\text{mm}$

Pad Layout Dimensions (mm)

AS Version



BP Version



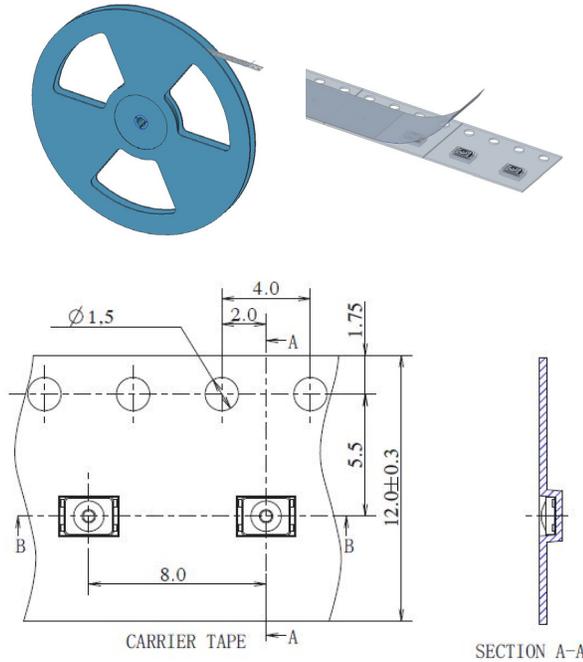
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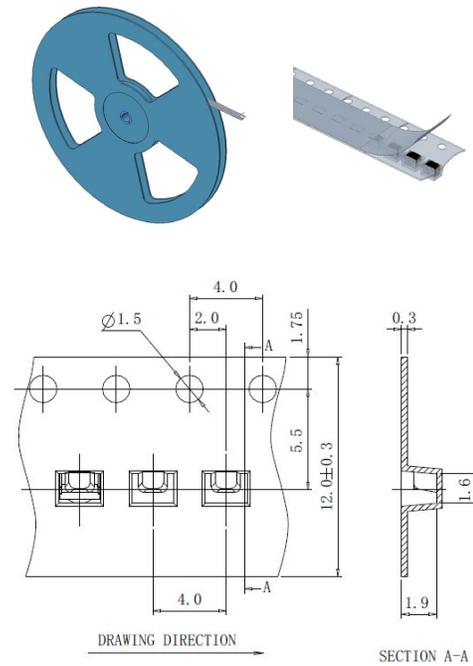


Packaging Dimensions (mm)

AS Version



BP Version

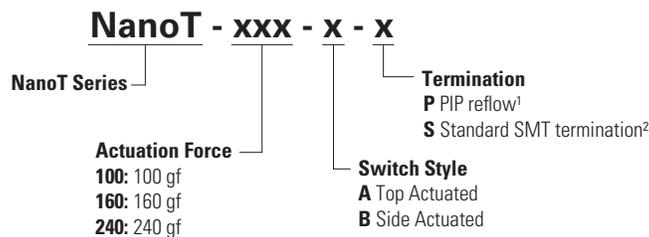


Packaging Details

Series	AS	BP
Type	Tape & Reel	Tape & Reel
Number of parts in packaging	8000	7500
Other information	EIS 481	EIS 481
Transport Conditions	According to specification NF H00-060	According to specification NF H00-060

Ordering Number

Our easy build-a-switch concept allows you to mix and match options to create the switch you need. To order, select desired option from each category. For any part number different from those listed below, please consult your local representative.



Notes:
 1. P termination for side version only
 2. S termination for top version only

Liability Limitation

This datasheet does not provide enough information for applications that require a certain level of quality or safety such as automotive, medical systems, or safety equipment. Please contact customer service for the contractual specification package.

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