



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



# TPA Series Navigation Tact Switch for SMT



## Features/Benefits

- One touch, 5 way switching
- Distinctive tactile feel for scanning and select functions
- Allows panel sealing
- Normally open momentary contacts
- Subminiature overall dimensions
- Push down to select possible in any position

## Typical Applications

- Electronic devices requiring direct control on LCD display
- Cellular phones
- PDA
- Digital cameras
- GPS navigation systems
- Home entertainment systems
- Security

## Construction

FUNCTION: Multi-directional momentary action  
CONTACT ARRANGEMENT: Make contact = SP, N.O.  
TERMINALS: Gullwing type for SMT

## Mechanical

SHAFT DISPLACEMENT:  
Orthogonal 4 horizontal directions  
Vertical Push down  
TRAVEL TO MAKE:  
Scanning  
Orthogonal 0.35 mm±0.15 mm  
Push to select 0.25 mm±0.15 mm  
OPERATING FORCE:  
Scanning Orthogonal 1.85 N ± 0.5 N  
Push to select Vertical 4.0 N ± 0.8 N  
MAXIMUM APPLIED FORCE:  
Horizontal 10 N  
Vertical 40 N  
LIFE EXPECTANCY:  
Scanning 200,000 operations in each direction  
Push to select 200,000 operations

## Electrical

	Silver	Gold
MAXIMUM POWER:	1 VA	0.2 VA
MAXIMUM VOLTAGE:	24 V	24 V
MAXIMUM CURRENT DC:	50 mA	10 mA
MINIMUM CURRENT DC:	1 mA	1 mA

DIELECTRIC STRENGTH: 250 VDC  
CONTACT RESISTANCE, INITIAL: ≤ 200 mΩ  
INSULATION RESISTANCE (100 VDC): 10<sup>9</sup>Ω  
BOUNCE TIME: < 10 ms

## Environmental

	Silver	Gold
OPERATING TEMPERATURE:	-40°C to 85°C	-40°C to 110°C
STORAGE TEMPERATURE:	-55°C to 85°C	-55°C to 125°C

## Process

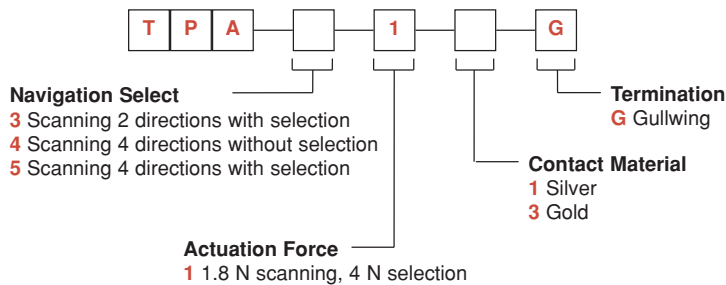
Soldering process: Infrared reflow according to CECC 0802  
No washing  
Hand soldering max. 350° 3S (CEI 68-2-20)

**NOTE:** Specifications listed above are for switches with standard options.  
For information on specific and custom switches, consult Customer Service Center.

## How To Order

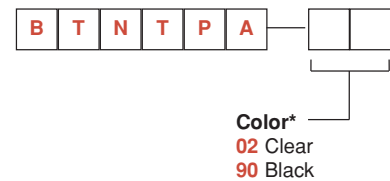
Our easy build-a-switch concept allows you to mix and match options to create the switch you need. To order, select desired option from each category and place it in the appropriate box.

### Switch



### Button

Buttons ordered separately in bulk, 500 pieces.



\* Other colors by request



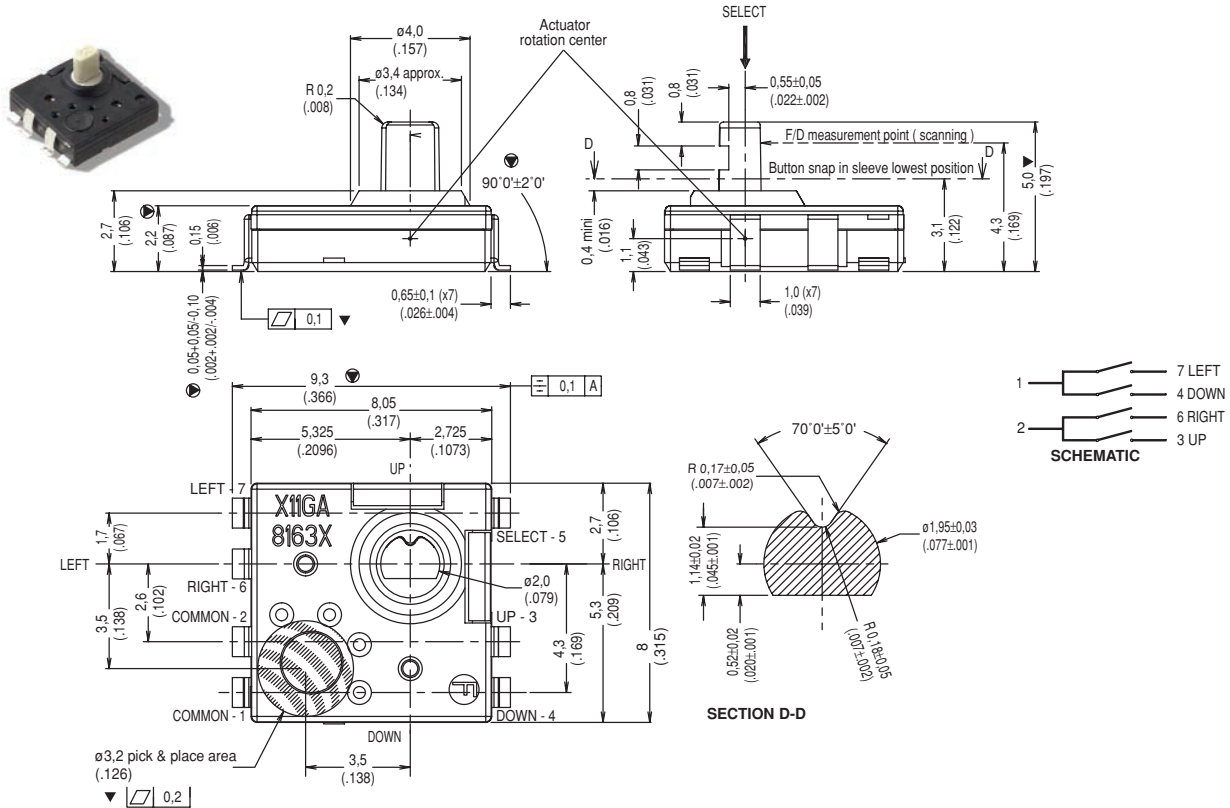
C

Navigation

# TPA Series Navigation Tact Switch for SMT

SERIES 

## TPA



## NAVIGATION SELECT

OPTION CODE	ARRANGEMENT
<b>3</b>	Scanning 2 directions with selection
<b>4</b>	Scanning 4 directions without selection
<b>5</b>	Scanning 4 directions with selection

## ACTUATION FORCE

**1** 1.8 N SCANNING, 4 N SELECTION

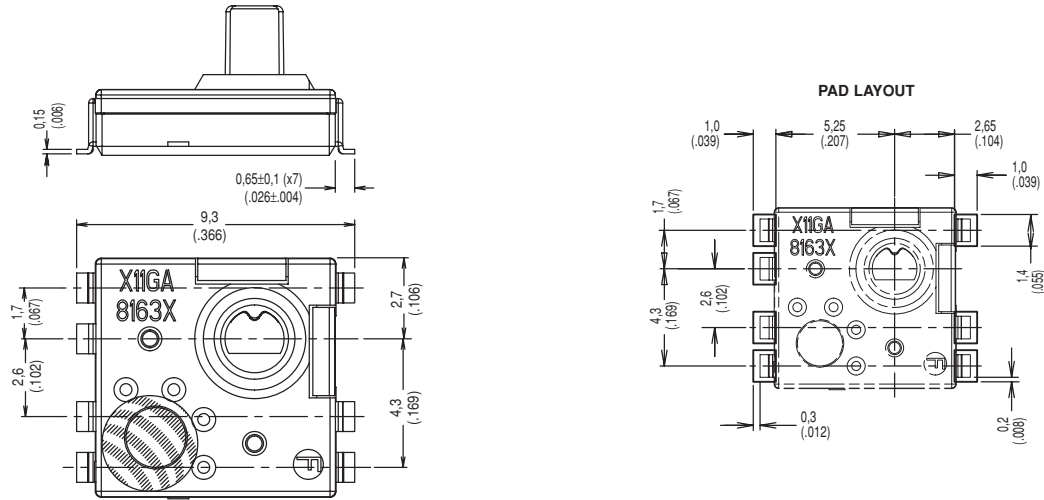
## CONTACT MATERIAL

OPTION CODE	MATERIAL
<b>1</b>	SILVER
<b>3</b>	GOLD

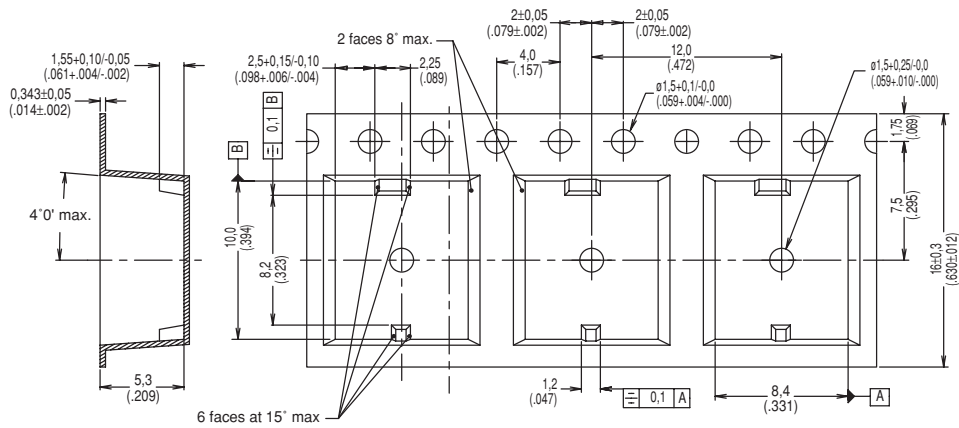
# TPA Series Navigation Tact Switch for SMT

## TERMINATION

**G** GULLWING

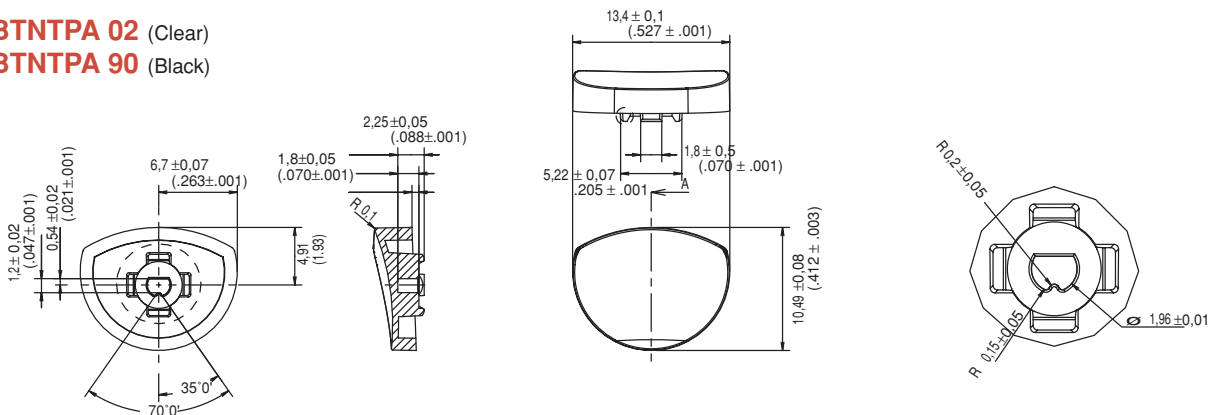


## TAPE & REEL



## BUTTON AVAILABLE

**BTNTPA 02** (Clear)  
**BTNTPA 90** (Black)



Navigation