## Features/Benefits

- 2 axis, multi-direction operation
- 2,000,000 life cycle for toggle
- Center select momentary switch
- Small package size

# **Typical Applications**

- Gaming peripherals
- Remote Control Vehicles
- Mini-joystick
- Thumb control
- Navigation control
- Industrial control
- Heavy equipment





## **Electrical**

TOTAL RESISTANCE (POTENTIOMETERS):  $10k\Omega \pm 20\%$  initial Within ± 20% of initial values for 10,000 cycles

RESISTANCE POTENTIOMETERS: Percentage of the voltage of terminal 1-2 to the voltage of terminal 1-3

RATED VOLTAGE: 50 VAC or 5 VDC RATED POWER: 0.05 A @ 12 VDC

CONTACT NOISE: Noise < 10% of operating voltage

VOLTAGE DIVIDER: 39.6 ~ 60.4% INSULATION RESISTANCE:  $> 100 \text{ M}\Omega$ 

WITHSTANDING VOLTAGE: No arcing or breakdown

### **Environment**

OPERATING TEMPERATURE: -10°C to +70°C STORAGE TEMPERATURE: -30°C to +80°C

## Mechanical

PATTERN OF ACTUATOR MOVEMENT: Toggle cross-wide and in a circle

FULL STROKE ACTUATION STOP STRENGTH: > 3.1 kgf

(3 seconds minimum)

PULL STRENGTH OF THE ACTUATOR: > 5.0 kgf

(3 seconds minimum)

ACTUATION FORCE: 120 +/-50 gf (12 +/- 5mN\*M of Torque) ACCURACY OF RETURN TO ACTUATOR RELEASE POSITION: ±3° TOGGLE ANGLE OF OPERATION: 26° max. angle from vertical

through full circular range of rotation

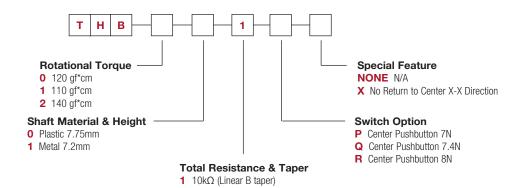
OPERATING LIFE: 1,000,000 cycles minimum (center switch) 2,000,000 cycles minimum (thumbstick toggle)

## **Packaging**

Tray (60 units)

#### **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.



<sup>\*</sup> Please note some option codes are mutually exclusive. Consult factory if you have any questions

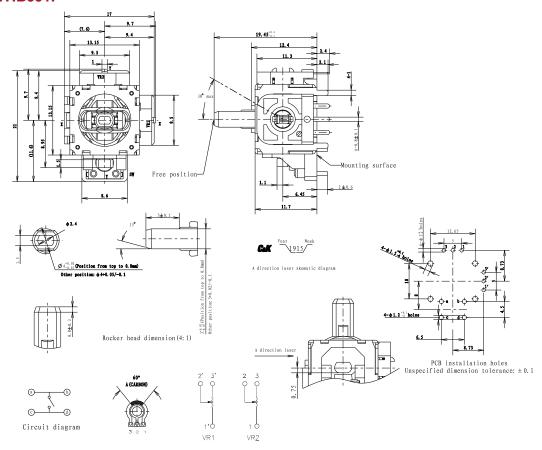






# **THB Series Miniature Thumbstick**

# **THB001P**



## **THB111R & THB211QX**

