## 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): $10 \mathrm{k} \Omega \pm 20 \%$ initial Within $\pm 20 \%$ 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: $>100 \mathrm{M} \Omega$
WITHSTANDING VOLTAGE: No arcing or breakdown

## Environment

OPERATING TEMPERATURE: $-10^{\circ} \mathrm{C}$ to $+70^{\circ} \mathrm{C}$
STORAGE TEMPERATURE: $-30^{\circ} \mathrm{C}$ to $+80^{\circ} \mathrm{C}$

## 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: $>5.0 \mathrm{kgf}$ (3 seconds minimum)
ACTUATION FORCE: $120+/-50 \mathrm{gf}(12+/-5 \mathrm{mN}$ * M of Torque)
ACCURACY OF RETURN TO ACTUATOR RELEASE POSITION: $\pm 3^{\circ}$
TOGGLE ANGLE OF OPERATION: $26^{\circ}$ 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.


* Please note some option codes are mutually exclusive. Consult factory if you have any questions


## THB001P



## THB111R \& THB211QX



X-X direction does not return (applies to THB211QX only)



## Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery \& Lifecycle Information:

C\&K Switches:
THB001P

