



# Series @254 Micro-stick Technical Data

## Two Axis, Micro-stick Controller With Optional Momentary Switch

### Features

- Sub-Compact Size: 11x11x5 (mm)
- Long Life 1 Million Cycles
- Provides excellent electrical accuracy through patented mechanism
- Optional momentary switch is operational at all rotations
- RoHS compliant



## Electrical and Mechanical Specifications

### Potentiometer 1 & 2

#### Resistance Range

10 K ohms through 100 K ohms

#### Resistance Tolerance

Standard:  $\pm 30\%$

Special:  $\pm 20\%$  available

#### Dielectric Strength

250 VAC 50/60 Hz for 1 minute

#### Insulation Resistance

100 Megohms @ 250 VDC

#### Operational Torque

120  $\pm 50$  gf-cm

#### Power Rating

0.0125 watt @ 50°C, derated to no load @ 85°C

#### Maximum Operating Voltage

50 VAC or 5 VDC maximum

#### Angle of Rotation

60° maximum

#### Life

1,000,000 cycles

### Available Switch

#### Type

Momentary

#### Contact Resistance

100 milliohms maximum

#### Maximum Contact Resistance

200 milliohms maximum after 200,000 cycles  
switching 5mA @ 5VDC

#### Insulation Resistance

100 Megaohms minimum @ 100 VDC

#### Operational Force

800 $\pm$ 200 gf

#### Power Rating

5 VDC, 5 mA maximum

#### Travel

0.8 $\pm$ 0.2mm

#### Switch Life

200,000 cycles



# Electrical and Mechanical Specifications

## Potentiometer 1 & 2

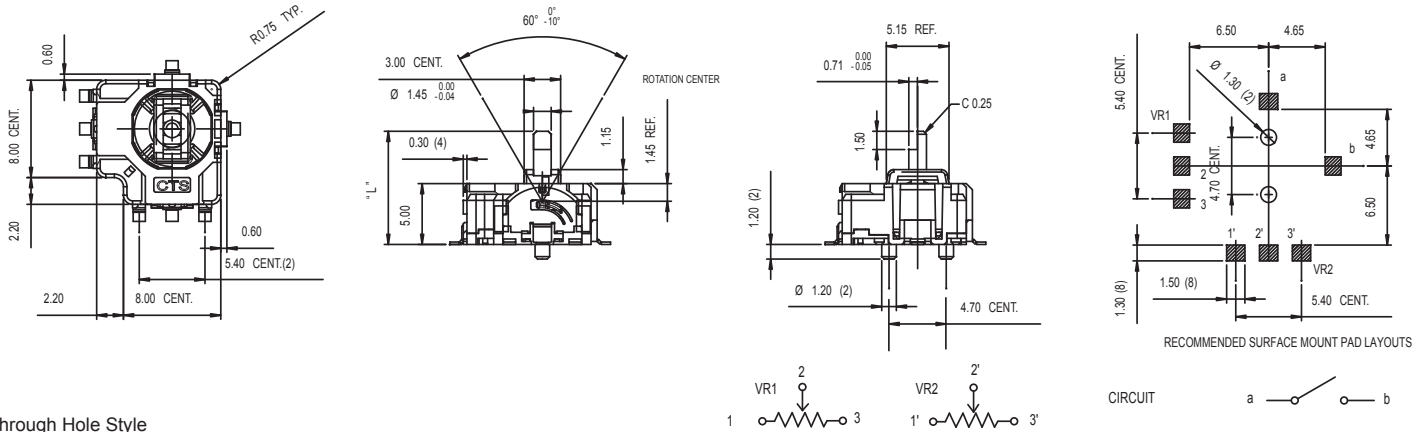
**Operating Temperature**  
Operating: -10°C to +70°C

**Soldering Heat Resistance**  
260±5°C for 5 seconds

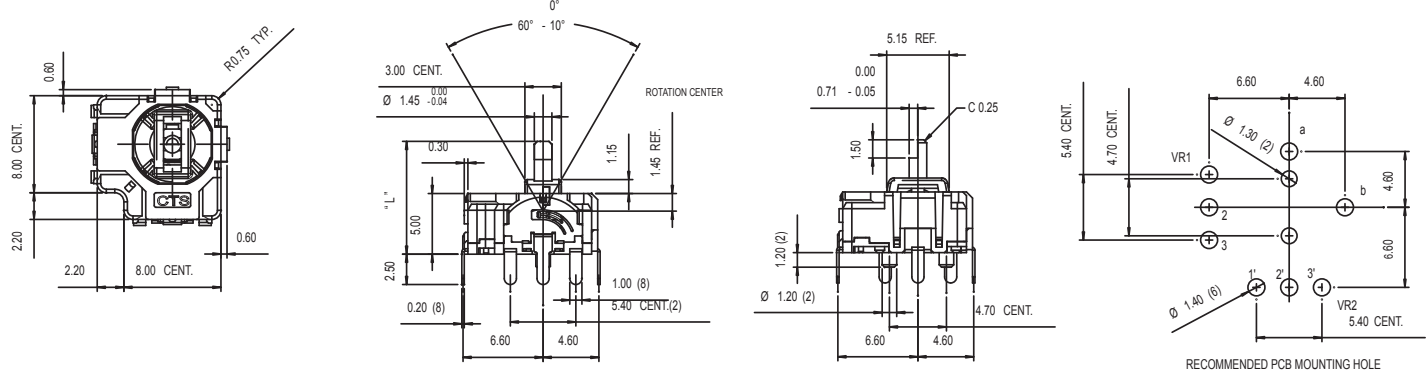
**Mounting Information**  
Through Hole or SMD Terminal

## CTS Series 254 DIMENSION: mm

SMD Style



Through Hole Style



## Ordering Information

**254**

**T**

**B**

**103**

**C**

**50**

**A**

TERMINAL STYLE	DRIVE ARM LENGTH DIM "L"	RESISTANCE CODE EXAMPLES	RESISTANCE TOLERANCE	ELECTRICAL ANGLE	SWITCH CONFIGURATION
S – SMD T – THROUGH HOLE	LENGTH FROM MOUNTING SURFACE A – 9.3 mm B – 12.0 mm	CODE RESISTANCE 103 10K 104 100K	B – ±20% C – ±30%	60 – 60° 50 – 50°	A – W/O SWITCH B – MOMENTARY SWITCH

STANDARD PART (QUICK DELIVERY, IVORY COLOR) - 254TA103C50A, 254TA103C50B, 254SA103C50A, 254SA103C50B