## : ©hipsmall

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

## Series 253 Data Sheett Half-height Mini-joystick

## Two Axis, Half-height Mini-joystick With Optional Momentary Switch

## Features

- Compact Size: $20 \times 18 \times 6 \mathrm{~mm}$ (.79"x.71"x.24")
- Long Life 1 Million Cycles
- Optional momentary switch is operational at all rotations
- Sturdy metal case with convenient mounting tabs
- RoHS compliant


Pat. No: US 6,654,005 , Taiwan: 176676, China ZL02123347

## Electrical and Mechanical Specifications

## Potentiometer 1 \& 2

Resistance Range
10 K ohms through 200 K ohms

## Resistance Tolerance

Standard: $\pm 30 \%$
Special: $\pm 10 \%, \pm 20 \%$ available

## Dielectric Strength

250 VAC 60 Hz for 1 minute
Insulation Resistance
100 Megohms @ 250 VDC

## Operation Torque

$180 \pm 50$ gf.cm
Power Rating
0.0125 watt @ $50^{\circ} \mathrm{C}$, derated to load @ $85^{\circ} \mathrm{C}$

Maximum Operating Voltage
50 VAC or 5 VDC maximum
Angle of Rotation
$54^{\circ}$ maximum

## Life

1,000,000 cycles

## Available Switch

Type
Momentary
Contact Resistance
100 milliohms maximum initially
200 milliohms max after 250,000 cycles
switching 5 mA @ 5VDC
Dielectric Strength
250 VAC 60 Hz for 1 minute
Insulation Resistance
100 Megohms minimum @ 100 VDC for 1 minute
Operational Force
$1,200 \pm 260 \mathrm{gf}$
Power Rating
$5 \mathrm{VDC}, 5 \mathrm{~mA}$ maximum
Travel
$0.5 \pm 0.4 \mathrm{~mm}$
Switch Life
250,000 cycles

## Electrical and Mechanical Specifications

## Potentiometer 1 \& 2

## Operating Temperature

$-10^{\circ} \mathrm{C}$ to $+70^{\circ} \mathrm{C}$

## Mounting Information

PC Terminals

## Soldering Conditions

$260 \pm 5^{\circ} \mathrm{C}$ for 5 seconds

## Caution

Please use extra mechanism to restrict rotational angle at less than 54 degree or there will be bumpy or rugged rotational feeling

CTS Series 253


DIMENSION: mm


## Ordering Information



