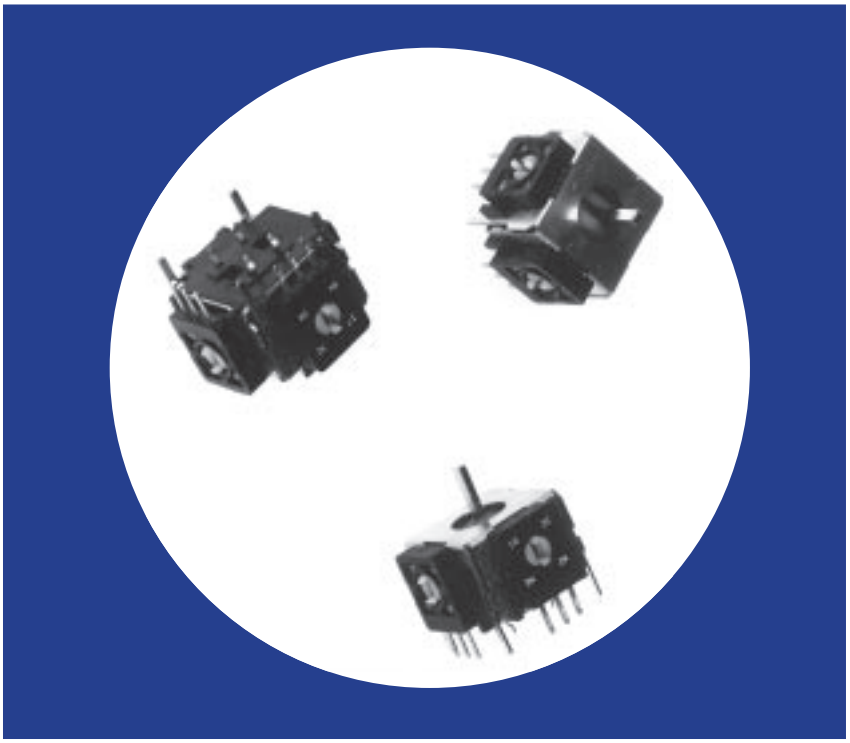
Series 252 Technical Data

Two Axis, Ministick Controller With Optional Momentary Switch



Pat. No: US 6,353,430 , Taiwan: 128688. Pat. Pending in Japan & China

Features

- Compact Size (20x21x13mm)
- Long Life 1 Million Cycles
- Optional momentary switch is operational at all rotations
- Sturdy metal case with convenient mounting tabs
- RoHS compliant

Electrical and Mechanical Specifications

Potentiometer 1 & 2

Resistance Range
10 K ohms through 200 K ohms

Resistance Tolerance
Standard: ±30%
Special: ±10% and ± 20% available

Insulation Resistance
100 Megaohms min @ 250 VDC

Rotational Torque of Stick
200 ± 80 gf.cm at 10° deflection

Power Rating
0.0125 watt @ 50°C, Derated to no load at 85°C

Operating Voltage
50 VAC or 5 VDC maximum

Angle of Rotation
60° maximum

Life
Standard: 1,000,000 cycles
Special: Consult CTS

RoHS Compliance
Compliant with European Union RoHS Directive

Available Switch

Type
Momentary

Contact Resistance
100 milliohms max

Maximum Contact Resistance
200 milliohms max after 500,000 cycles switching 5mA @ 5VDC

Dielectric Strength
250 VAC 50/60 Hz for 1 minute

Insulation Resistance
100 Megaohms min @ 100 VDC

Operational Force
800±200 g

Power Rating
12 VDC, 50 mA maximum

Travel
0.9 ± 0.4mm

Switch Life
500,000 cycles

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Electrical and Mechanical Specifications

Potentiometer 1 & 2

Operating Temperature

-10°C to +70°C

Mounting Information

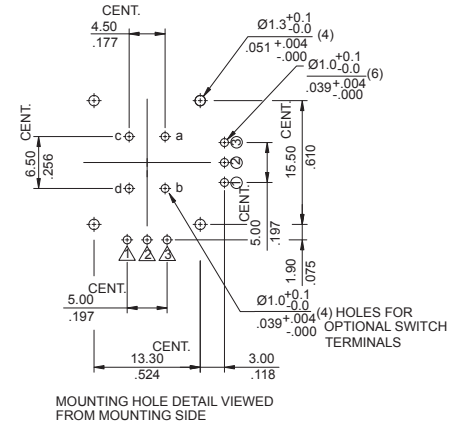
PC Terminals

Soldering Conditions

Wave - up to 5 seconds at 260°C

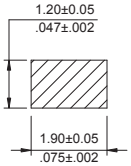
No Solder or flux on component side of board

CTS Series 252

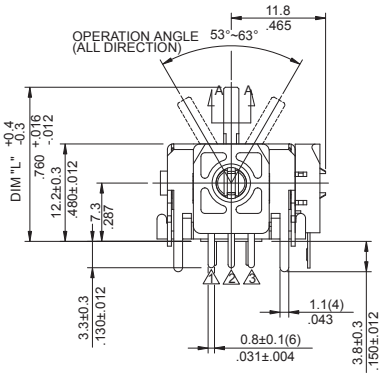


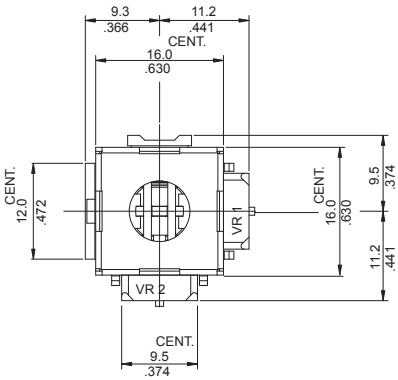


SWITCH CIRCUIT DIAGRAM



SECTION A-A
SCALE : 10X





DIMENSION: mm / inch

Ordering Information

252 A 103 C 60 N A

DRIVE ARM LENGTH DIM "L"

LENGTH FROM MOUNTING SURFACE

A – 19.3mm

B – 24.3mm

RESISTANCE CODE EXAMPLES

CODE	RESISTANCE
103	10K
203	20K
503	50K
104	100K
124	120K
154	150K

RESIST TOL

A – ±10%

B – ±20%

C – ±30%

ROTATIONAL ANGLE

40 – 40°

50 – 50°

60 – 60°

TAP CONFIGURATION

N – NO TAP

T – 4° TAP AT CENTER

SWITCH CONFIGURATION

A – W/O SWITCH

B – MOMENTARY SWITCH

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