BOURNS®

PST10 Series

10 mm Incremental Potentiometers

*RoHS COMPLIANT

Features

- Compact design
- High reliability
- Mounting hole pin
- RoHS compliant*

Applications

- Industrial controls
- Robotics
- Factory automation equipment
- Motion control systems
- Human-machine interfaces (HMI)
- Commercial equipment
- Position feedback applications

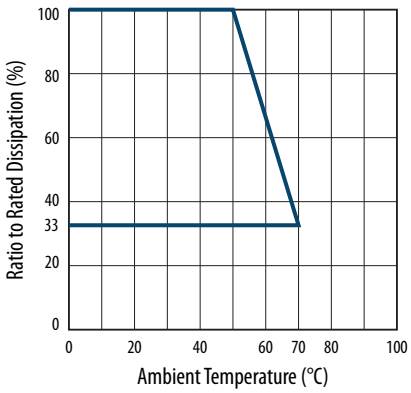
Sustainability

- Small size reduces material use
- High pallet density for lower CO_2
- Eco-logistics-friendly packing
- Recyclable ESD-safe packaging
- High efficiency, low power loss

Product Overview

Bourns® PST10 Series combines a compact hollow-shaft design with contact sensing technology to deliver accurate position feedback and long-term reliability. By eliminating mechanical wear associated with conventional potentiometers, this series provides stable analog output and maintenance-free operation throughout its service life. The hollow-shaft configuration simplifies mechanical integration, while the compact package supports space-constrained designs without compromising performance. Designed to help improve system durability and reduce maintenance requirements, the PST10 Series offers consistent electrical performance and dependable operation over an extended operating life.

Derating Curve of Rated Dissipation



Electrical Characteristics

Contact Rating ..... 10 mA @ 5 VDC
Insulation Resistance ..... 100 MΩ min. @ 200 VDC
Dielectric Strength - Sea Level ..... 50 VAC 1 min.
Linear Taper B ..... Linear
Rated Power ..... 0.15 W
Rated Voltage ..... 150 VAC – 100 VDC
Standard Resistance Range ..... 1 KΩ to 5 MΩ
Total Resistance Tolerance
  1 KΩ to 1 MΩ ..... ±20 %
  ≥1 MΩ to 5 MΩ ..... ±30 %
Electrical Travel ..... 200 ° ±20 °

Environmental Characteristics

Operating Temperature ..... -10 °C to +70 °C
Storage Temperature ..... -25 °C to +80 °C
Soldering Condition
  Dip Soldering ..... 260 °C ±5 °C for 3 s
  Manual Soldering ..... 350 °C ±5 °C for 3 s
IP Rating ..... IP 40

Mechanical Characteristics

Mechanical Angle ..... 235 ° ±10 °
Rotational Torque ..... 10 to 100 gf/cm
Rotational Speed ..... 60 ° / sec.
Rotation Stopper Strength ..... 0.5 Kgf/cm
Push – Pull Strength of Shaft ..... 1.0 Kgf/cm
Shaft Play in Axial Direction ..... 0.5 K gf max.
Rotational Life ..... 10,000 cycles

Product Characteristics

Weight ..... 0.6 grams

Contact Information

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Asia-Pacific	+886-2 2562-4117	asiacus@bourns.com
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*RoHS Directive 2015/863, Mar 31, 2015 and Annex.

Specifications are subject to change without notice. Users should verify actual device performance in their specific applications.

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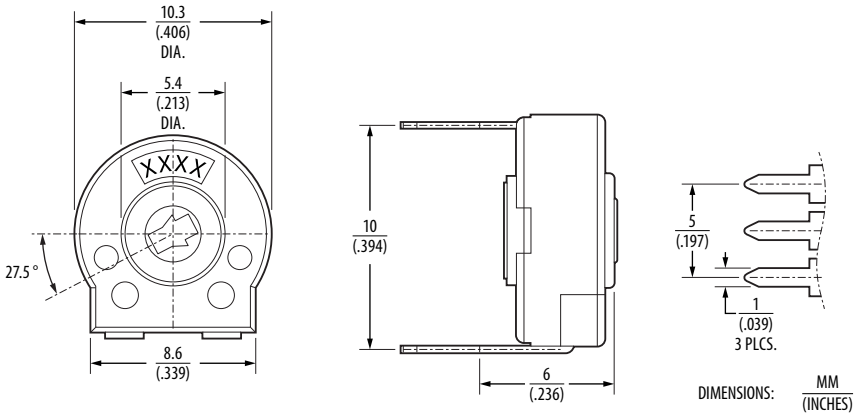
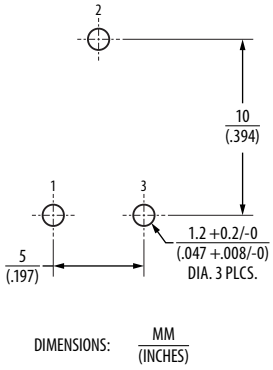
Product Dimensions

PST10H Horizontal PC Board Mounting Hole Pin



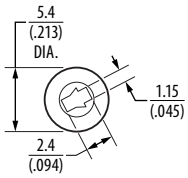
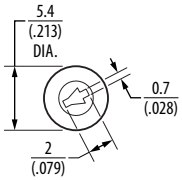
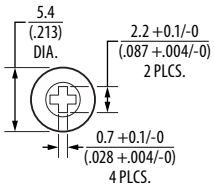
Mounting Hole Details

PST10H



Hole Style

PST10H

Style K1	Style J	Style S
		

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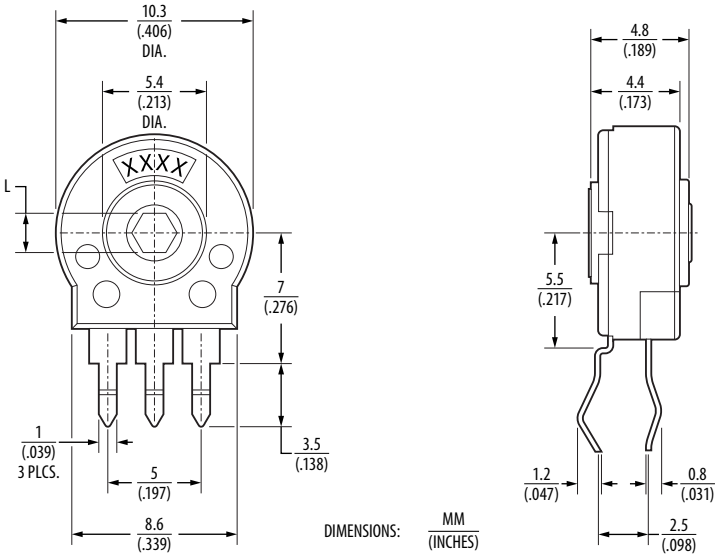
Product Dimensions

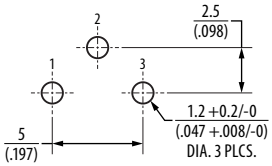
PST10V Vertical PC Board Mounting Hole Pin



DIMENSIONS: MM (INCHES)

Mounting Hole Details

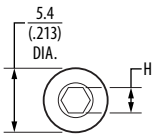
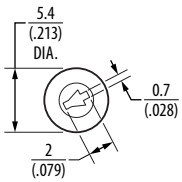
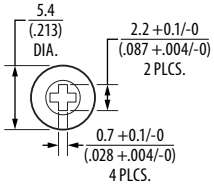
PST10V



DIMENSIONS: MM (INCHES)

Hole Style

PST10V

Style H				Style J	Style S
					
Code H	L0	L2	L5		
	2.0 +0.02/-0 (.079 +.001/-0)	2.02 +0.02/-0 (.080 +.001/-0)	2.05 +0.02/-0 (.081 +.001/-0)		

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How to Order

PST10 2 - 1 01 HL0 - N 503

Model Series

10 mm Incremental Potentiometer
- 1 = Horizontal
- 2 = Vertical

Detent Option
- 1 = No Detents

Key Shaft
- 01 = Hole

Shaft Style
- HL0 = 2.00 Hexagon Key Shaft (vertical model only)
- HL2 = 2.02 Hexagon Key Shaft (vertical model only)
- HL5 = 2.05 Hexagon Key Shaft (vertical model only)
- J = 2.0 Arrow Key Shaft
- K1 = 2.4 Arrow Key Shaft (horizontal model only)
- S = 2.0 Cross Key Shaft

Switch Configuration
- N = No Switch

Resistance
- Resistance Code

Resistance (Ohms)	Resistance Code
1,000	102
2,000	202
5,000	502
10,000	103
20,000	203
50,000	503
100,000	104
200,000	204
500,000	504
1,000,000	105

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