


## Features

- Carbon element
- Metal housing
- 15-60 mm travel
- Single and dual gang
- Center detent option
- Dust cover option
- RoHS compliant*

BOURNS® PRO AUDIO

# PTA Series - Low Profile Slide Potentiometer

## Electrical Characteristics

Taper ..... Linear, audio
Standard Resistance Range
..... 1 K ohms to 1 M ohms
Standard Resistance Tolerance..... ±20 %
Residual Resistance
..... 500 ohms or 1 % max.
Insulation Resistance
..... Min. 100 megohms at 250 V DC

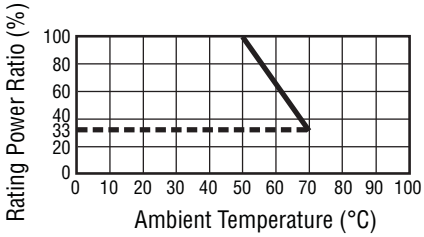
## Environmental Characteristics

Operating Temperature
..... -10 °C to +50 °C
Power Rating, Linear
15 mm .... 0.05 W (0.025 W Dual Gang)
20 mm ..... 0.1 W (0.05 W)
30 mm ..... 0.2 W (0.1 W)
45 mm ..... 0.25 W (0.125 W)
60 mm ..... 0.25 W (0.125 W)
Power Rating, Audio
15 mm .. 0.025 W (0.015 W Dual Gang)
20 mm ..... 0.05 W (0.025 W)
30 mm ..... 0.1 W (0.05 W)
45 mm ..... 0.125 W (0.06 W)
60 mm ..... 0.125 W (0.06 W)
Maximum Operating Voltage, Linear
15 mm ..... 100 V DC
20-60 mm ..... 200 V DC
Maximum Operating Voltage, Audio
15 mm ..... 50 V DC
20-60 mm ..... 150 V DC
Withstand Voltage, Audio
..... 1 Min. at 300 V AC
Sliding Noise ..... 100 mV maximum
Tracking Error ..... 3 dB at -40 to 0 dB

## Mechanical Characteristics

Operating Force ..... 30 to 250 g-cm
Stop Strength ..... 5 kg-cm min.
Sliding Life ..... 15,000 cycles
Soldering Condition
..... 300 °C max. within 3 seconds
Travel ..... 15, 20, 30, 45, 60 mm

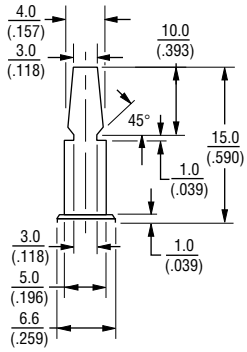
## Derating Curve



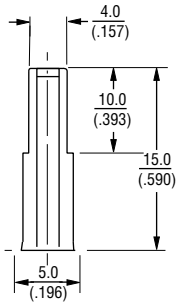

## Lever Style & Product Dimensions

Actuator Styles

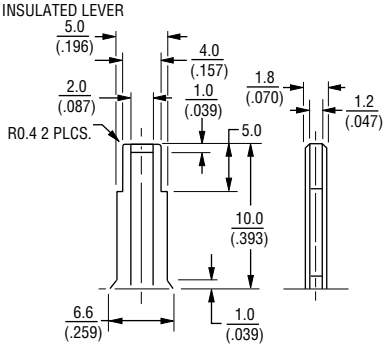
DP METAL LEVER




CP METAL LEVER




CI INSULATED LEVER




DIMENSIONS: MM (INCHES)

## How To Order

**PTA 15 4 3 - 2 0 10 DP B 203**

Model
Stroke Length
- 15 = 15 mm
- 20 = 20 mm
- 30 = 30 mm
- 45 = 45 mm
- 60 = 60 mm

Dust Cover Option
- 4 = No Dust Cover
- 5 = Rubber Dust Cover**

No. of Gangs
- 3 = Single Gang
- 4 = Dual Gang

Pin Style
- 2 = PC Pins Down Facing

Center Detent Option
- 0 = No Detent
- 2 = Center Detent

Standard Lever Length (See Table)
- 10 = 10 mm (CI Lever)
- 15 = 15 mm (DP, CP and CI)

Lever Style
- DP = Metal Lever (Refer to Drawing)
- CP = Metal Lever (Refer to Drawing)
- CI = Insulated Lever (Refer to Drawing)

Resistance Taper
- A = Audio Taper
- B = Linear Taper

Resistance Code (See Table)

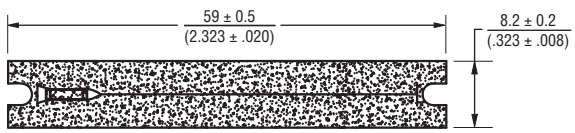
Other styles available.

** Part numbers with dust covers must be mounted with screws to a panel to prevent issues with the dust cover during usage.

## Standard Resistance Table

| 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 |

## Optional Dust Cover




NOTE: DUST COVER HAS ADHESIVE BACK. T = 0.3 ± 0.1 (.0118 ± .004)

*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.
Specifications are subject to change without notice.
The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.
Users should verify actual device performance in their specific applications.

## Applications

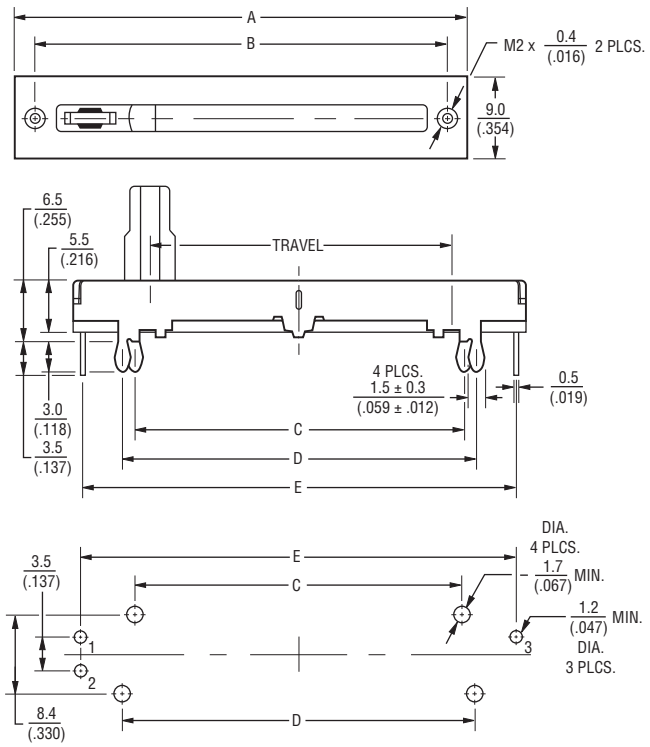
- Audio/TV sets
- Car radio
- Amplifiers/mixers/drum machines/synthesizers
- PCs/monitors
- Appliances

# PTA Series - Low Profile Slide Potentiometer

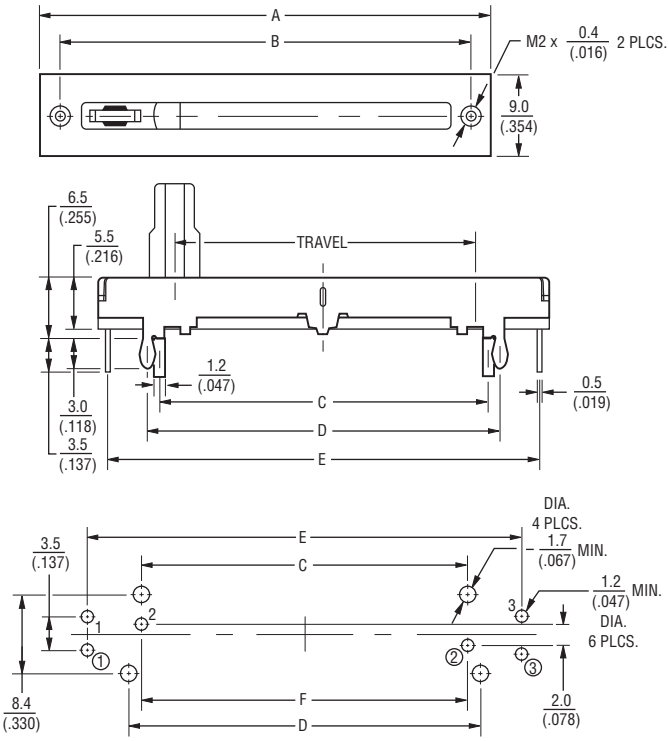
BOURNS®

### Product Dimensions

**PTAxx43**



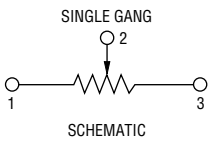

**PTAxx44**




DIMENSIONS: MM / (INCHES)

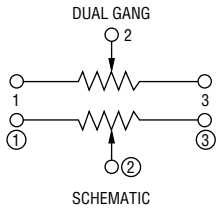
### Single Gang Dimensions

| Model | A | B | C | D | E | Travel |
|---|---|---|---|---|---|---|
| PTA1543 | 30 (1.18) | 26 (1.02) | 17.8 (.700) | 20.2 (.795) | 28.5 (1.12) | 15 (.59) |
| PTA2043 | 35 (1.37) | 31 (1.22) | 22.8 (.897) | 25.2 (.992) | 33 (1.29) | 20 (.787) |
| PTA3043 | 45 (1.77) | 41 (1.61) | 32.8 (1.29) | 35.2 (1.38) | 43.5 (1.71) | 30 (1.18) |
| PTA4543 | 60 (2.36) | 56 (2.20) | 47.8 (1.88) | 50.2 (1.97) | 58.5 (2.30) | 45 (1.77) |
| PTA6043 | 75 (2.95) | 71 (2.79) | 62.8 (2.47) | 65.2 (2.56) | 73.5 (2.89) | 60 (2.36) |




### Dual Gang Dimensions

| Model | A | B | C | D | E | F | Travel |
|---|---|---|---|---|---|---|---|
| PTA1544 | 30 (1.18) | 26 (1.02) | 17.8 (.700) | 20.2 (.795) | 28.5 (1.12) | 18 (.708) | 15 (.59) |
| PTA2044 | 35 (1.37) | 31 (1.22) | 22.8 (.897) | 25.2 (.992) | 33 (1.29) | 23 (.905) | 20 (.787) |
| PTA3044 | 45 (1.77) | 41 (1.61) | 32.8 (1.29) | 35.2 (1.38) | 43.5 (1.71) | 33 (1.29) | 30 (1.18) |
| PTA4544 | 60 (2.36) | 56 (2.20) | 47.8 (1.88) | 50.2 (1.97) | 58.5 (2.30) | 48 (1.88) | 45 (1.77) |
| PTA6044 | 75 (2.95) | 71 (2.79) | 62.8 (2.47) | 65.2 (2.56) | 73.5 (2.89) | 63 (2.48) | 60 (2.36) |




REV. 12/14

Specifications are subject to change without notice.
The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.
Users should verify actual device performance in their specific applications.