



**THE DATASHEET OF  
PTA3043-2010CIB104**





## Features

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

## Applications

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

# PTA Series - Low Profile Slide Potentiometer

### Electrical Characteristics

Taper..... Linear, audio  
 Standard Resistance Range  
 ..... 1 K ohms to 1 M ohms  
 Standard Resistance Tolerance  
 $R \leq 1 \text{ K}\Omega$  .....  $\pm 30\%$   
 $1 \text{ K}\Omega < R < 1 \text{ M}\Omega$  .....  $\pm 20\%$   
 $\geq 1 \text{ M}\Omega$  .....  $\pm 30\%$   
 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

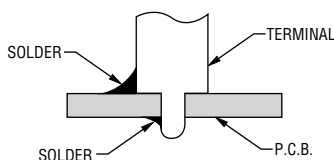
### Mechanical Characteristics

Operating Force ..... 30 to 250 gf  
 Stop Strength ..... 5 kgf min.  
 Sliding Life ..... 15,000 cycles  
 Soldering Condition\*\*  
 ... 350 °C max. within  $3 \pm 0.5$  seconds  
 Travel ..... 15, 20, 30, 45, 60 mm

\*\*Manual soldering

#### NOTES:

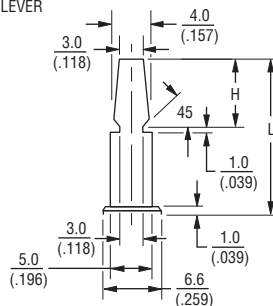
- \* Avoid wiring and soldering that causes solder to flow out the surface of the P.C.B., as illustrated in the schematic drawing. This could cause a contact failure.
- \* Soldered device is not board washable.



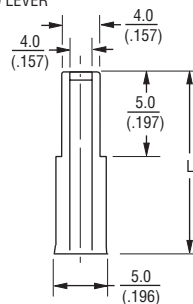
### Lever Style & Product Dimensions

Actuator Styles

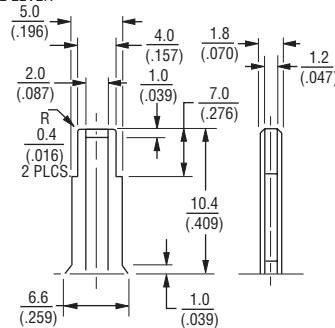
DP METAL LEVER



CI INSULATED LEVER



CP METAL LEVER



Dimension	
L	H
15 (.591)	10 (.394)
10 (.394)	7 (.276)

DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

### Additional Information

Click these links for more information:




### 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  
 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  
 • 15 = 15 mm  
 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.

 **CALIFORNIA WARNING** Can expose you to lead, a carcinogen and reproductive toxicant.  
 See [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

\*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.

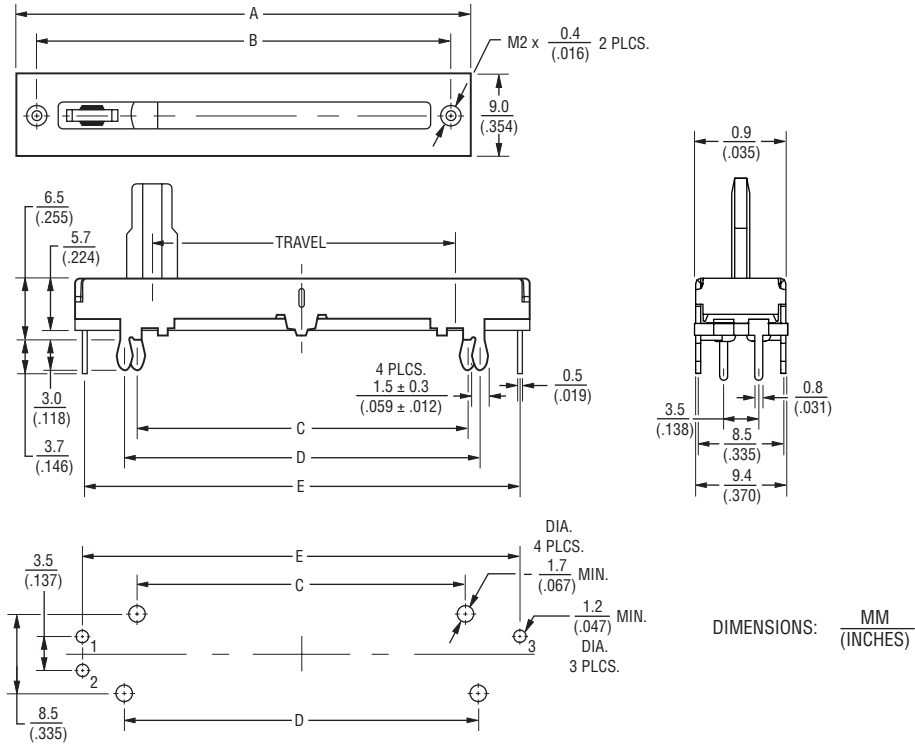
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# PTA Series - Low Profile Slide Potentiometer

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## Product Dimensions

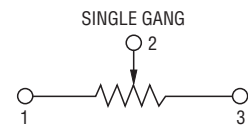
PTAxx43



## Single Gang Dimensions

Model	A	B	C	D	E	Travel
PTA1543	$\frac{30}{(1.18)}$	$\frac{26}{(1.02)}$	$\frac{17.8}{(0.700)}$	$\frac{20.2}{(0.795)}$	$\frac{28.5}{(1.12)}$	$\frac{15}{(0.59)}$
PTA2043	$\frac{35}{(1.37)}$	$\frac{31}{(1.22)}$	$\frac{22.8}{(0.897)}$	$\frac{25.2}{(0.992)}$	$\frac{33.5}{(1.32)}$	$\frac{20}{(0.787)}$
PTA3043	$\frac{45}{(1.77)}$	$\frac{41}{(1.61)}$	$\frac{32.8}{(1.29)}$	$\frac{35.2}{(1.38)}$	$\frac{43.5}{(1.71)}$	$\frac{30}{(1.18)}$
PTA4543	$\frac{60}{(2.36)}$	$\frac{56}{(2.20)}$	$\frac{47.8}{(1.88)}$	$\frac{50.2}{(1.97)}$	$\frac{58.5}{(2.30)}$	$\frac{45}{(1.77)}$
PTA6043	$\frac{75}{(2.95)}$	$\frac{71}{(2.79)}$	$\frac{62.8}{(2.47)}$	$\frac{65.2}{(2.56)}$	$\frac{73.5}{(2.89)}$	$\frac{60}{(2.36)}$

## Schematic



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Users should verify actual device performance in their specific applications.

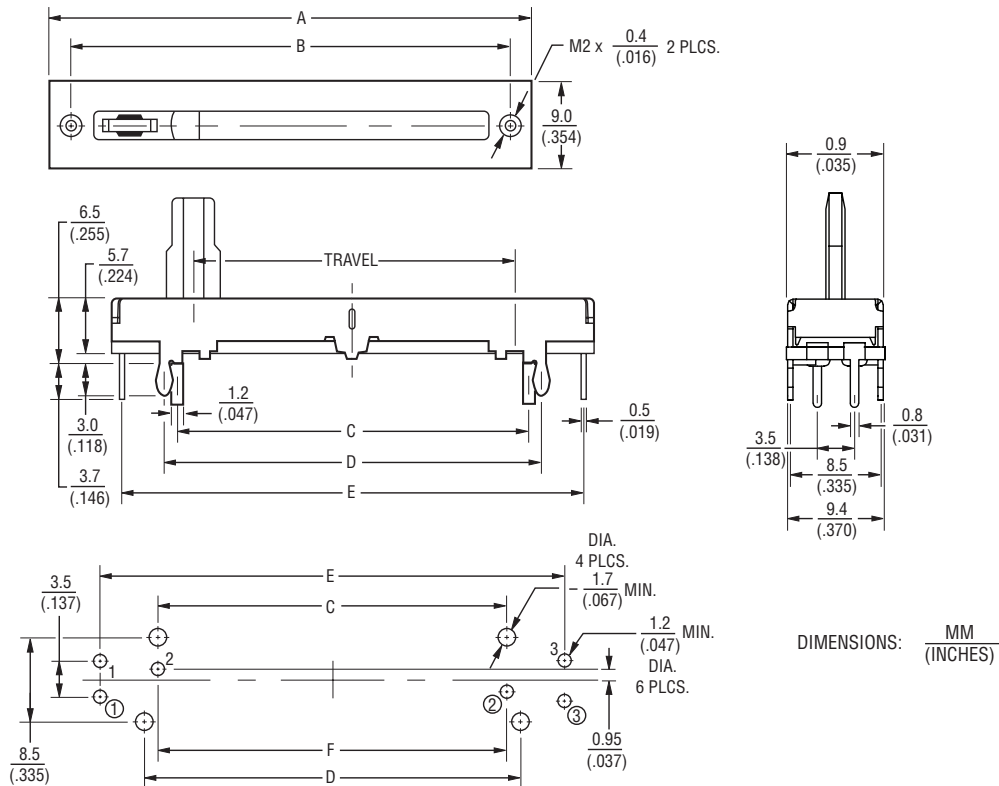
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# PTA Series - Low Profile Slide Potentiometer

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## Product Dimensions

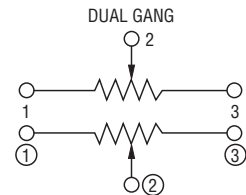
PTAxx44



## Dual Gang Dimensions

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

## Schematic



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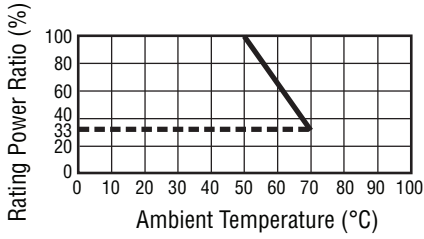
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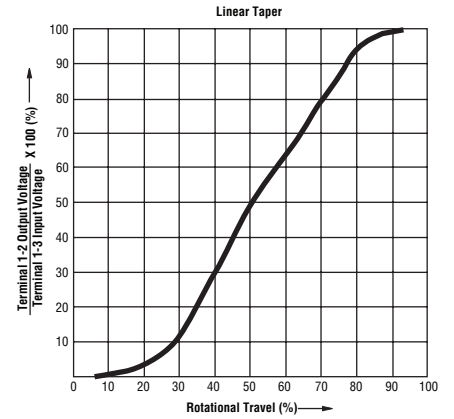
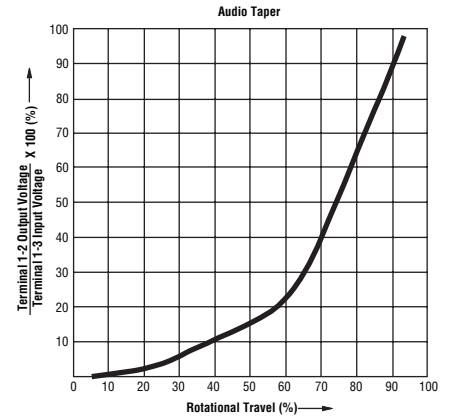
## Derating Curve



## 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

## Tapers



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