



**THE DATASHEET OF
PTA2043-2015CPB103**





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

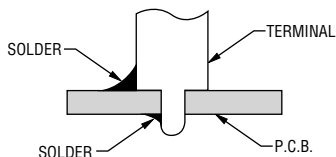
Mechanical Characteristics

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

**Manual soldering

NOTES:

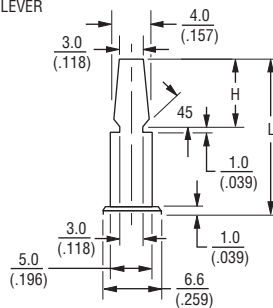
- * Avoid wiring and soldering that causes solder to flow out the surface of the P.C.B., as illustrated in the schematic drawing. This could cause a contact failure.
- * Soldered device is not board washable.



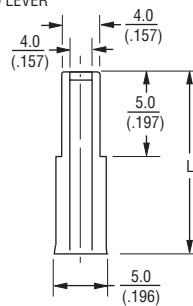
Lever Style & Product Dimensions

Actuator Styles

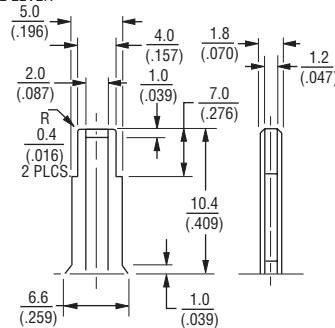
DP METAL LEVER



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:



PRODUCT
SELECTOR



TECHNICAL
LIBRARY



INVENTORY



SAMPLES



CONTACT

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

*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.

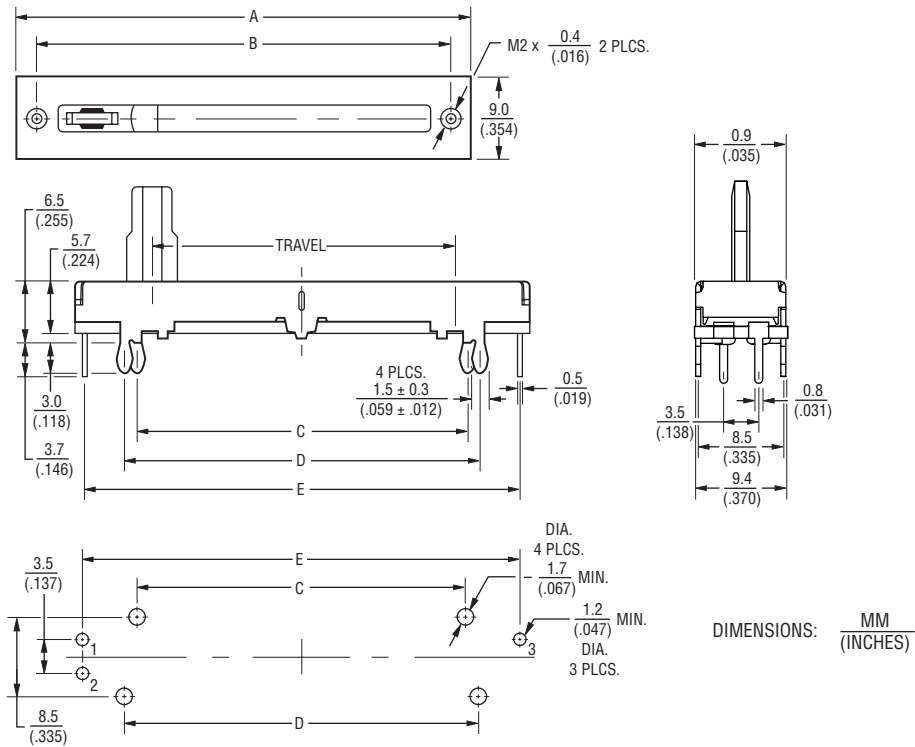
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PTA Series - Low Profile Slide Potentiometer

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Product Dimensions

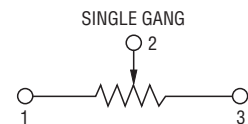
PTAxx43



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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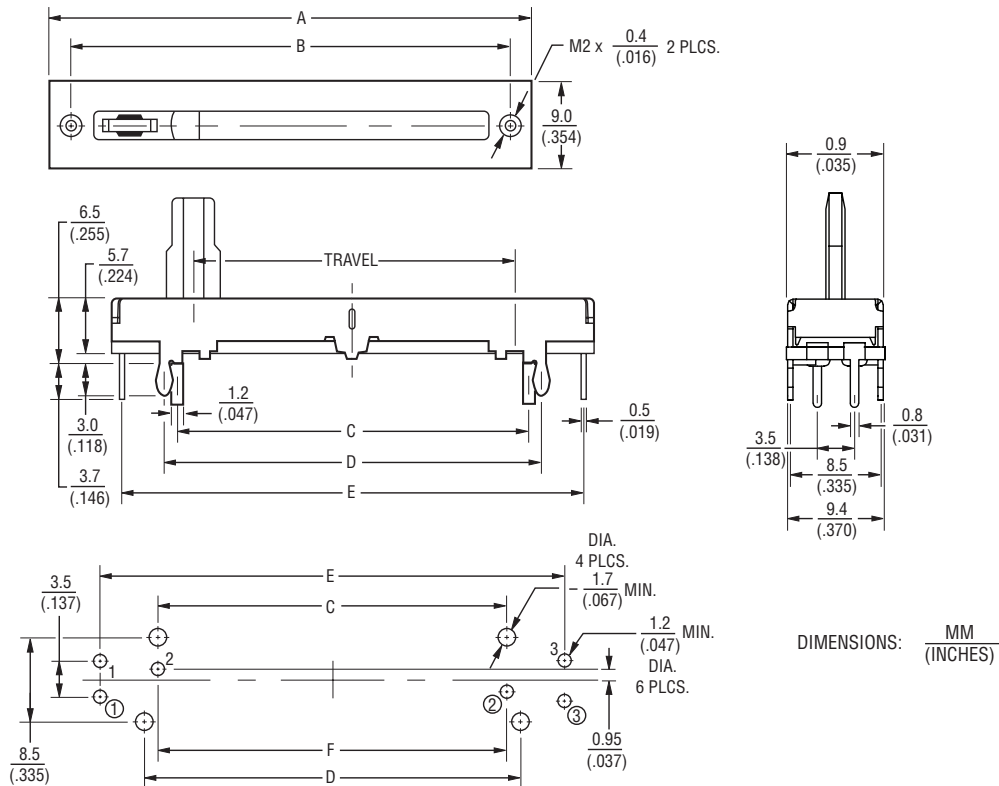
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Product Dimensions

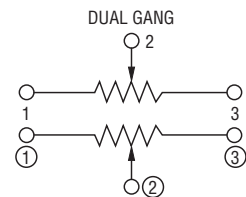
PTAxx44



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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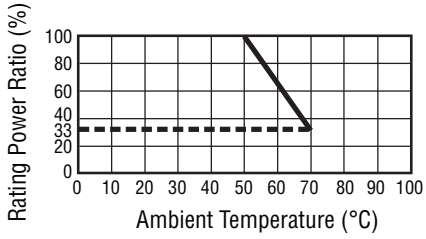
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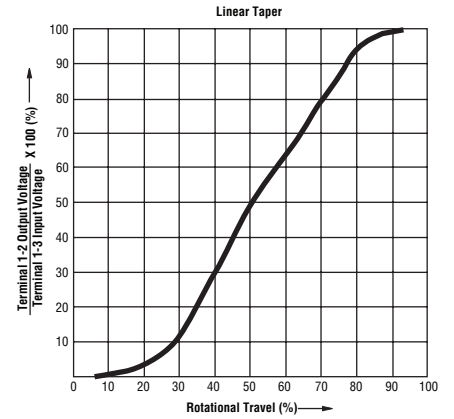
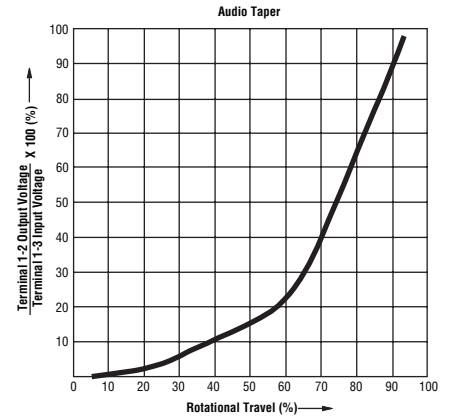
Derating Curve



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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