



BOURNS®

Features

- Single gang panel control
- RoHS compliant*
- Carbon element
- Center detent option
- Wide range of resistance tapers
- Insulated shaft styles
- Assortment of pin layouts

Additional Information

Click these links for more information:



PRODUCT
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TECHNICAL
LIBRARY

INVENTORY

SAMPLES

CONTACT

PDB12 Series - 12 mm Rotary Potentiometer

Electrical Characteristics

Taper.....	Linear, audio
Standard Resistance Range	1K ohms to 1M ohms
Standard Resistance Tolerance	±30%
R≤1 KΩ	±30%
1 KΩ<R<1 MΩ	±20%
≥1 MΩ	±30%
Residual Resistance	10 ohms max.

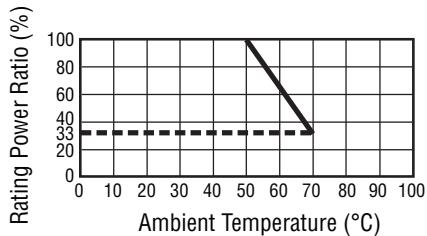
Environmental Characteristics

Power Rating	
Linear	0.08 watt
Audio.....	0.04 watt
Maximum Operating Voltage	
Linear	150 V
Audio.....	100 V
Sliding Noise	47 mV max.
Operating Temperature..	-10 °C to +70 °C

Mechanical Characteristics

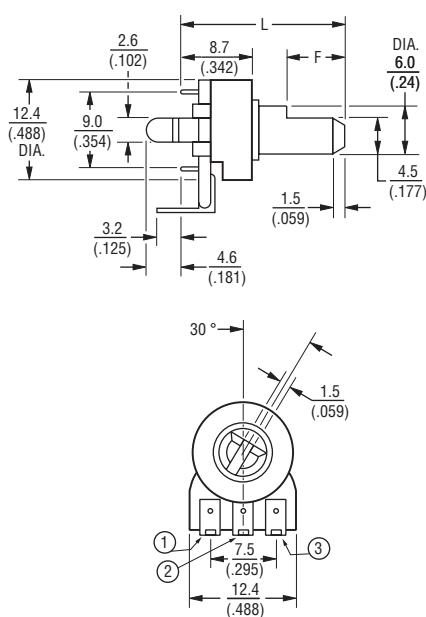
Mechanical Angle	300 ° ±5 °
Rotational Torque	20 to 200 g-cm
Stop Strength	3 kg-cm min.
Rotational Life	15,000 cycles
Soldering Condition300 °C max. within 3 seconds
Hardware.....	No hardware supplied

Derating Curve

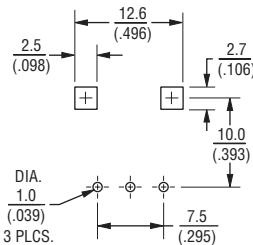


Product Dimensions

PDB12-H



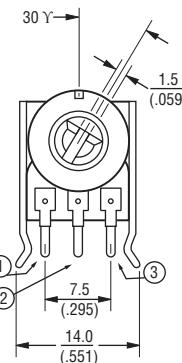
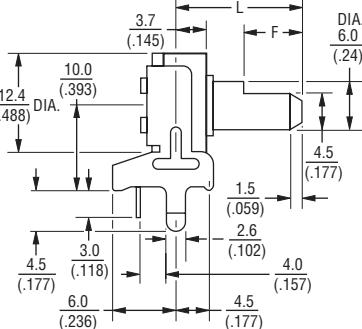
RECOMMENDED PCB LAYOUT



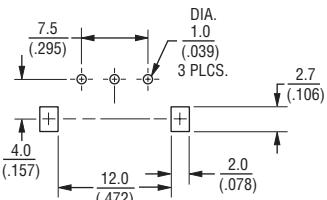
SHAFT SHOWN IN CCW POSITION

DIMENSIONS: MM
(INCHES)

PDB12-G



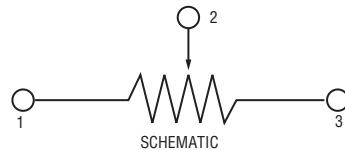
RECOMMENDED PCB LAYOUT



SHAFT SHOWN IN CCW POSITION

PDB12 Dimensions

L	15 .591	20 .787	25 .984	30 (1.181)
F	7 .276	7 .276	12 .472	12 .472



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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Applications

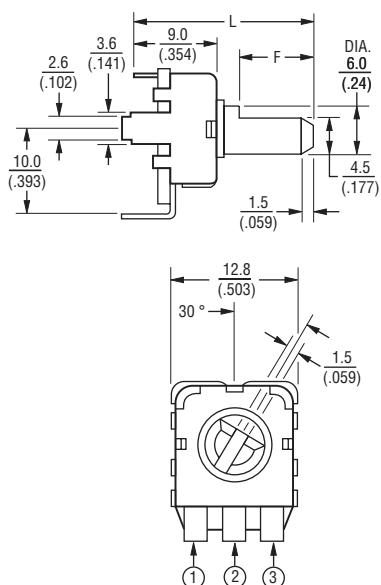
- Audio/TV sets
- Car radio
- Amplifiers/mixers/drum machines/synthesizers
- PCs/monitors
- Appliances

PDB12 Series - 12 mm Rotary Potentiometer

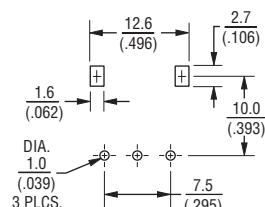
BOURNS®

Product Dimensions

PDB12-M



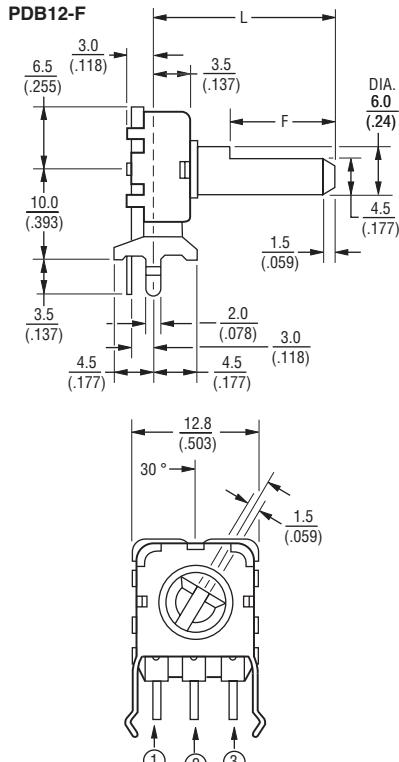
RECOMMENDED PCB LAYOUT



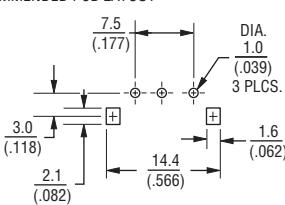
SHAFT SHOWN IN CCW POSITION

DIMENSIONS: MM
(INCHES)

PDB12-F



RECOMMENDED PCB LAYOUT



SHAFT SHOWN IN CCW POSITION

How To Order

PDB12 - H 4 20 1 - 103 A F

Model _____

Terminal Config. _____
(see individual drawings)

H = PC pins, rear facing snap mount

G = PC pins, vertical/down facing/snap mount

M = PC pins, rear facing

F = PC pins, vertical/down facing/snap mount

Option _____

- 2 = Center Detent
- 4 = No Detent

Standard Shaft Length _____

- 15 = 15 mm
- 20 = 20 mm
- 25 = 25 mm
- 30 = 30 mm

Number of Gangs _____

- 1 = Single Gang

Resistance Code (See Table) _____

Resistance Taper _____

- A = Audio Taper
- B = Linear Taper

Shaft Style _____

- F = Flat Type Insulated Shaft

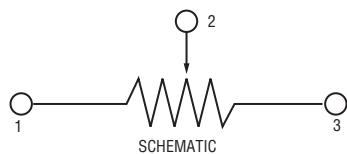
Other styles available.

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

PDB12 Dimensions

L	15 .591	20 .787	25 .984	30 (1.181)
F	7 .276	7 .276	12 .472	12 .472



REV. 07/25

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