

Features

- High rotational life
- Metal shaft styles
- Carbon element
- Center detent option
- Wide range of resistance tapers
- RoHS compliant*



PDB24 Series - 24 mm Rotary Potentiometer

Electrical Characteristics

Taper.....Linear, audio
 Standard Resistance Range1 K ohms to 1 M ohms
 Standard Resistance Tolerance.....±20 %
 Residual Resistance
 R<500K ohms10 ohms max.
 R>500K ohms0.1 % max.
 total resistance

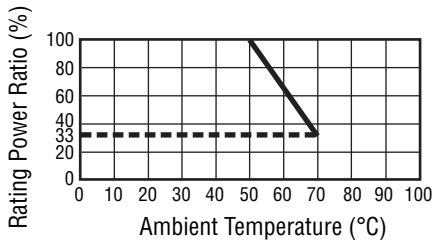
Environmental Characteristics

Operating Temperature-10 °C to +70 °C
 Power Rating
 Linear0.5 watt
 Audio0.25 watt
 Maximum Operating Voltage
 Linear500 V
 Audio250 V
 Rotational Noise150 mV max.

Mechanical Characteristics

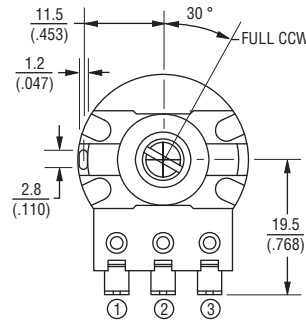
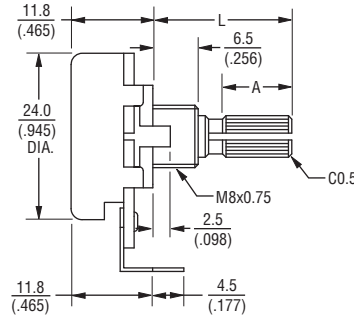
Mechanical Angle300 ° ±5 °
 Rotational Torque20 to 200 g-cm
 Stop Strength8 kg-cm min.
 Rotational Life
 Standard.....15,000 cycles min.
 High.....500,000 cycles min.
 Soldering Condition
 Manual Soldering
300 °C within 3 seconds
 Wave Soldering
260 °C within 3 seconds
 Hardware.....One flat washer and
 mounting nut supplied per
 potentiometer with bushing

Derating Curve

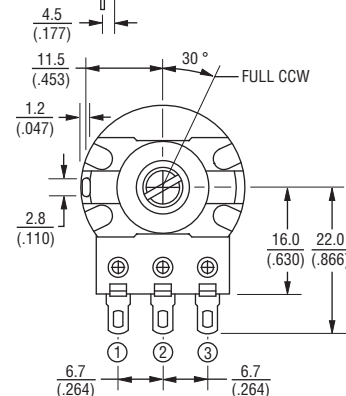
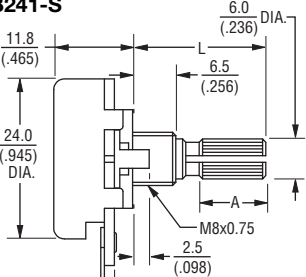


Product Dimensions

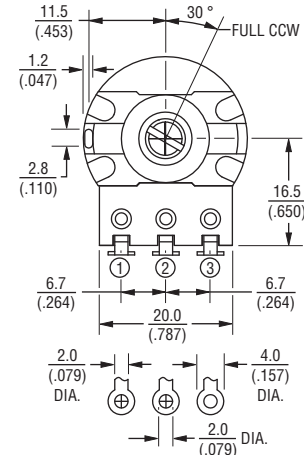
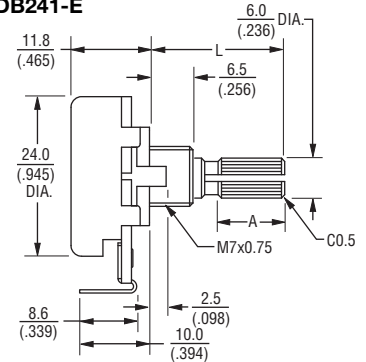
PDB241-D



PDB241-S



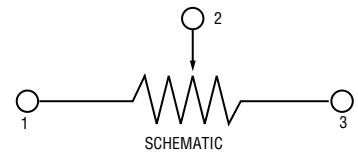
PDB241-E



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

TOLERANCES:

UNDER 10.0 = ±0.3
 (.394) (±0.12)
 10.0 - 100 = ±0.5
 (.394 - 3.937) (±0.20)



*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. Users should verify actual device performance in their specific applications.

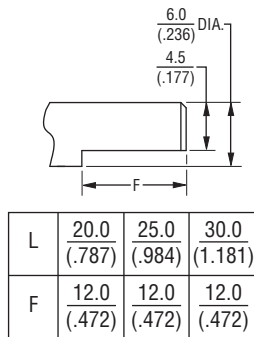
Applications

- Various commercial applications
- Electric guitars
- Sound processing equipment
- Guitar and sound system amplifiers
- Appliances

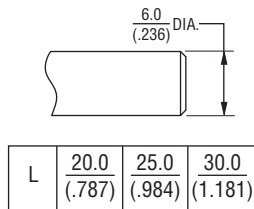
PDB24 Series - 24 mm Rotary Potentiometer **BOURNS®**

Product Dimensions

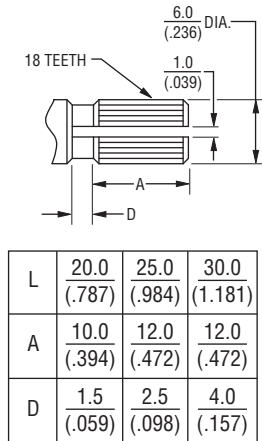
F Type



P Type



K Type



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

How To Order

PDB24 1 - E 4 25 K - 103 A2

Model

No. of Sections

- 1 = Single Section/Standard Rotational Life
- 2 = Single Section/High Rotational Life

Terminal Configuration (Pin Layout) (see individual drawings)

- E = Solder Lugs Rear Facing
- S = Solder Lugs Down Facing
- D = PC Pins Front Facing

Detent Option

- 2 = Center Detent
- 4 = No Detents

Standard Shaft Length

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

Shaft Style

- K = Metal Knurled Type Shaft
- F = Metal Flatted Shaft
- P = Metal Plain Shaft

Resistance Code (See Table)

Resistance Taper (See Taper Chart)

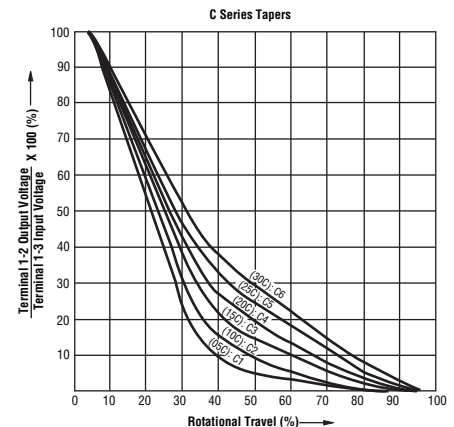
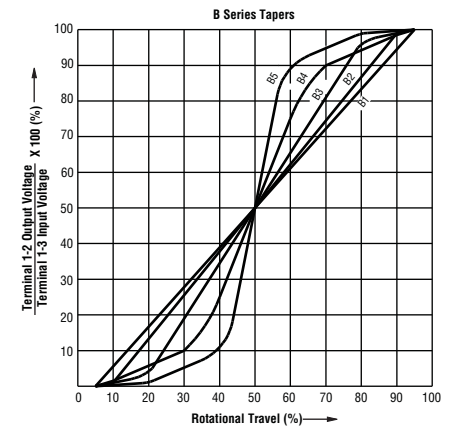
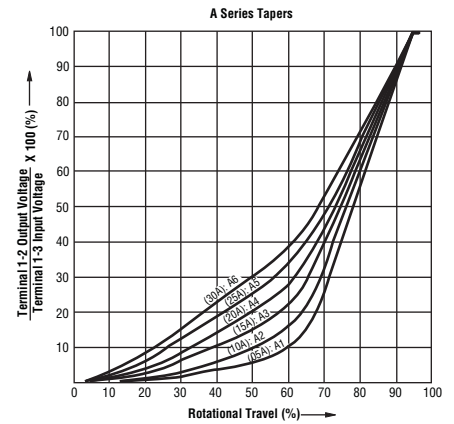
Taper Series followed by Curve Number

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
250,000	254
500,000	504
1,000,000	105

Tapers



REV. 11/13

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.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Bourns:

[PDB242-E420K-504A2](#) [PDB242-E420K-254A2](#) [PDB241-E420P-254A2](#) [PDB241-E420P-103B0](#) [PDB241-E420K-504B0](#) [PDB241-E420P-504B0](#) [PDB241-E420K-254B0](#) [PDB241-S420K-504A2](#) [PDB241-E420P-504A2](#) [PDB241-S420P-504A2](#) [PDB241-E420K-254A2](#) [PDB241-S420P-254A2](#) [PDB241-E420K-103B0](#) [PDB241-S420P-103B0](#) [PDB241-E420P-254B0](#) [PDB241-S420K-103B0](#) [PDB241-S420K-254A2](#) [PDB241-E420K-504A2](#) [PDB241-E420K-104B0](#) [PDB241-E420K-105A2](#) [PDB241-E425K-504A2](#) [PDB241-S420K-103B2](#) [PDB242-E220F-103B0](#) [PDB242-E420F-103B1](#) [PDB241-E430P-253B0](#)