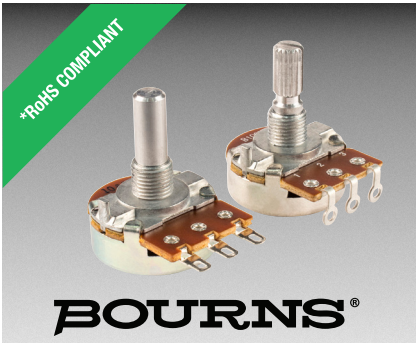




**THE DATASHEET OF
PDB241-E420K-254A2**





Features

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

Additional Information

Click these links for more information:



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INVENTORY



SAMPLES



CONTACT

PDB24 Series - 24 mm Rotary Potentiometer

Electrical Characteristics

Taper.....	Linear, audio
Standard Resistance Range 1 K ohms to 1 M ohms
Standard Resistance Tolerance	
R ≤ 1 KΩ	±30%
1 KΩ < R < 1 MΩ	±20%
≥ 1 MΩ	±30%
Residual Resistance	
R < 500K ohms	10 ohms max.
R > 500K ohms	0.1 % max. total resistance

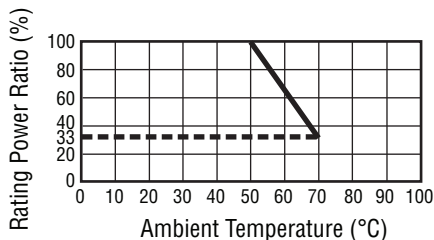
Environmental Characteristics

Operating Temperature -10 °C to +70 °C
Power Rating	
Linear	0.5 watt
Audio	0.25 watt
Maximum Operating Voltage	
Linear	500 V
Audio	250 V
Rotational Noise	150 mV max.

Mechanical Characteristics

Mechanical Angle	300 ° ±5 °
Rotational Torque	20 to 200 g-cm
Stop Strength	8 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



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.

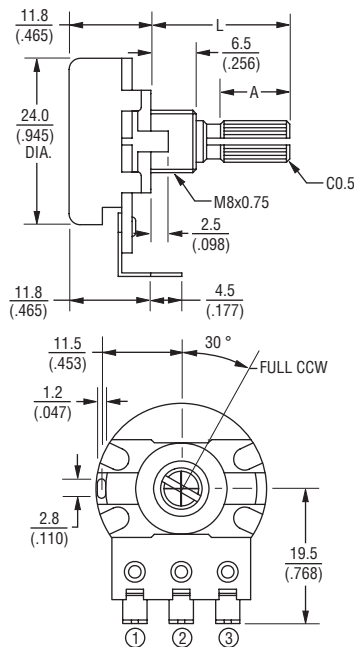
Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

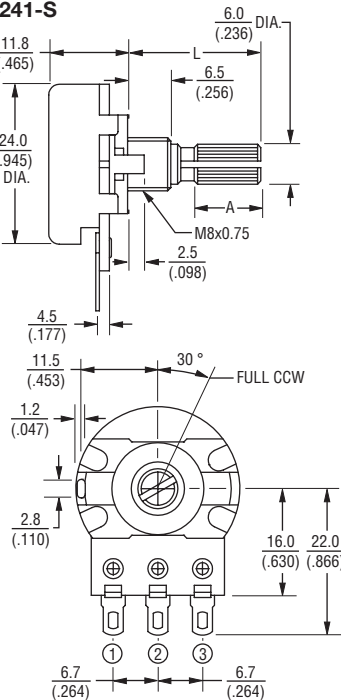
The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at www.bourns.com/docs/legal/disclaimer.pdf.

Product Dimensions

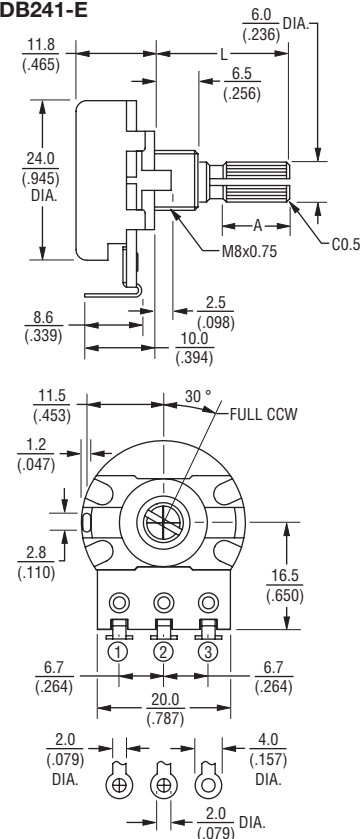
PDB241-D



PDB241-S



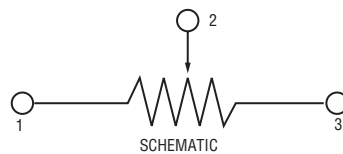
PDB241-E



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)



Applications

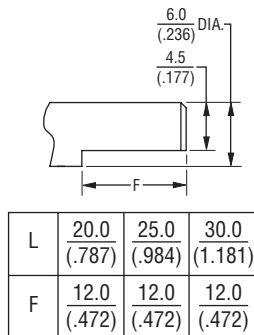
- Various commercial applications
- Electric guitars
- Sound processing equipment
- Guitar and sound system amplifiers
- Appliances

PDB24 Series - 24 mm Rotary Potentiometer

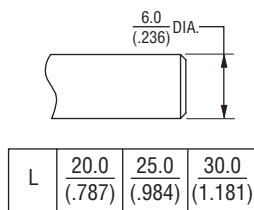
BOURNS®

Product Dimensions

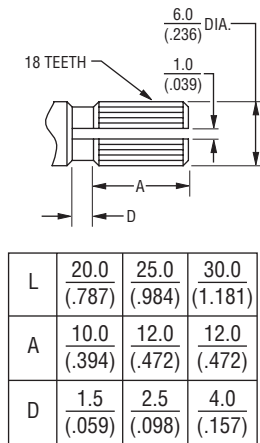
F Type



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
- 18 Toothed Serration Type
- F = Metal Flatted Shaft
- P = Metal Plain Shaft

Resistance Code (See Table) _____

Resistance Taper (See Taper Chart) _____

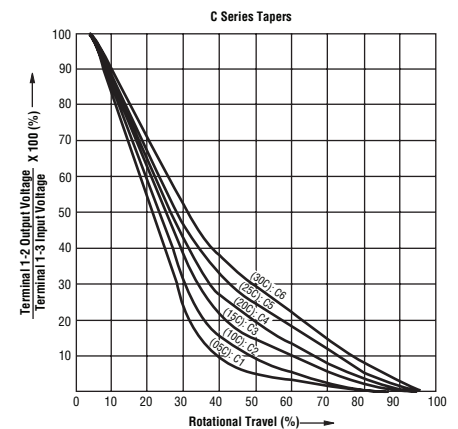
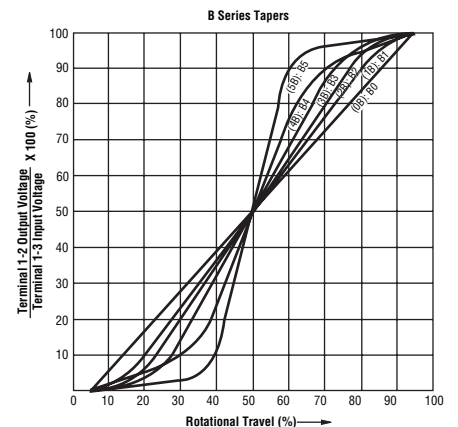
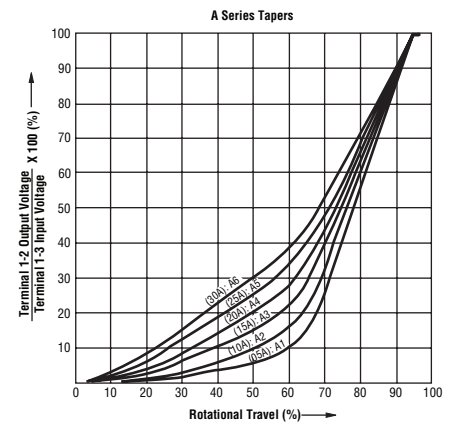
Taper Series followed by Curve Number

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. 07/25

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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