

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

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**CONTACT**

## PDB24 Series - 24 mm Rotary Potentiometer

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

Operating Temperature ..... -10 °C to +70 °C

Power Rating

Linear ..... 0.5 watt

Audio ..... 0.25 watt

Maximum Operating Voltage

Linear ..... 500 V

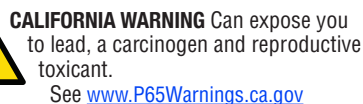
Audio ..... 250 V

Rotational Noise ..... 150 mV max.

Mechanical 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

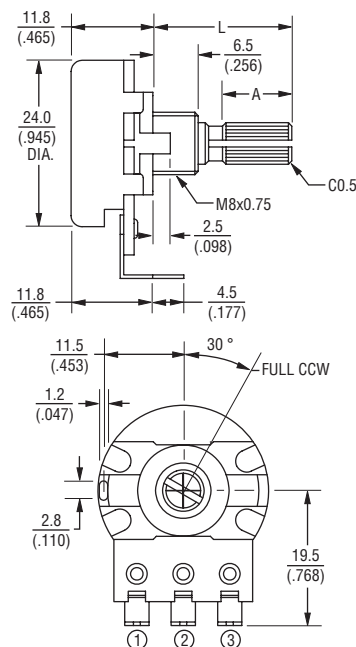
The graph plots the Rating Power Ratio (%) on the y-axis against Ambient Temperature (°C) on the x-axis. The y-axis ranges from 0 to 100 in increments of 20, with grid lines every 10 units. The x-axis ranges from 0 to 100 in increments of 10, with grid lines every 5 units. A solid line represents the rating power ratio, which is constant at 33% from 0°C to 70°C and then decreases linearly to 100% at 50°C. A dashed line is also shown at the 33% level for reference.

Ambient Temperature (°C)	Rating Power Ratio (%)
0	33
10	33
20	33
30	33
40	33
50	100
60	33
70	33

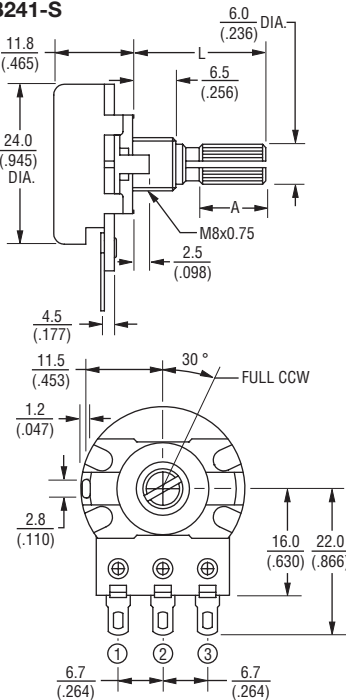


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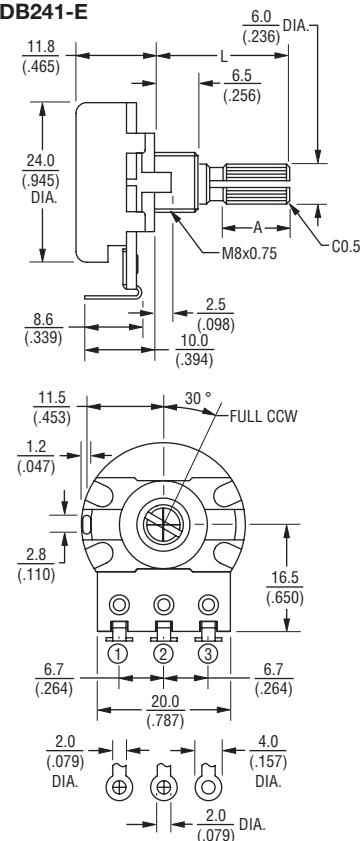
**PDB241-D**



**PDB241-S**



## PDB241-E

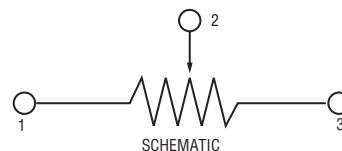


DIMENSIONS:  $\frac{\text{MM}}{(\text{INCHES})}$

TOLERANCES:

$$\text{UNDER } \frac{10.0}{(.394)} = \frac{\pm 0.3}{(\pm .012)}$$

$$\frac{10.0 \sim 100}{(.394 \sim 3.937)} = \frac{\pm 0.5}{(\pm .020)}$$



## Applications

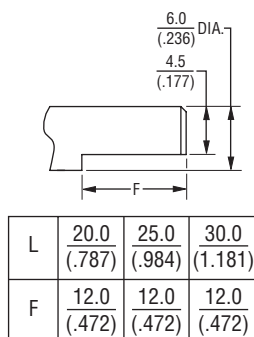
- Various commercial applications
- Electric guitars
- Sound processing equipment
- Guitar and sound system amplifiers
- Appliances

## PDB24 Series - 24 mm Rotary Potentiometer

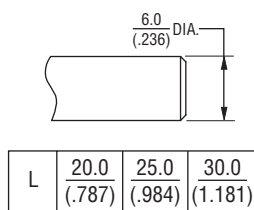
**BOURNS®**

### Product Dimensions

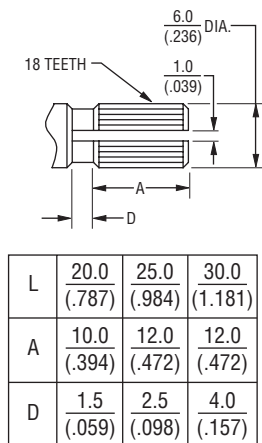
#### F Type



#### 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) \_\_\_\_\_

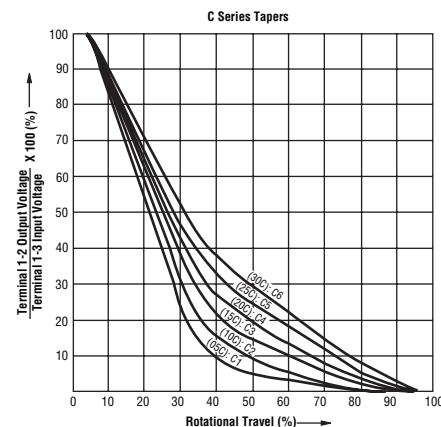
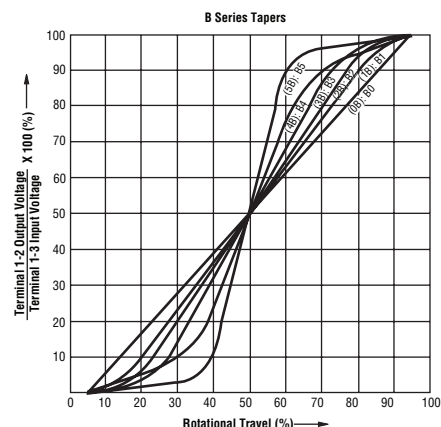
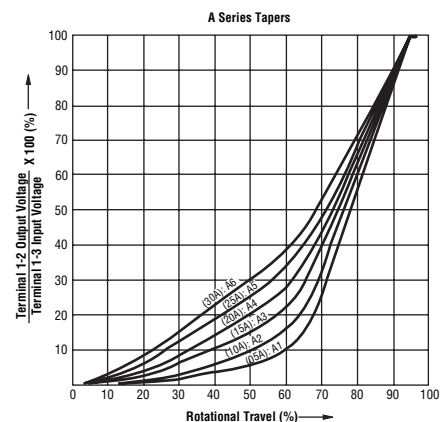
Taper Series followed by Curve Number

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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