



## Features

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

## Applications

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

# PDB24 Series - 24 mm Rotary Potentiometer

### Electrical Characteristics

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

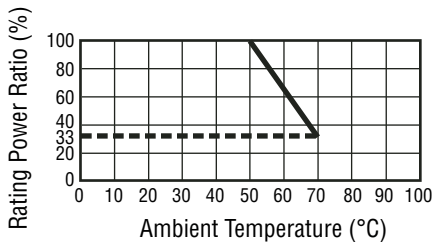
### Environmental Characteristics

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

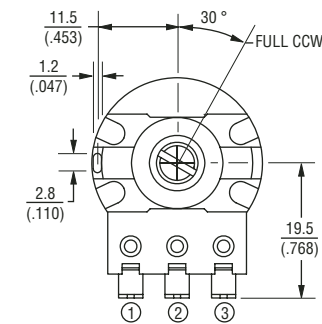
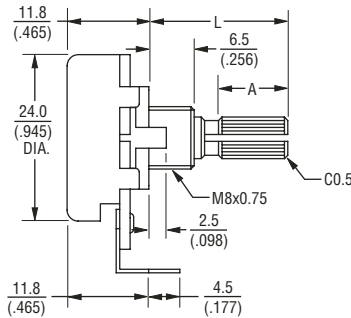
Mechanical Angle .....300 ° ±5 °  
 Rotational Torque .....20 to 200 g-cm  
 Stop Strength.....8 kg-cm min.  
 Rotational Life  
 Standard .....15,000 cycles min.  
 High .....500,000 cycles min.  
 Soldering Condition  
 Manual Soldering  
 .....300 °C within 3 seconds  
 Wave Soldering  
 .....260 °C within 3 seconds  
 Hardware .....One flat washer and  
 mounting nut supplied per  
 potentiometer with bushing

### Derating Curve

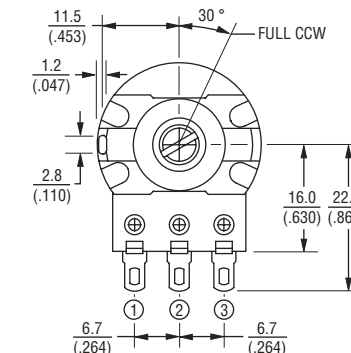
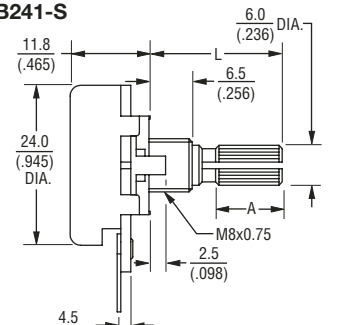


### Product Dimensions

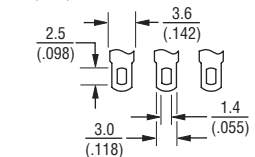
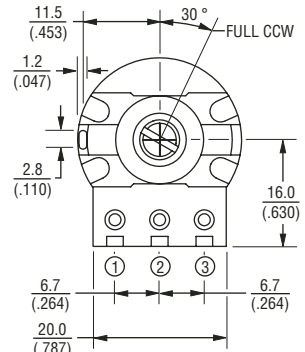
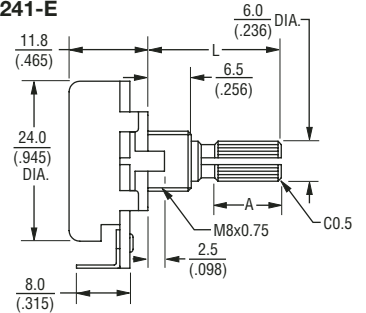
#### PDB241-D



#### PDB241-S



#### PDB241-E

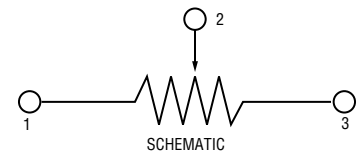


DIMENSIONS ARE:  $\frac{\text{MM}}{\text{(INCHES)}}$

TOLERANCES:

UNDER  $\frac{10.0}{(.394)} = \frac{\pm 0.3}{(\pm 0.12)}$

$\frac{10.0 - 100}{(.394 - 3.937)} = \frac{\pm 0.5}{(\pm 0.20)}$



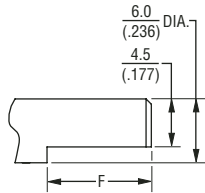
\*RoHS Directive 2002/95/EC Jan 27 2003 including Annex. Specifications are subject to change without notice. Customers should verify actual device performance in their specific applications.

# PDB24 Series - 24 mm Rotary Potentiometer

**BOURNS®**

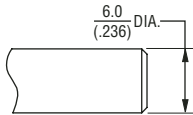
## Shaft Styles

### F Type



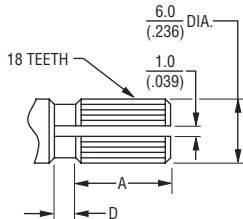
L	20.0 (.787)	25.0 (.984)	30.0 (1.181)
F	12.0 (.472)	12.0 (.472)	12.0 (.472)

### P Type



L	20.0 (.787)	25.0 (.984)	30.0 (1.181)
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### K Type



L	20.0 (.787)	25.0 (.984)	30.0 (1.181)
A	10.0 (.394)	12.0 (.472)	12.0 (.472)
D	1.5 (.059)	2.5 (.098)	4.0 (.157)

## How To Order

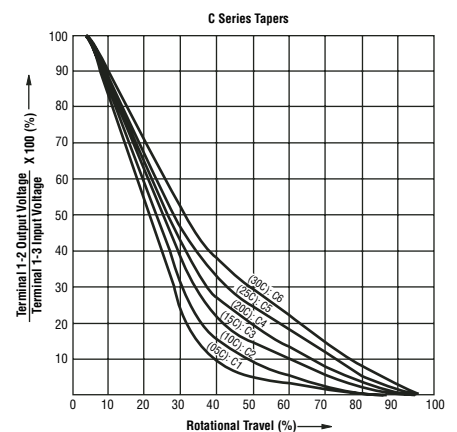
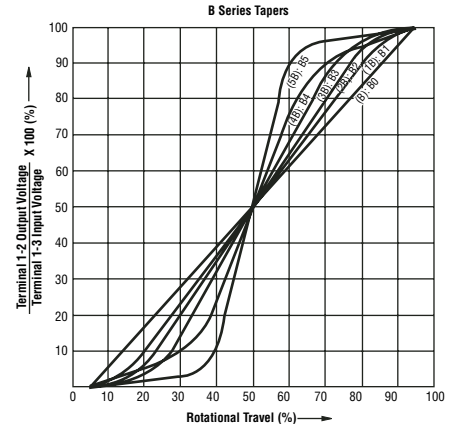
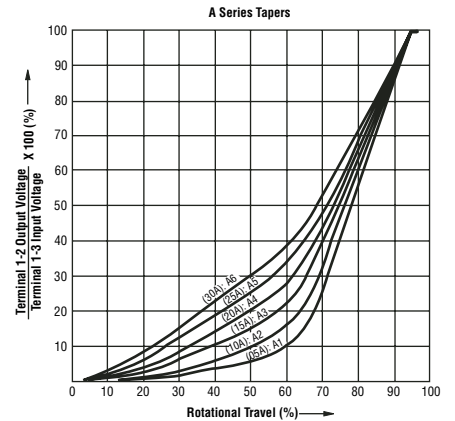
**PDB24 1 - E 4 25 K - 103 A2**

- 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



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