



## 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 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

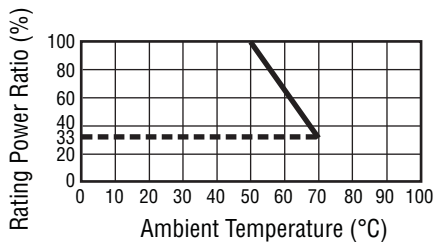
## Environmental Characteristics

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

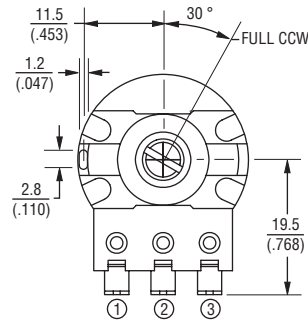
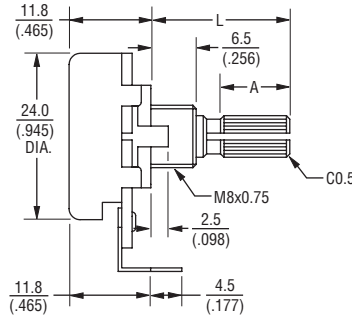
Mechanical Angle .....	300 ° ±5 °
Rotational Torque .....	.20 to 200 g-cm
Stop Strength .....	8 kg-cm min.
Rotational Life	
Standard.....	15,000 cycles min.
High .....	500,000 cycles min.
Soldering Condition	
Manual Soldering	.....300 °C within 3 seconds
Wave Soldering	.....260 °C within 3 seconds
Hardware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

## Derating Curve

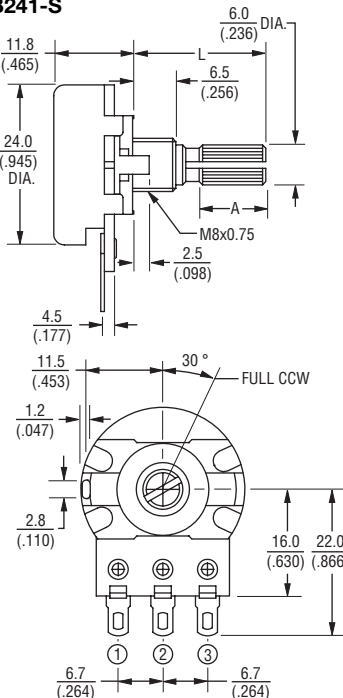


## Product Dimensions

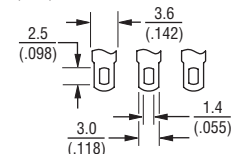
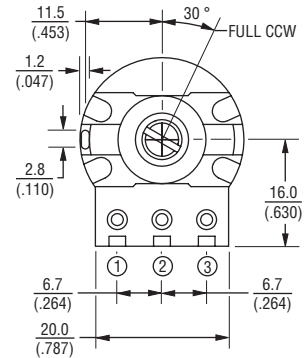
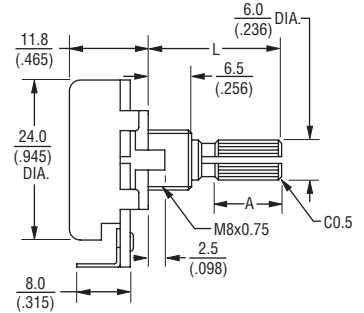
### PDB241-D



### PDB241-S



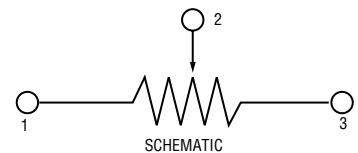
### PDB241-E



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

TOLERANCES:

UNDER  $\frac{10.0}{(.394)} = \pm 0.3$   
 $(\pm 0.012)$   
 $\frac{10.0 - 100}{(.394 - 3.937)} = \pm 0.5$   
 $(\pm 0.020)$



\*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.

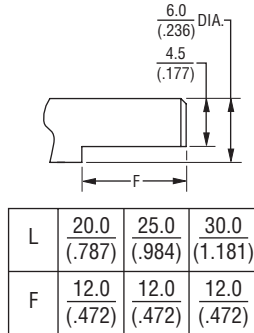
# Applications

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

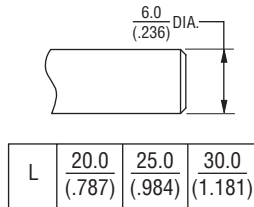
## PDB24 Series - 24 mm Rotary Potentiometer **BOURNS®**

### Product Dimensions

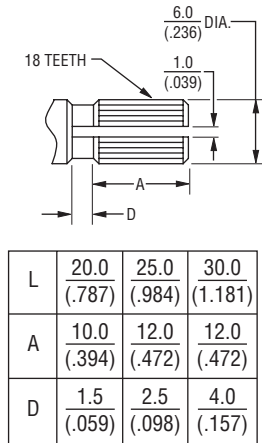
#### F Type



#### 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

