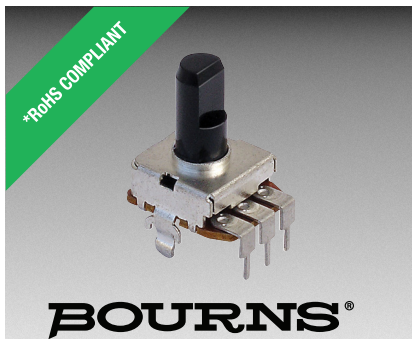




Features

- Single gang panel control
- RoHS compliant*
- Carbon element
- Center detent option
- Wide range of resistance tapers
- Insulated shaft styles
- Assortment of pin layouts

Additional Information

Click these links for more information:



PRODUCT
SELECTOR



TECHNICAL
LIBRARY



INVENTORY



SAMPLES



CONTACT

PDB12 Series - 12 mm Rotary Potentiometer

Electrical Characteristics

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

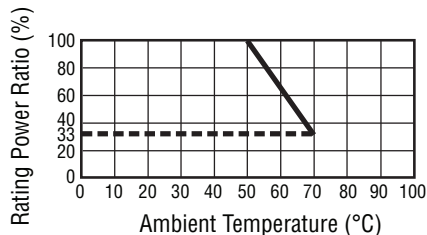
Environmental Characteristics

Power Rating
Linear 0.08 watt
Audio 0.04 watt
Maximum Operating Voltage
Linear 150 V
Audio 100 V
Sliding Noise 47 mV max.
Operating Temperature... -10 °C to +70 °C

Mechanical Characteristics

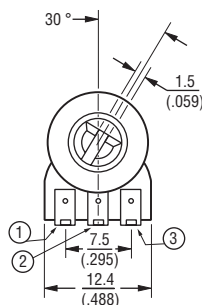
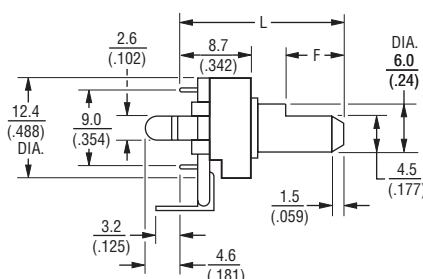
Mechanical Angle 300 ° ± 5 °
Rotational Torque 20 to 200 g-cm
Stop Strength 3 kg-cm min.
Rotational Life 15,000 cycles
Soldering Condition
..... 300 °C max. within 3 seconds
Hardware No hardware supplied

Derating Curve

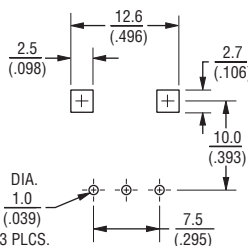


Product Dimensions

PDB12-H



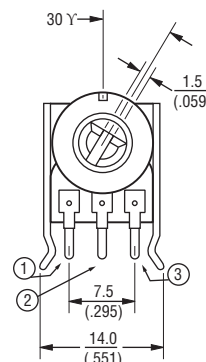
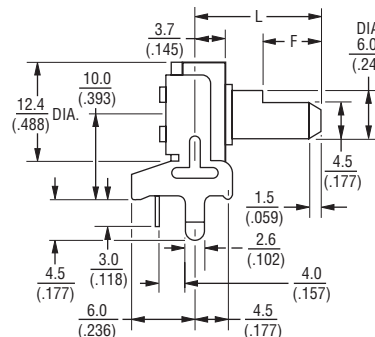
RECOMMENDED PCB LAYOUT



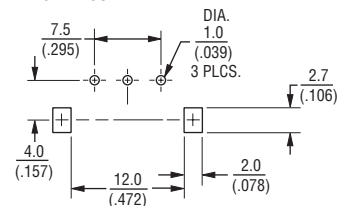
SHAFT SHOWN IN CCW POSITION

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

PDB12-G



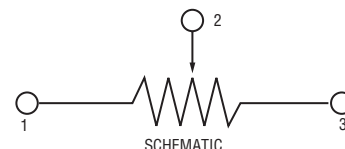
RECOMMENDED PCB LAYOUT



SHAFT SHOWN IN CCW POSITION

PDB12 Dimensions

	15	20	25	30
L	$\frac{15}{(.591)}$	$\frac{20}{(.787)}$	$\frac{25}{(.984)}$	$\frac{30}{(1.181)}$
F	$\frac{7}{(.276)}$	$\frac{7}{(.276)}$	$\frac{12}{(.472)}$	$\frac{12}{(.472)}$



SCHEMATIC



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.

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Applications

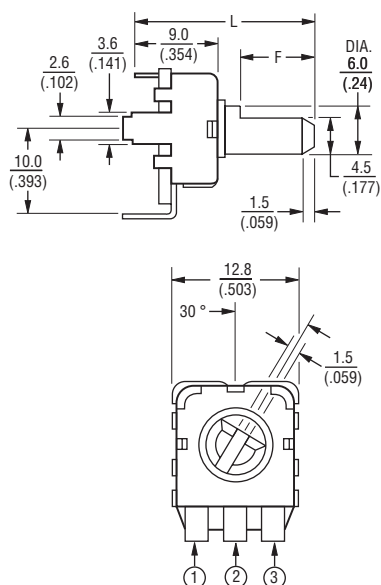
- Audio/TV sets
- Car radio
- Amplifiers/mixers/drum machines/synthesizers
- PCs/monitors
- Appliances

PDB12 Series - 12 mm Rotary Potentiometer

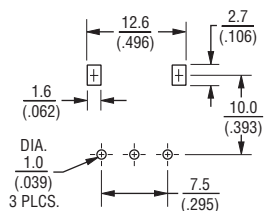
BOURNS®

Product Dimensions

PDB12-M



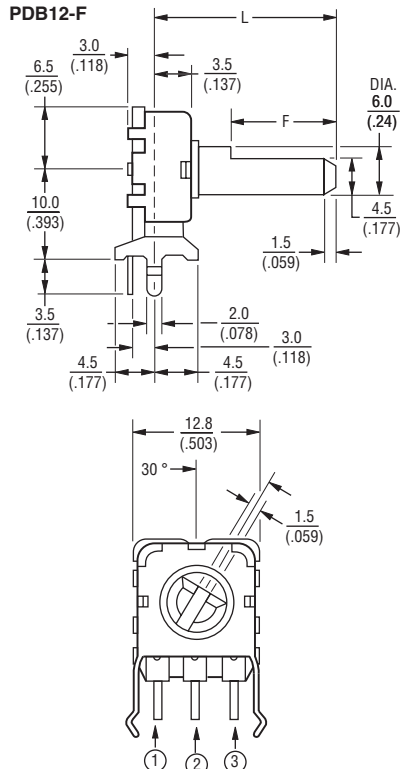
RECOMMENDED PCB LAYOUT



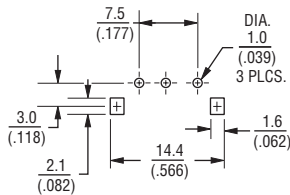
SHAFT SHOWN IN CCW POSITION

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

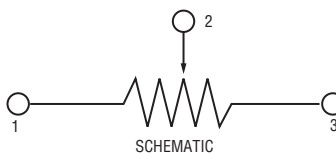
PDB12-F



RECOMMENDED PCB LAYOUT



SHAFT SHOWN IN CCW POSITION



How To Order

PDB12 - H 4 20 1 - 103 A F

Model _____
 Terminal Config. _____
 (see individual drawings)
 H = PC pins, rear facing
 snap mount
 G = PC pins, vertical/
 down facing/
 snap mount
 M = PC pins, rear facing
 F = PC pins, vertical/
 down facing/
 snap mount
 Option _____
 • 2 = Center Detent
 • 4 = No Detent
 Standard Shaft Length _____
 • 15 = 15 mm
 • 20 = 20 mm
 • 25 = 25 mm
 • 30 = 30 mm
 Number of Gangs _____
 • 1 = Single Gang
 Resistance Code (See Table) _____
 Resistance Taper _____
 • A = Audio Taper
 • B = Linear Taper
 Shaft Style _____
 • F = Flat Type Insulated Shaft
 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
500,000	504
1,000,000	105

PDB12 Dimensions

L	15 (.591)	20 (.787)	25 (.984)	30 (1.181)
F	7 (.276)	7 (.276)	12 (.472)	12 (.472)

REV. 07/25

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