BOURNS®

Features

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

Applications

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

PDB12 Series - 12 mm Rotary Potentiometer

Electrical Characteristics

Taper..................................... Linear, audio
Standard Resistance Range
.... 1K ohms to 1M ohms
Standard Resistance Tolerance.....±20 %
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
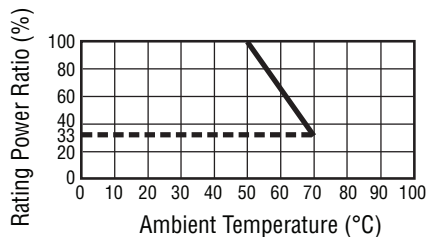
Product Dimensions

PDB12-H
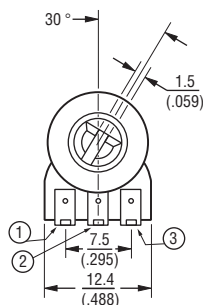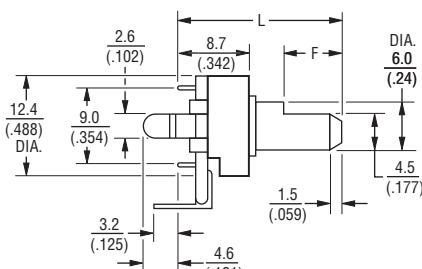
PDB12-G

RECOMMENDED PCB LAYOUT

SHAFT SHOWN IN CCW POSITION

RECOMMENDED PCB LAYOUT

SHAFT SHOWN IN CCW POSITION

PDB12 Dimensions

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

DIMENSIONS: MM/(INCHES)
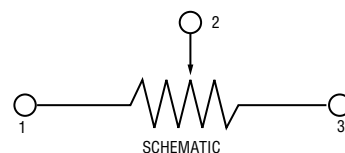
SCHEMATIC

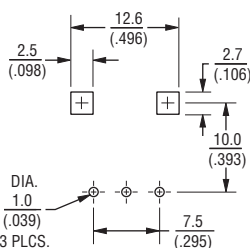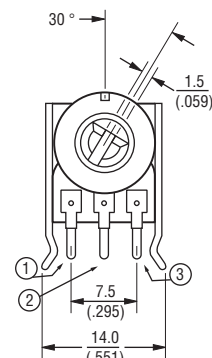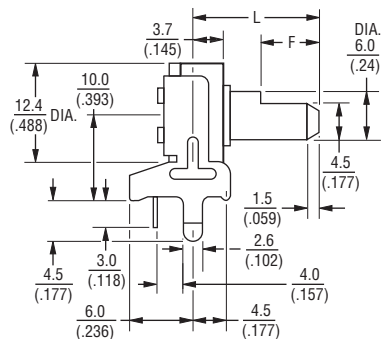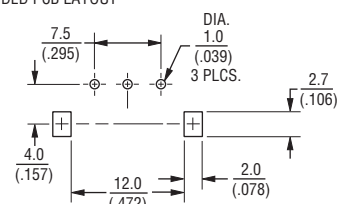## PDB12 Series - 12 mm Rotary Potentiometer
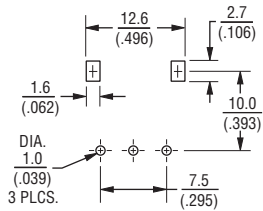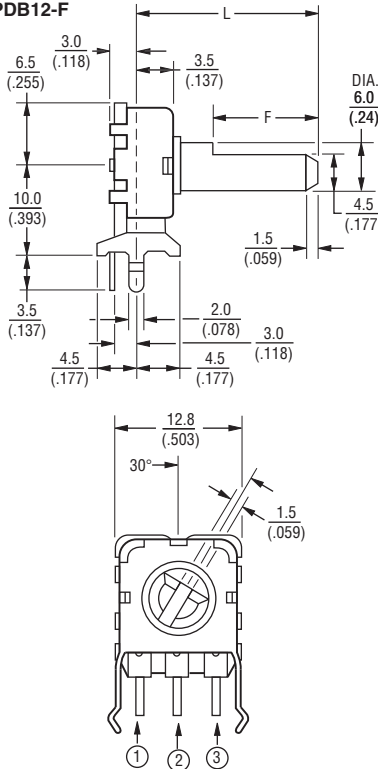
BOURNS®
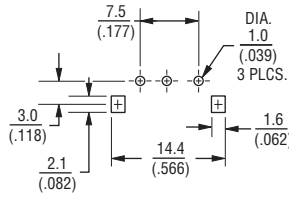
Product Dimensions

PDB12-M
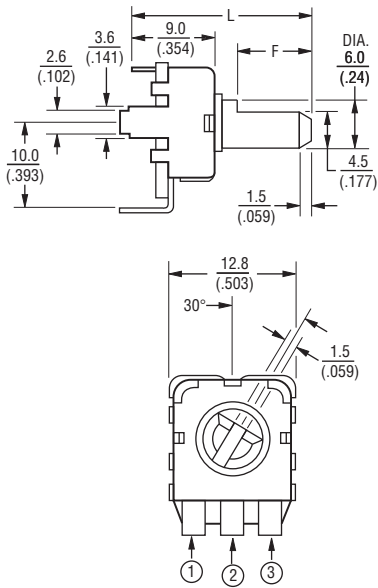
RECOMMENDED PCB LAYOUT

SHAFT SHOWN IN CCW POSITION

DIMENSIONS: $\dfrac{MM}{(INCHES)}$

PDB12-F

RECOMMENDED PCB LAYOUT

SHAFT SHOWN IN CCW POSITION

PDB12 Dimensions

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

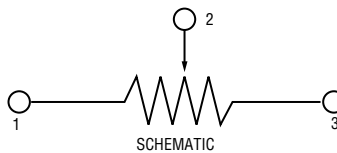SCHEMATIC

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

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