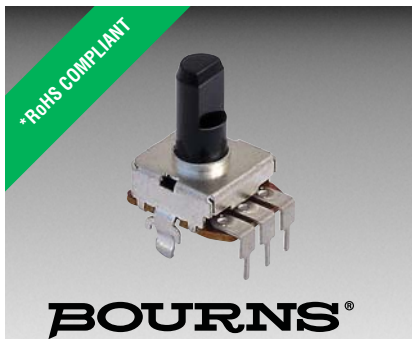




Features

- 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..... $\pm 20\%$
Residual Resistance..... 10 ohms max.

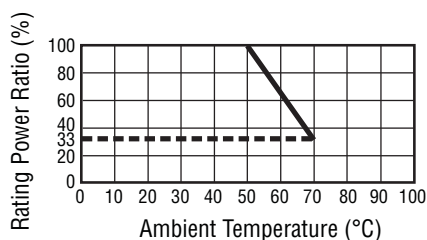
Environmental Characteristics

Power Rating
Linear..... 0.08 watt
Audio..... 0.04 watt
Maximum Operating Voltage
Linear..... 150 V
Audio..... 100 V
Sliding Noise..... 47 mV max.

Mechanical Characteristics

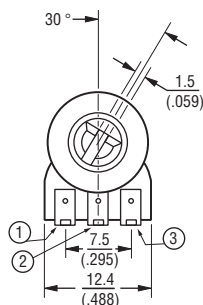
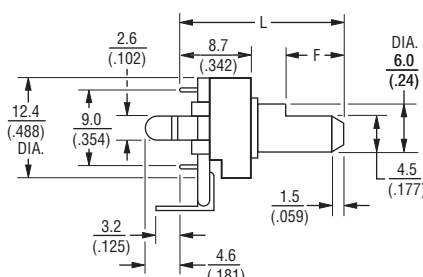
Mechanical Angle..... $300^\circ \pm 5^\circ$
Rotational Torque..... 20 to 200 g-cm
Stop Strength..... 3 kg-cm min.
Rotational Life..... 15,000 cycles
Soldering Condition
..... 300°C max. within 3 seconds
Hardware..... No hardware supplied

Derating Curve

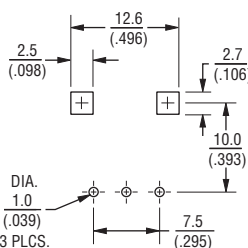


Product Dimensions

PDB12-H



RECOMMENDED PCB LAYOUT



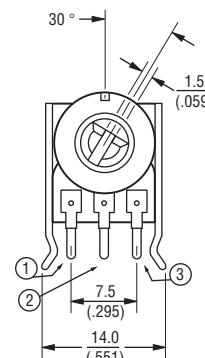
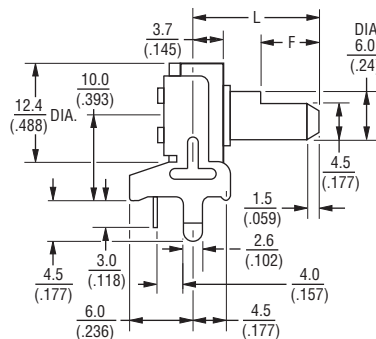
SHAFT SHOWN IN CCW POSITION

PDB12 Dimensions

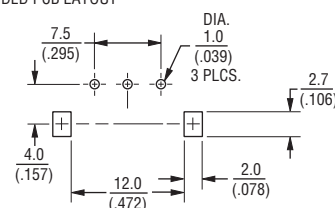
L	$\frac{15}{(.591)}$	$\frac{20}{(.787)}$	$\frac{25}{(.984)}$	$\frac{30}{(1.181)}$
F	$\frac{7}{(.276)}$	$\frac{7}{(.276)}$	$\frac{12}{(.472)}$	$\frac{12}{(.472)}$

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

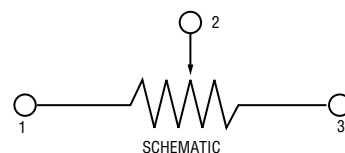
PDB12-G



RECOMMENDED PCB LAYOUT



SHAFT SHOWN IN CCW POSITION



*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.

Specifications are subject to change without notice.

The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.

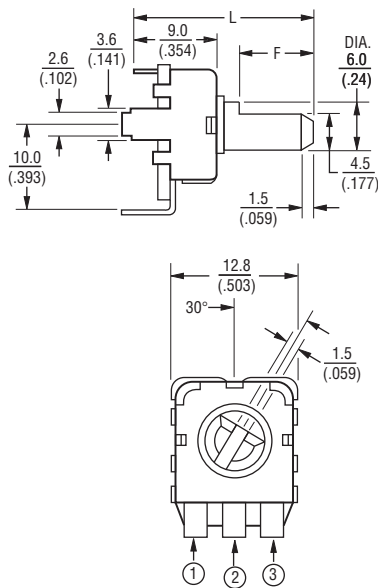
Users should verify actual device performance in their specific applications.

PDB12 Series - 12 mm Rotary Potentiometer

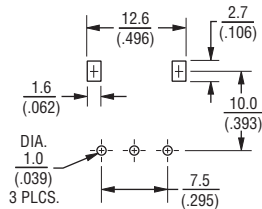
BOURNS®

Product Dimensions

PDB12-M



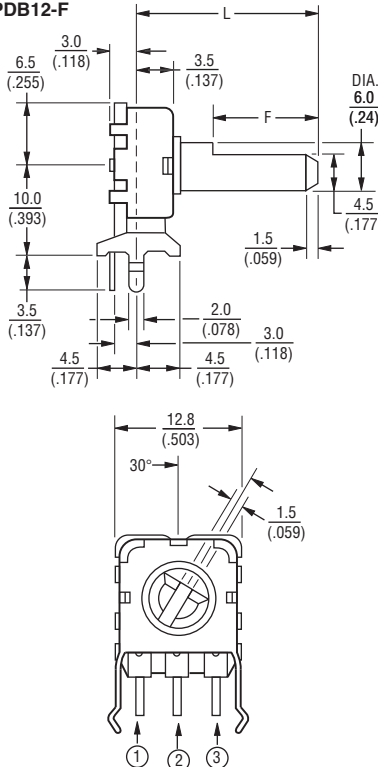
RECOMMENDED PCB LAYOUT



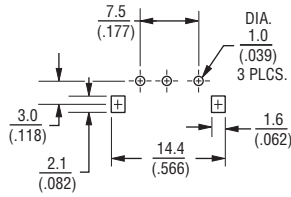
SHAFT SHOWN IN CCW POSITION

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

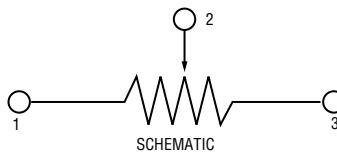
Other styles available.

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. 08/15

Specifications are subject to change without notice.

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Users should verify actual device performance in their specific applications.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Bourns:

PDB12-G1AAD-B102	PDB12-H4301-105BF	PDB12-M4251-104BF	PDB12-M4251-105BF	PDB12-F1AAG-B503
PDB12-F1AAH-B503	PDB12-H4201-103BF	PDB12-F2251-503BF	PDB12-F2301-103BF	PDB12-F4151-104BF
PDB12-F4201-204BF	PDB12-F4251-104BF	PDB12-F4251-104CF	PDB12-F4251-254BF	PDB12-F4251-503AF
PDB12-F4251-503BF	PDB12-F4251-503CF	PDB12-G2251-102BF	PDB12-G2251-103BF	PDB12-G2251-104BF
PDB12-G2251-502BF	PDB12-G2251-503BF	PDB12-G4201-103AF	PDB12-G4201-502BF	PDB12-H2201-103BF
PDB12-H2201-104BF	PDB12-H2201-502BF	PDB12-H2251-102BF	PDB12-H2251-103BF	PDB12-H2251-104BF
PDB12-H2251-502BF	PDB12-H2251-503BF	PDB12-H4151-203BF	PDB12-H4201-103AF	PDB12-H4251-102BF
PDB12-H4251-103BF	PDB12-H4251-104BF	PDB12-H4251-202BF	PDB12-H4251-503BF	PDB12-H4301-103BF
PDB12-H4301-203BF	PDB12-H4301-502BF	PDB12-M4251-102BF	PDB12-M4251-103BF	PDB12-H2151-103AF
PDB12-H4151-104BF	PDB12-H4301-102BF	PDB12-H4301-202BF	PDB12-H4301-503AF	PDB12-H4301-503BF
PDB12-M4151-103AF	PDB12-M4201-103AF	PDB12-H4151-503BF	PDB12-H4251-203BF	PDB12-M4201-203BF
PDB12-M4201-202BF	PDB12-H4301-103AF	PDB12-M2201-502BF	PDB12-M4151-504BF	PDB12-F4201-503BF
PDB12-H4201-203BF	PDB12-F4121-104BF	PDB12-F4251-104AF	PDB12-G4201-102BF	PDB12-H4201-102BF
PDB12-H4201-202BF	PDB12-H4251-204BF			