

*RoHS COMPLIANT



BOURNS®

Features

- Carbon element
- Insulated shaft
- Snap-in clip
- Center detent option
- RoHS compliant*

Applications

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

PTV09 Series - 9 mm Potentiometer

Electrical Characteristics

TaperLinear, audio
 Standard Resistance Range1 K ohms to 1 M ohms
 Standard Resistance Tolerance±20 %
 Residual Resistance500 ohms or ±1 % max.

Environmental Characteristics

Operating Temperature-10 °C to +50 °C
 Power Rating (Linear and Audio)0.05 watt
 Maximum Operating Voltage (Linear and Audio).....20 VDC, 50 VAC
 Sliding Noise100 mV max.

Mechanical Characteristics

Mechanical Angle280 ° ±5 °
 Rotational Torque10 to 100 g-cm
 Detent Torque.....40 to 200 g-cm
 Stop Strength.....2 kg-cm min.
 Rotational Life10,000 cycles
 Soldering Condition300 °C max. within 3 seconds
 HardwareNo hardware supplied

How To Order

PTV09A - 2 0 20 F - B 203

Model _____

Terminal Configuration (Pin Layout)

- 2 = PC Pins Vertical/Down Facing
- 4 = PC Pins Horizontal/Rear Facing

Option

- 0 = No Detent
- 2 = Center

Standard Shaft Length

- 15 = 15 mm
- 20 = 20 mm
- 25 = 25 mm
- 30 = 30 mm

Shaft Style

- F = Flat Type Insulated Shaft
- S = Insulated Knurled (24 Teeth)*
- U = Insulated Knurled (40 Teeth)

Resistance Taper

- A = Audio Taper
- B = Linear Taper

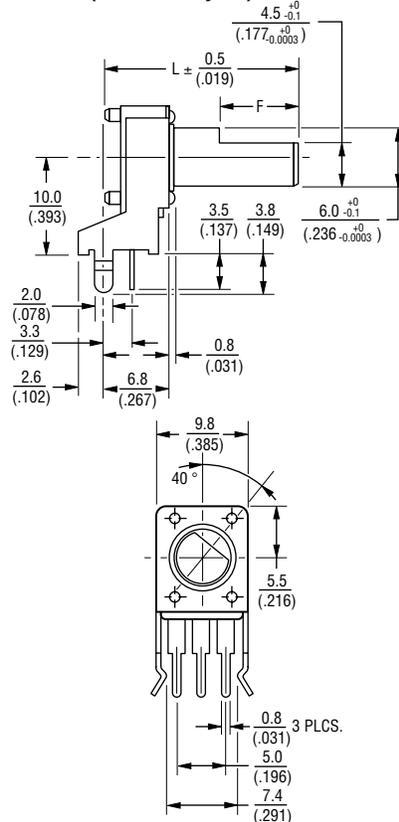
Resistance Code (See Table) _____

Other styles available.

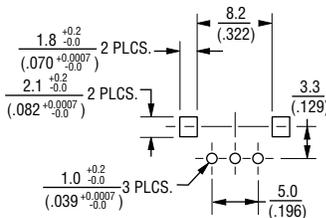
*Available in 20 mm or 25 mm shaft lengths only.

Product Dimensions

PTV09A-2 (with shaft style F)



RECOMMENDED PCB LAYOUT



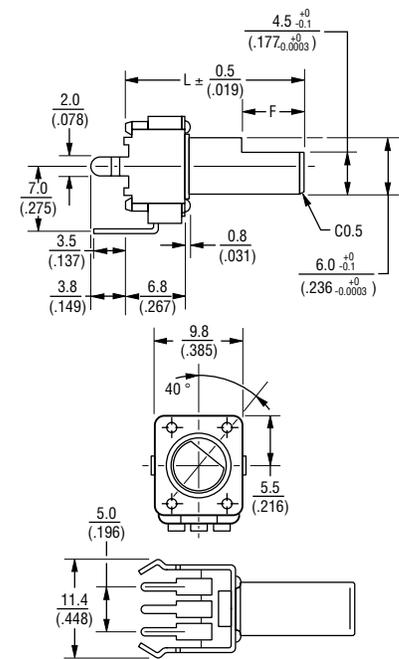
SHAFT SHOWN IN CCW POSITION

F-Type Shaft

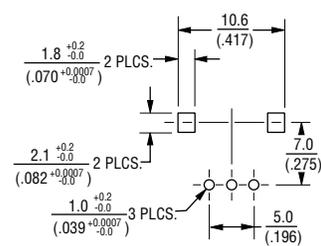
L	15	20	25	30
	(.591)	(.787)	(.984)	(1.181)
F	6	7	12	12
	(.236)	(.275)	(.472)	(.472)

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

PTV09A-4 (with shaft style F)



RECOMMENDED PCB LAYOUT



SHAFT SHOWN IN CCW POSITION

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

*RoHS Directive 2002/95/EC Jan 27 2003 including Annex. Specifications are subject to change without notice.

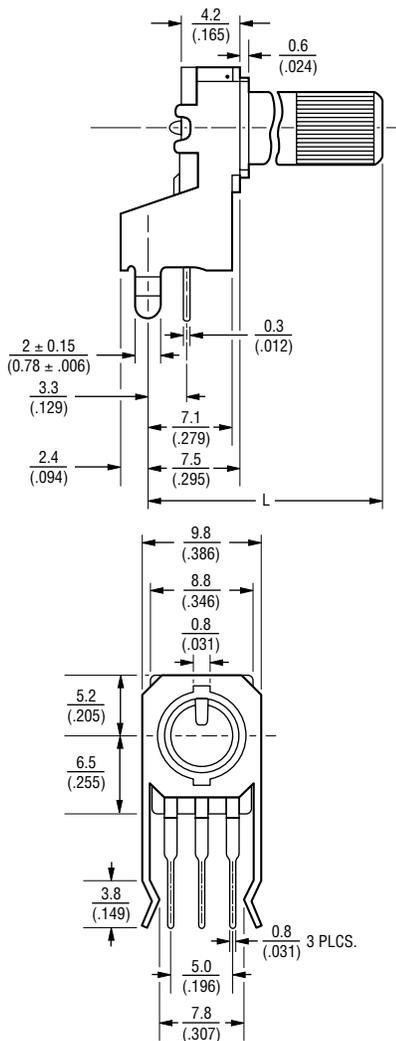
Customers should verify actual device performance in their specific applications.

PTV09 Series - 9 mm Potentiometer

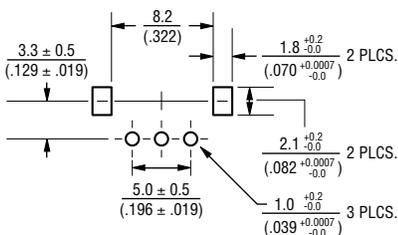
BOURNS®

Product Dimensions

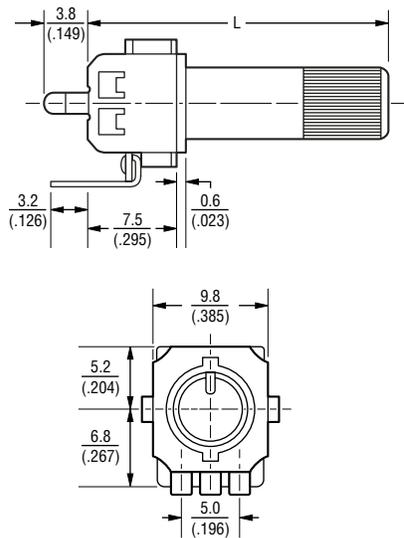
PTV09A-2
(with shaft style U)



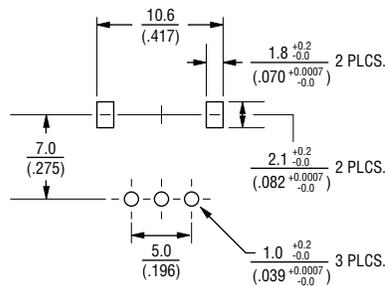
RECOMMENDED PCB LAYOUT



PTV09A-4
(with shaft style U)



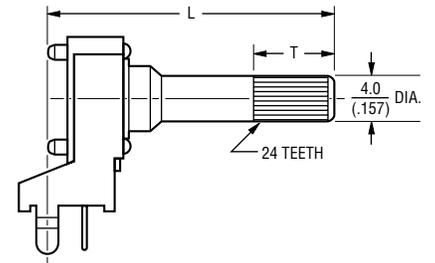
RECOMMENDED PCB LAYOUT



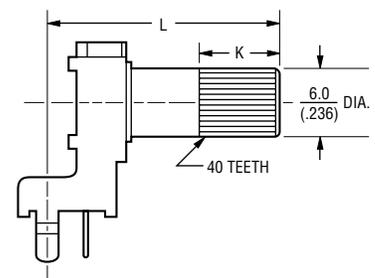
DIMENSIONS ARE: $\frac{\text{MM}}{\text{(INCHES)}}$

Shaft Styles

S-Type



U-Type



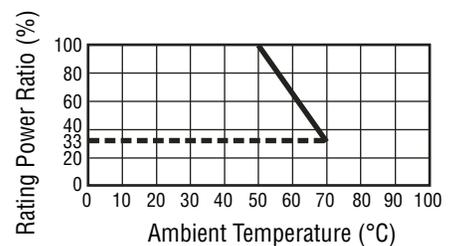
S-Type Shaft

L	20	25
	(.787)	(.984)
T	7	7
	(.275)	(.275)

U-Type Shaft

L	15	20	25	30
	(.591)	(.787)	(.984)	(1.181)
K	6	7	7	7
	(.236)	(.275)	(.275)	(.275)

Derating Curve



REV. 10/08

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