

*RoHS COMPLIANT



BOURNS®

Features

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



PTV09 Series - 9 mm Potentiometer

Electrical Characteristics

Taper..... Linear, audio
 Standard Resistance Range
 1 K ohms to 1 M ohms
 Standard Resistance Tolerance..... ±20 %
 Residual Resistance
 500 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 Noise 100 mV max.

Mechanical Characteristics

Mechanical Angle 280 ° ±5 °
 Rotational Torque 10 to 100 g-cm
 Detent Torque 40 to 200 g-cm
 Stop Strength 2 kg-cm min.
 Rotational Life 10,000 cycles
 Soldering Condition
 300 °C max. within 3 seconds
 Hardware No hardware supplied

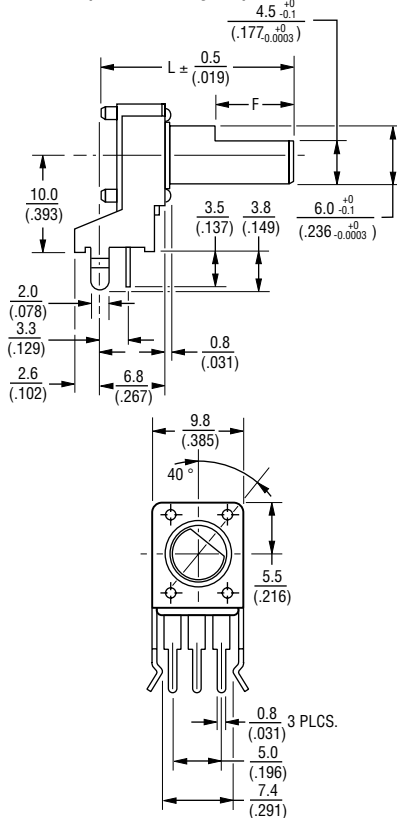
How To Order

PTV09A - 2 0 20 F - B 203

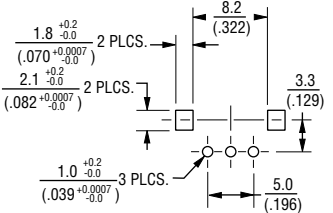
Model _____
 Terminal Configuration (Pin Layout)
 • 2 = PC Pins Vertical/Down Facing
 • 4 = PC Pins Horizontal/Rear Facing
 Option _____
 • 0 = No Detent
 • 2 = Center
 Standard Shaft Length _____
 • 15 = 15 mm
 • 20 = 20 mm
 • 25 = 25 mm
 • 30 = 30 mm
 Shaft Style _____
 • F = Flat Type Insulated Shaft
 • S = Insulated Knurled (18 Teeth)
 • U = Insulated Knurled (40 Teeth)
 Resistance Taper _____
 • A = Audio Taper
 • B = Linear Taper
 Resistance Code (See Table) _____
 Other styles available.

Product Dimensions

PTV09A-2 (with shaft style F)



RECOMMENDED PCB LAYOUT



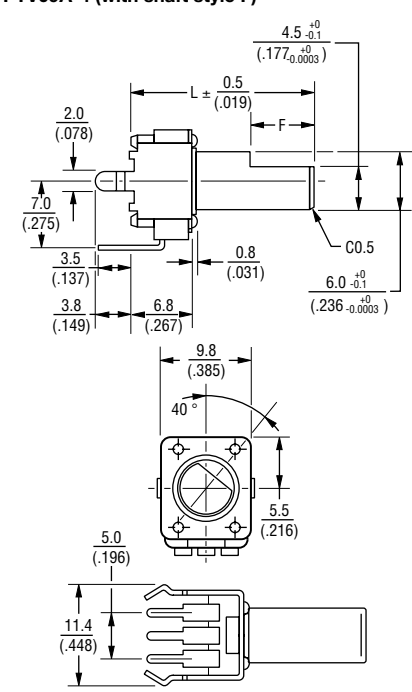
SHAFT SHOWN IN CCW POSITION

F-Type Shaft

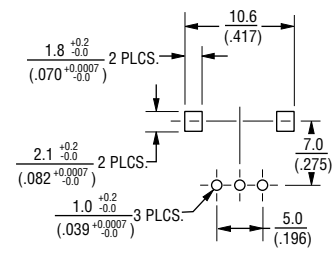
L	15	20	25	30
	(.591)	(.787)	(.984)	(1.181)
F	6	7	12	12
	(.236)	(.275)	(.472)	(.472)

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

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.

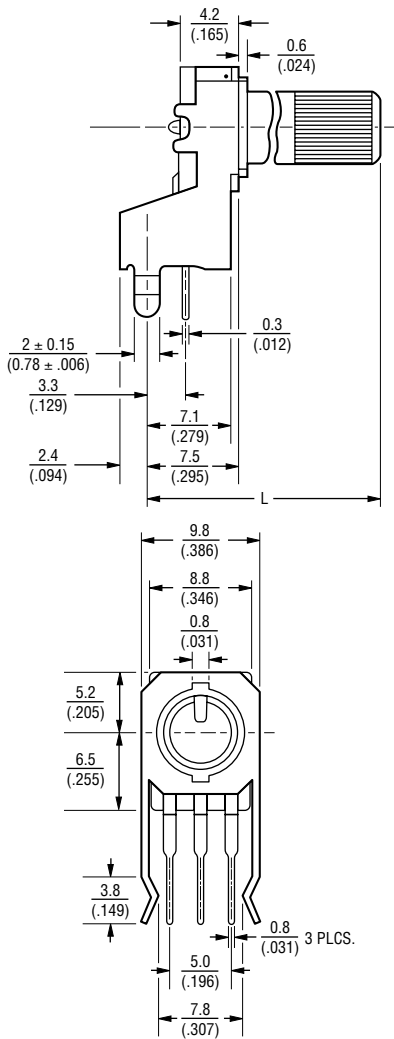
Applications

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

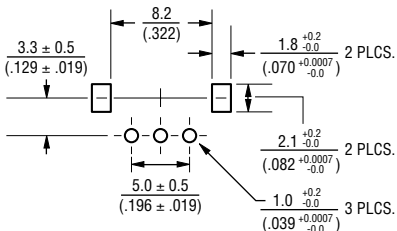
PTV09 Series - 9 mm Potentiometer **BOURNS®**

Product Dimensions

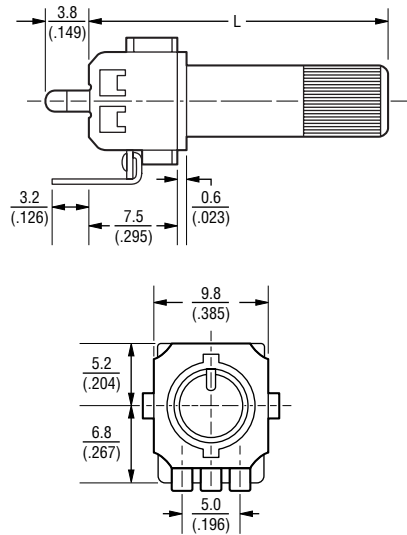
PTV09A-2
(with shaft style U)



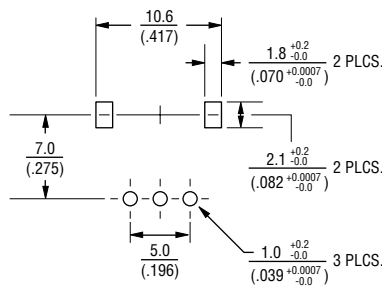
RECOMMENDED PCB LAYOUT



PTV09A-4
(with shaft style U)

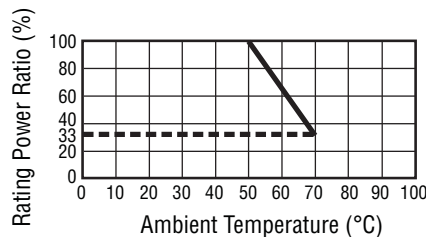


RECOMMENDED PCB LAYOUT



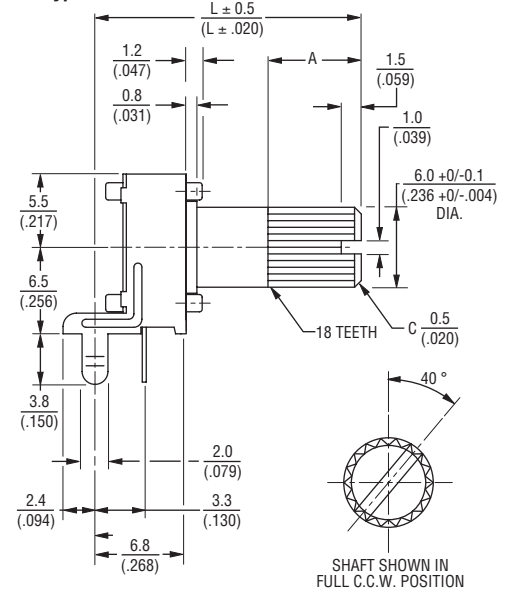
DIMENSIONS: $\frac{\text{MM}}{\text{INCHES}}$

Derating Curve

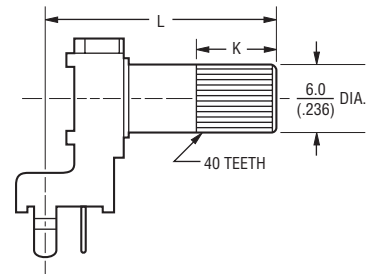


Shaft Styles

S-Type



U-Type



S-Type Shaft

L	15 (.591)	20 (.787)	25 (.984)	30 (1.181)
A	7 (.275)	7 (.275)	7 (.275)	7 (.275)

U-Type Shaft

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