

Features

- Carbon element
- Insulated shaft
- Wide variety of mounting styles
- 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..... $\pm 20\%$
 Residual Resistance
500 ohms or $\pm 1\%$ max.

Environmental Characteristics

Operating Temperature.... $-10\text{ }^{\circ}\text{C}$ to $+50\text{ }^{\circ}\text{C}$
 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 $280\text{ }^{\circ} \pm 10\text{ }^{\circ}$
 Rotational Torque 10 to 100 g-cm
 Detent Torque20 to 200 gf-cm
 Stop Strength 2 kg-cm min.
 Rotational Life 10,000 cycles
 Soldering Condition
 $300\text{ }^{\circ}\text{C}$ max. within 3 seconds
 Hardware One flat washer and one
 hex nut supplied with bushing version

How To Order

PTV09A - 2 0 20 F - B 203

Model _____
 Terminal Configuration _____
 (Pin Layout)

1 = Horizontal/Rear Mount w/Sleeve Bushing
 2 = Vertical/Side Mount, Bushingless, 10 mm Height
 3 = Vertical/Side Mount, Bushingless, 6.5 mm Height
 4 = Horizontal/Rear Mount, Bushingless
 5 = Horizontal/Rear Mount w/Plastic Plain Bushing
 6 = Horizontal/Rear Mount w/Metal Threaded Bushing
 7 = Vertical/Side Mount w/Sleeve Bushing, 6.5 mm Height
 8 = Vertical/Side Mount w/Sleeve Bushing, 10 mm height

Option _____
 0 = No Detent 2 = Center

Standard Shaft Length
 15 = 15 mm** 25 = 25 mm
 20 = 20 mm 30 = 30 mm

Shaft Style _____
 F = Flat Type Insulated Shaft
 S = Insulated Knurled (18 Teeth)
 U = Insulated Knurled (40 Teeth)

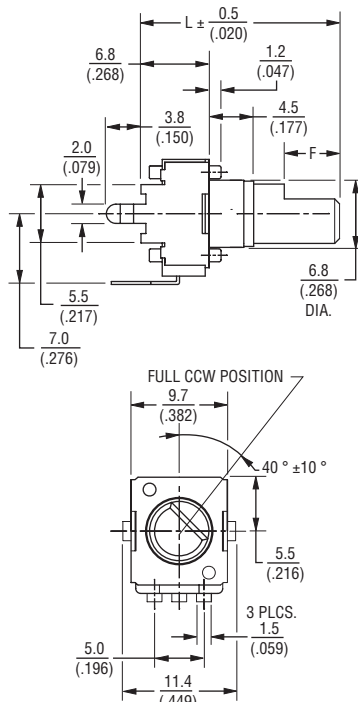
Resistance Taper _____
 Taper Series followed by Curve Number

Resistance Code (See Table) _____

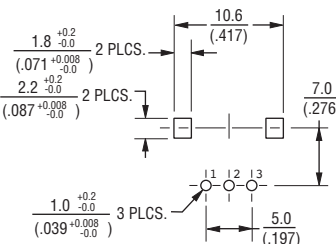
Other styles available.
 ** Bushingless version only.

Product Dimensions

PTV09A-1
 (Horizontal/Rear Mount w/Sleeve Bushing)

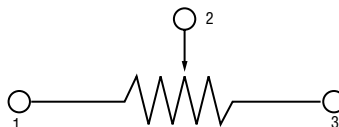


RECOMMENDED PCB LAYOUT
 (HORIZONTAL/REAR MOUNT)

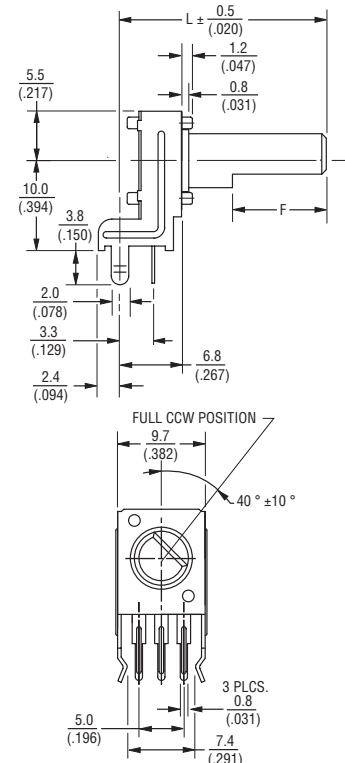


DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$

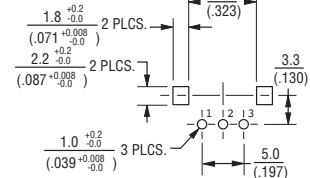
Schematic



PTV09A-2
 (Vertical/Side Mount,
 Bushingless, 10 mm Height)



RECOMMENDED PCB LAYOUT
 (VERTICAL/SIDE MOUNT)



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

Specifications are subject to change without notice. Users should verify actual device performance in their specific applications. The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at www.bourns.com/docs/legal/disclaimer.pdf.



WARNING Cancer and Reproductive Harm
www.P65Warnings.ca.gov

*RoHS Directive 2015/863, Mar 31, 2015 and Annex.

Applications

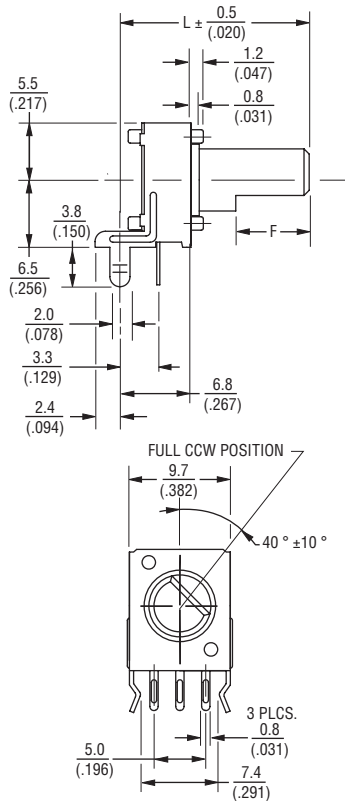
- Commercial communications equipment
- Portable electronics
- Amplifiers/mixers/drum machines/synthesizers
- Consumer goods
- Commercial appliances

PTV09 Series - 9 mm Potentiometer

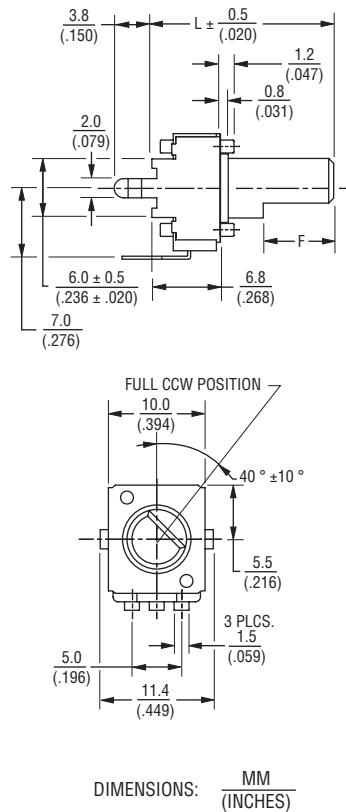
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Product Dimensions (Continued)

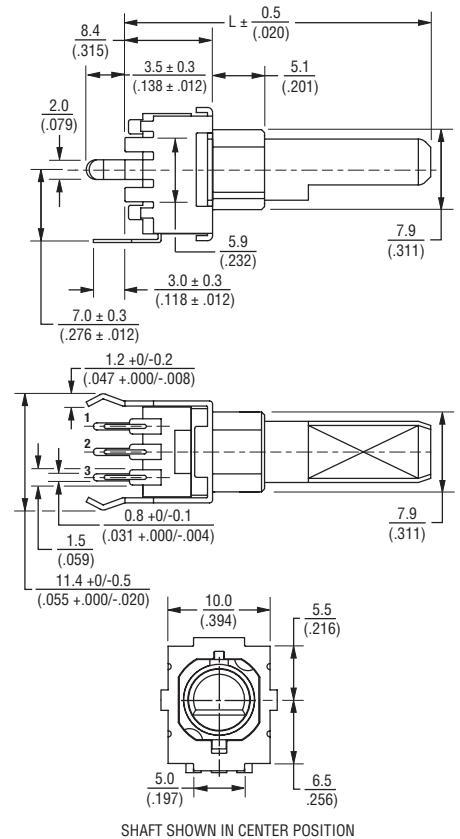
PTV09A-3
(Vertical/Side Mount,
Bushings, 6.5 mm Height)



PTV09A-4
(Horizontal/Rear Mount, Bushingless)



PTV09A-5
(Horizontal/Rear Mount
w/Plastic Plain Bushing)



Shaft Styles

F-Type



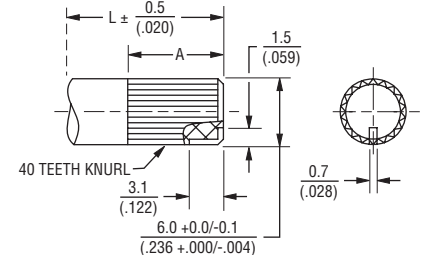
L	15 (.591)	20 (.787)	25 (.984)	30 (1.181)
F	6 (.236)	7 (.275)	12 (.472)	12 (.472)

S-Type



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

U-Type



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

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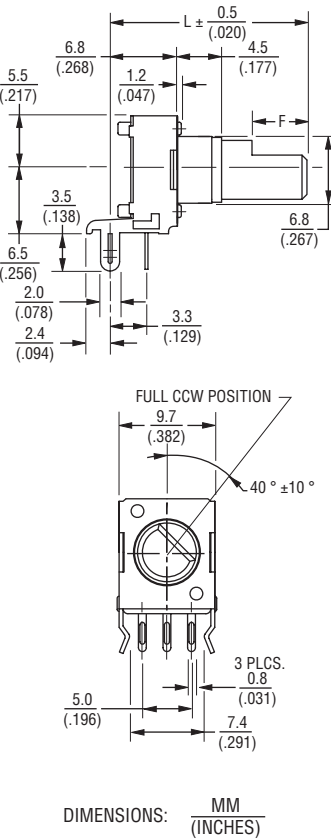
Product Dimensions (Continued)

PTV09A-6
(Horizontal/Rear Mount
w/Metal Threaded Bushing)

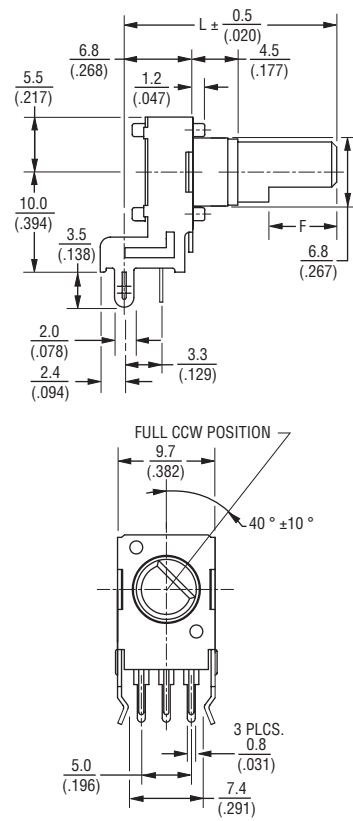


SHAFT SHOWN IN CENTER POSITION

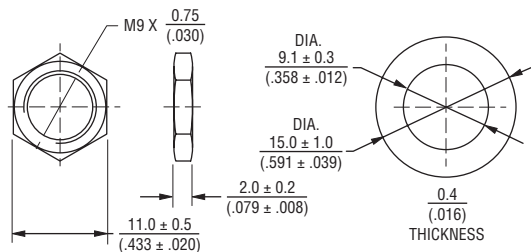
PTV09A-7
(Vertical/Side Mount
w/Sleeve Bushing, 6.5 mm Height)



PTV09A-8
(Vertical/Side Mount
w/Sleeve Bushing, 10 mm Height)



Mounting Hardware



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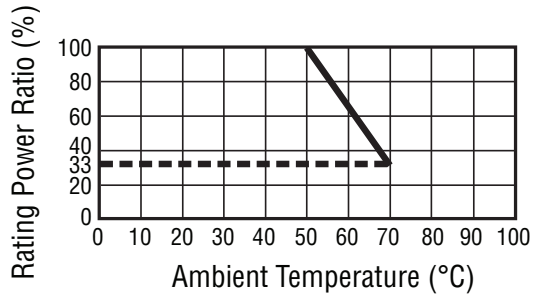
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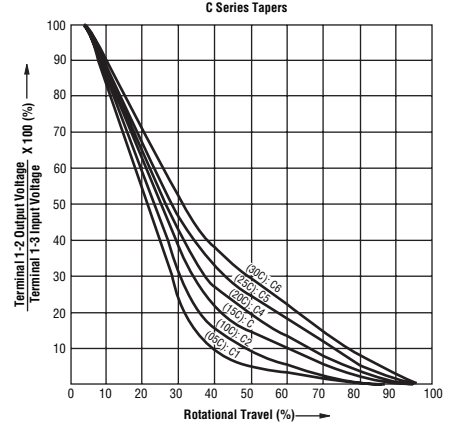
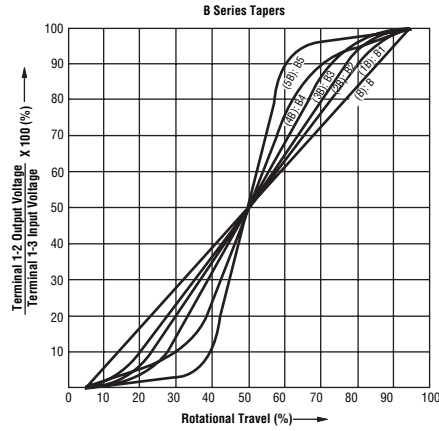
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Derating Curve



Tapers



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