

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 °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 $280^\circ \pm 10^\circ$
 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 °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)

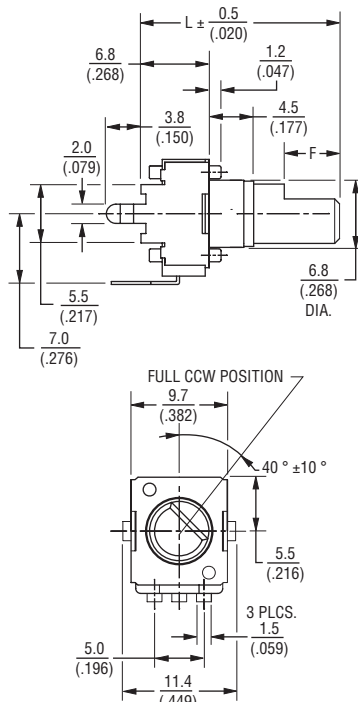
Resistance Taper _____
 Taper Series followed by Curve Number

Resistance Code (See Table) _____

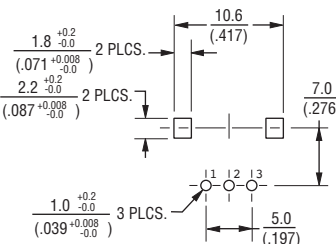
Other styles available.
 ** Bushingless version only.

Product Dimensions

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

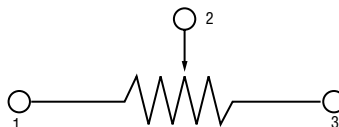


RECOMMENDED PCB LAYOUT
 (HORIZONTAL/REAR MOUNT)

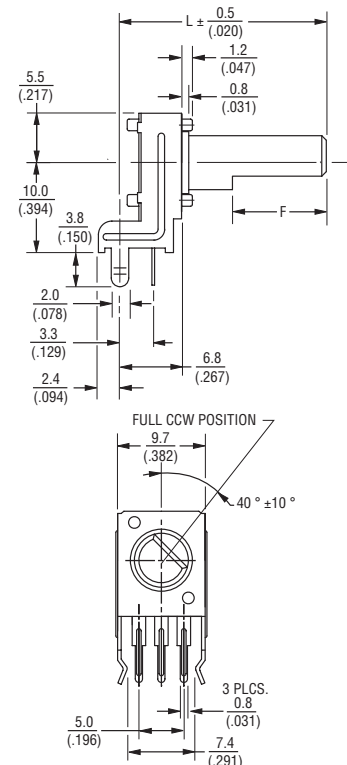


DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$

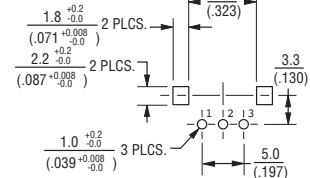
Schematic



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 |

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

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

Applications

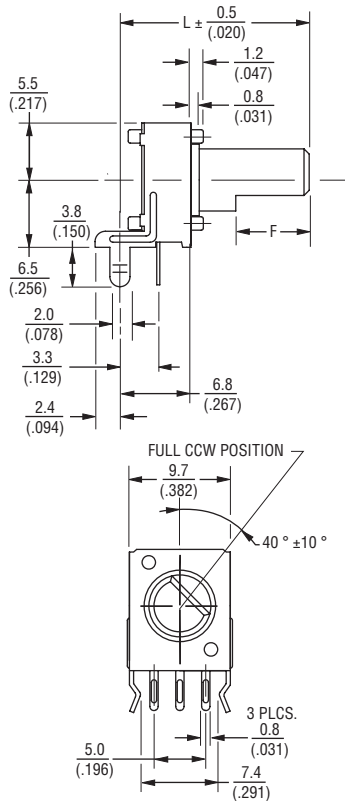
- Commercial communications equipment
- Portable electronics
- Amplifiers/mixers/drum machines/synthesizers
- Consumer goods
- Commercial appliances

PTV09 Series - 9 mm Potentiometer

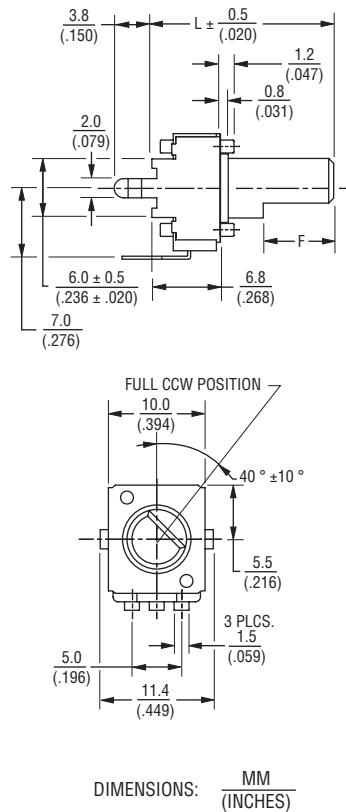
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Product Dimensions (Continued)

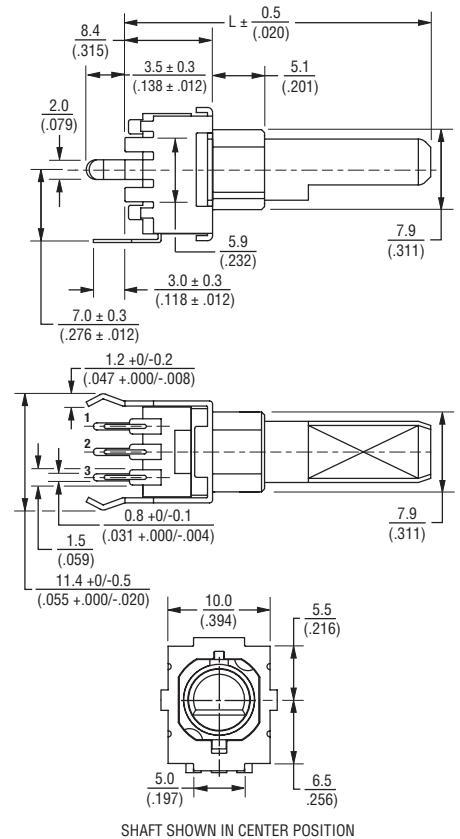
PTV09A-3
(Vertical/Side Mount,
Bushings, 6.5 mm Height)



PTV09A-4
(Horizontal/Rear Mount, Bushingless)



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



Shaft Styles

F-Type



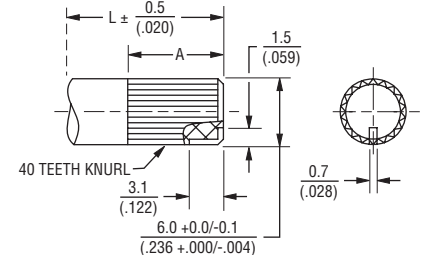
| | | | | |
|---|--------------|--------------|--------------|---------------|
| L | 15 (.591) | 20 (.787) | 25 (.984) | 30 (1.181) |
| F | 6 (.236) | 7 (.275) | 12 (.472) | 12 (.472) |

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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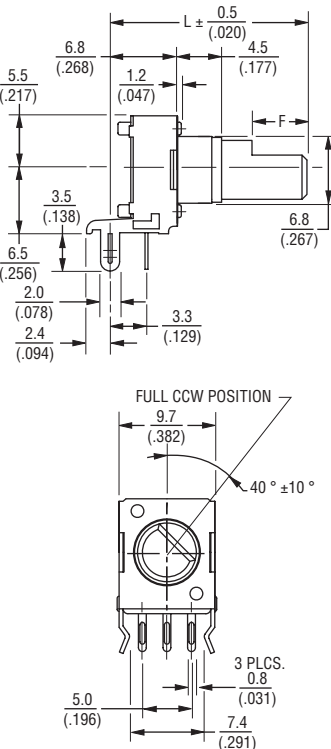
Product Dimensions (Continued)

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



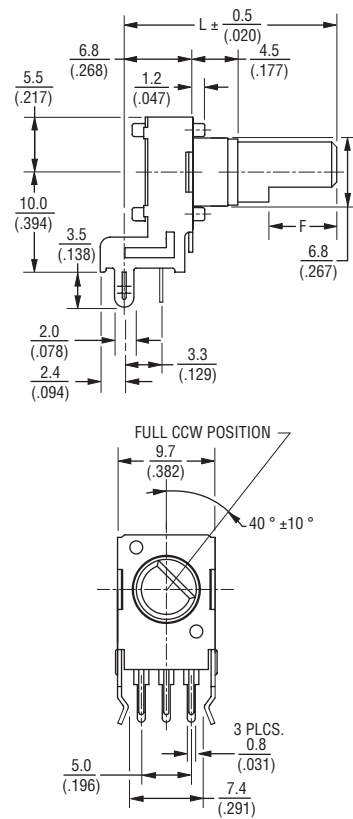
SHAFT SHOWN IN CENTER POSITION

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

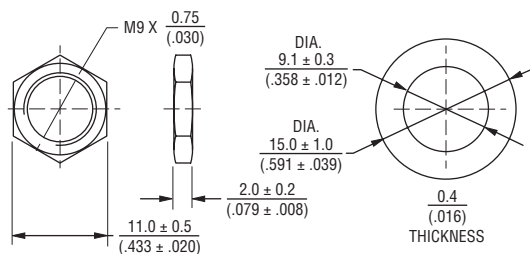


DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$

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



Mounting Hardware



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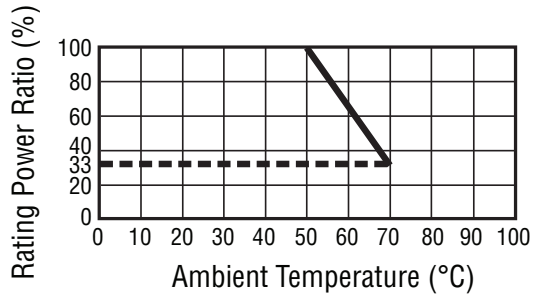
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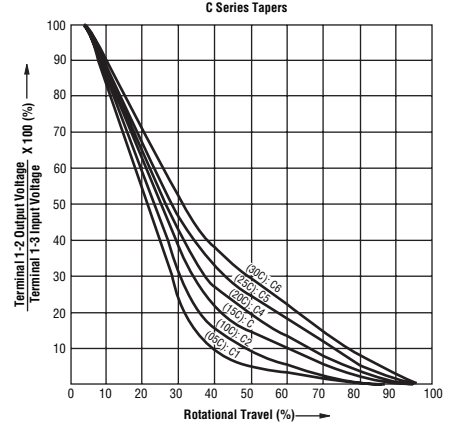
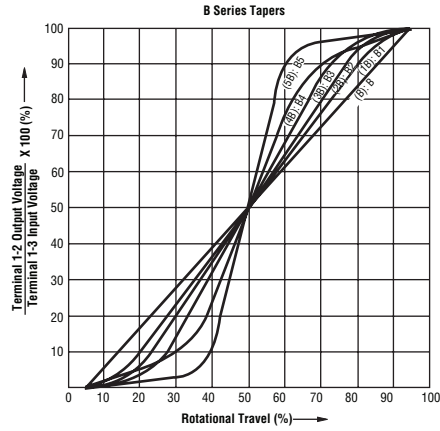
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Derating Curve



Tapers



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