

Features

- Carbon element
- Ganging up to 8 sections available
- Knurled and flatted shaft styles
- Audio taper option
- Tracking error within 3 dB
- RoHS compliant*

Applications

- Audio/TV sets
- Automotive sound systems
- Amplifiers/mixers/drum machines/synthesizers/DJ equipment
- Multimedia sound systems
- Portable electronics

PTD90 Series - 9 mm Multi-Ganged Potentiometer

Electrical Characteristics

Standard Resistance Range1 K ohms to 1 M ohms
 Total Resistance Tolerance±10 % or ±20 %
 Standard Tapers.....Linear & audio
 Maximum Operating Voltage150 VAC, 20 VDC
 Rated Power
 Linear Taper0.05 watts
 Audio Taper.....0.025 watts
 Noise100 mV max.
 Insulation Resistance @ 250 VDC100 M ohms
 Dielectric Withstanding Voltage300 VAC
 End Resistance20 ohms max.
 Tracking Error (-40 dB to 0 dB)±3 dB

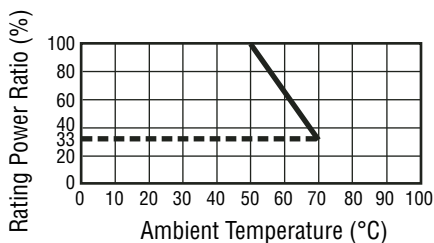
Environmental Characteristics

Operating Temperature-10 °C to +50 °C
 Rotational Life10,000 cycles
 IP RatingIP 40

Mechanical Characteristics

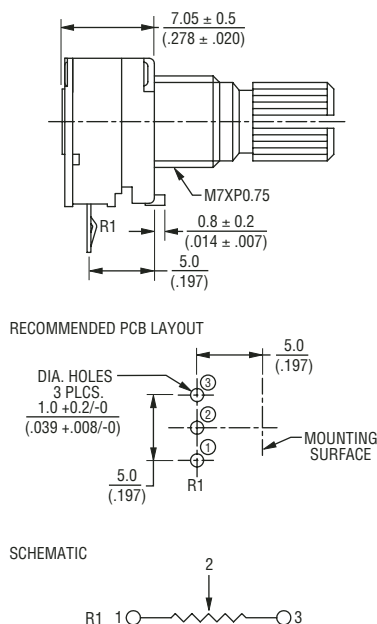
Mechanical Angle300 ° ±10 °
 Running Torque10 to 250 g-cm
 Stop Strength4.0 kg-cm
 Shaft Push/Pull Strength5.0 kgf min.
 Shaft Wobble0.6 x L/20 mm p-p max.
 Mounting Torque7.0 kg-cm min.
 Soldering Condition
 Manual Soldering
96.5 Sn/3.0 Ag/0.5 Cu solid wire
 or no-clean rosin cored wire
 270 °C max. for 3 seconds
 Wave Soldering
96.5 Sn/3.0 Ag/0.5 Cu solder
 with no-clean flux
 260 °C max. for 5 seconds
 Wash ProcessNot recommended
 Mounting HardwareOne flat washer
 and one mounting nut supplied
 per potentiometer

Derating Curve

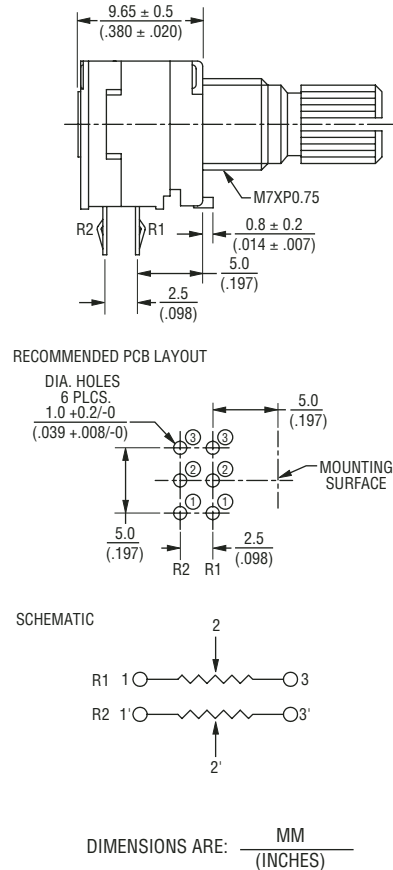


Product Dimensions

PTD901



PTD902



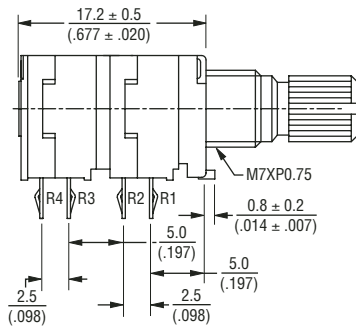
*RoHS Directive 2002/95/EC Jan 27 2003 including Annex
 Specifications are subject to change without notice.
 Customers should verify actual device performance in their specific applications.

PTD90 Series - 9 mm Multi-Ganged Potentiometer

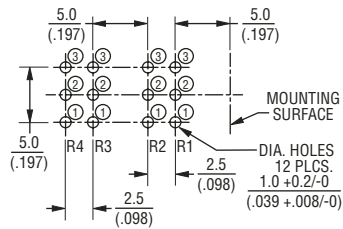
BOURNS®

Product Dimensions

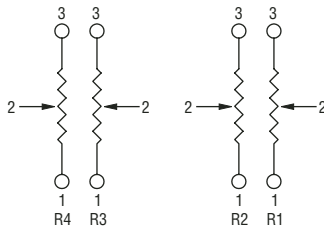
PTD904



RECOMMENDED PCB LAYOUT

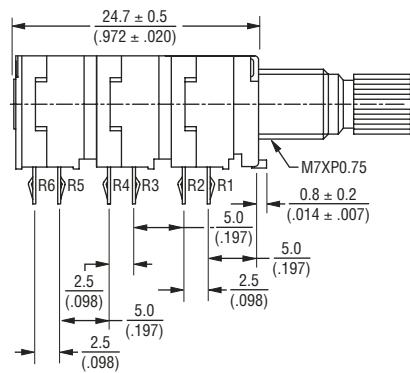


SCHEMATIC

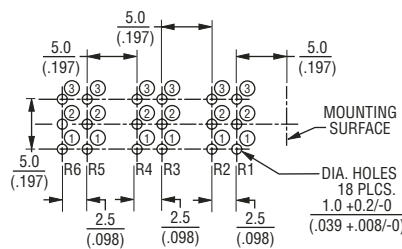


DIMENSIONS ARE: $\frac{\text{MM}}{\text{(INCHES)}}$

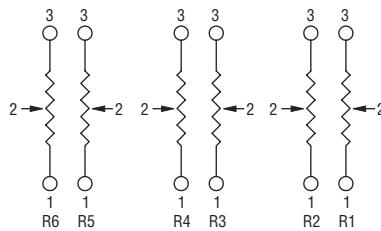
PTD906



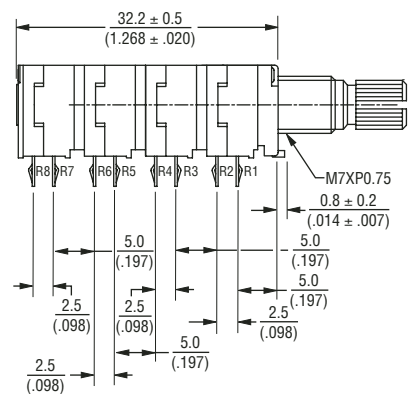
RECOMMENDED PCB LAYOUT



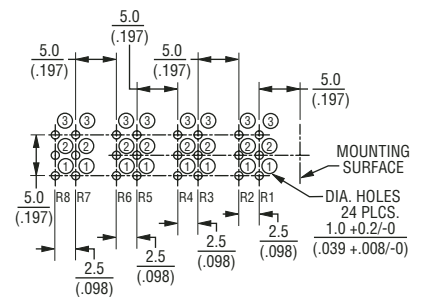
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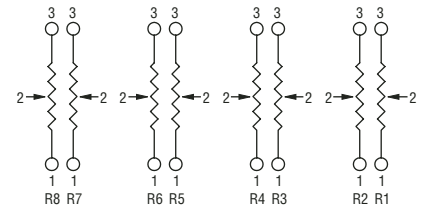
PTD908



RECOMMENDED PCB LAYOUT



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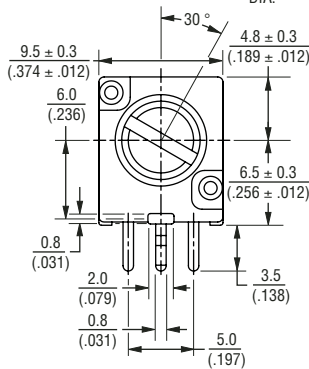
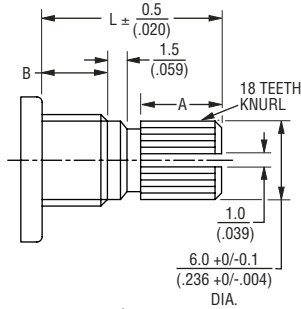


PTD90 Series - 9 mm Multi-Ganged Potentiometer

BOURNS®

Product Dimensions

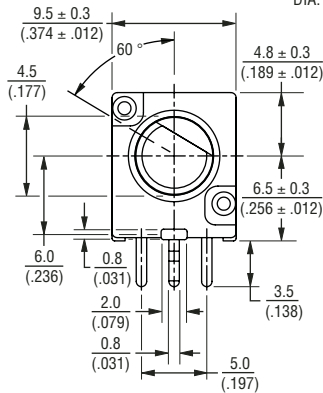
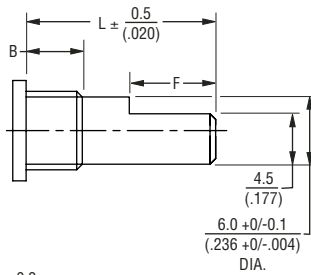
SHAFT STYLE "K"



SHAFT SHOWN IN CCW POSITION

L	15 (.591)	20 (.787)	25 (.984)
B	5 (.197)	7 (.276)	10 (.394)
A	6 (.236)	12 (.472)	12 (.472)

SHAFT STYLE "F"



SHAFT SHOWN IN CCW POSITION

L	15 (.591)	20 (.787)	25 (.984)
B	5 (.197)	7 (.276)	10 (.394)
F	7 (.276)	12 (.472)	12 (.472)

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

How To Order

PTD90 1 - 2 0 20 K - B 203

Model _____

- PTD90 = No Switch

No. of Sections _____

- 1 = 1 Section
- 2 = 2 Sections
- 3 = 3 Sections
- 4 = 4 Sections
- 5 = 5 Sections
- 6 = 6 Sections
- 8 = 8 Sections

Pin Style _____

- 1 = PC Pins vertical/down facing and $\pm 10\%$ Total Resistance Tolerance
- 2 = PC Pins vertical/down facing and $\pm 20\%$ Total Resistance Tolerance

Center Detent Option _____

- 0 = No Detent
- 2 = Center Detent

Standard Shaft Length _____

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

Shaft Styles _____

- K = Knurled Type Shaft (Metal) 18 Toothed Serration Type
- F = Flatted Metal Shaft

Resistance Taper _____

- A = Audio Taper
- B = Linear Taper

Resistance Code (See Table) _____

Other taper and shaft 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