

\*RoHS COMPLIANT



**BOURNS®**

**Features**

- Carbon element
- Insulated shaft
- Snap-in clip
- Center detent
- Center tap option
- Assorted pin layouts
- Dual gang option
- Various taper options

**PTV/PTT Series - 12 mm Potentiometer**

**Electrical Characteristics**

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

**Environmental Characteristics**

Operating Temperature  
 ..... -10 °C to +50 °C  
 Power Rating..... 0.05 Watt  
 Maximum Operating Voltage  
 ..... 50 V AC, 20 V DC  
 Sliding Noise ..... 100 mV max.

**Mechanical Characteristics**

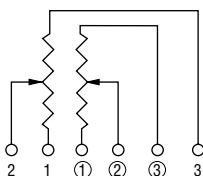
Mechanical Angle..... 300 ° ±5 °  
 Rotational Torque ..... 20 to 200 g-cm  
 Detent Torque..... 30 to 300 g-cm  
 Stop Strength  
 no bushing ..... 3 kg-cm min.  
 with bushing..... 3 kg-cm min.  
 Rotational Life ..... 15,000 cycles  
 Soldering Condition  
 ..... 300 °C max. within 3 seconds  
 Hardware ..... One flat washer and  
 mounting nut supplied per  
 potentiometer with bushing

**Electrical Diagrams**

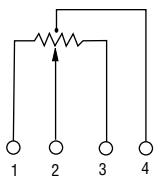
MODEL PTV 111



MODEL PTV 112

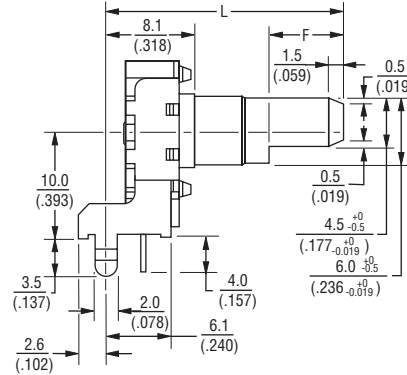


MODEL PTT 111



**Product Dimensions**

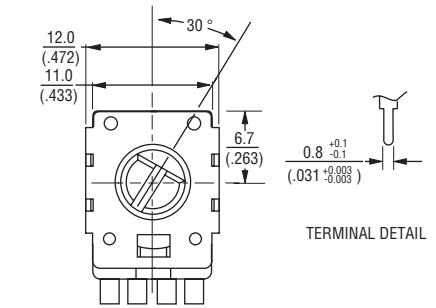
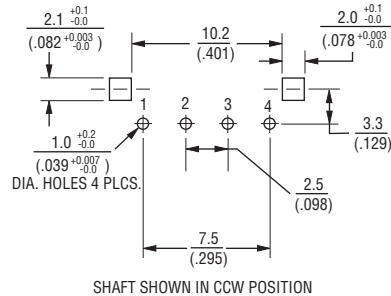
PTV111-2



PTV111-4

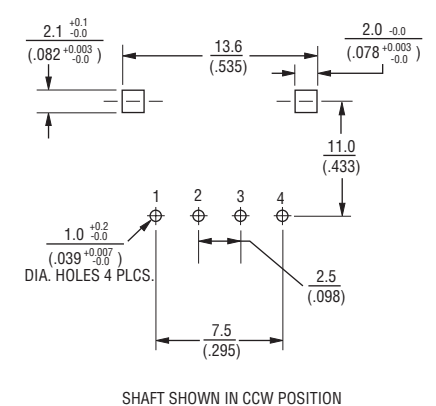


RECOMMENDED PCB LAYOUT



TERMINAL DETAIL

RECOMMENDED PCB LAYOUT



**Dimensions Without Bushing**

L	15 (.591)	20 (.787)	22.5 (.886)	25 (.984)	27.5 (1.083)
F	4.5 (.177)	7 (.276)	7 (.276)	12 (.472)	12 (.472)

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

\*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

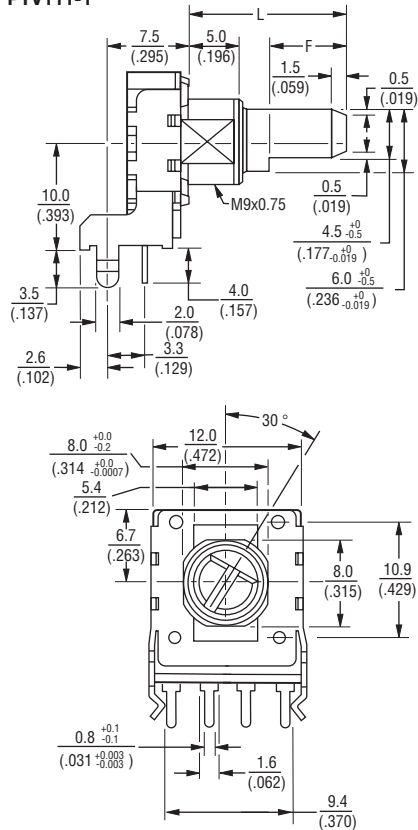
- Audio/TV sets
- Car radio
- Amplifiers/mixers/drum machines/synthesizers
- PCs/monitors
- Appliances

# PTV/PTT Series - 12 mm Potentiometer

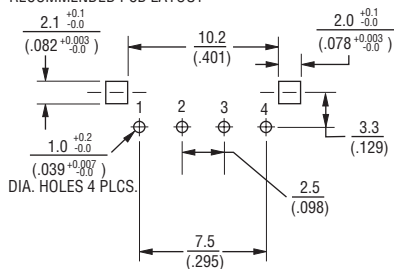
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## Product Dimensions

PTV111-1

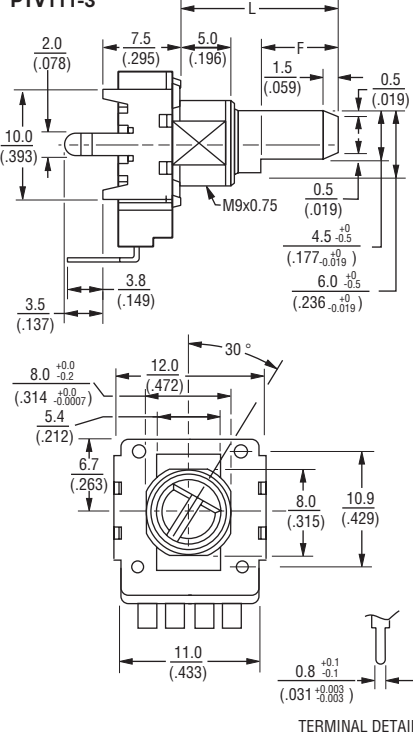


RECOMMENDED PCB LAYOUT



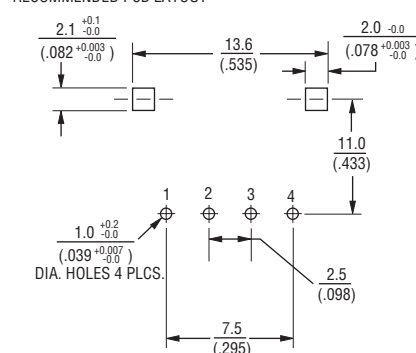
SHAFT SHOWN IN CCW POSITION

PTV111-3



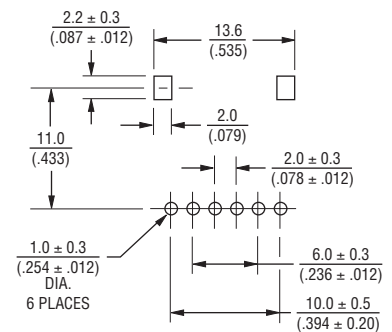
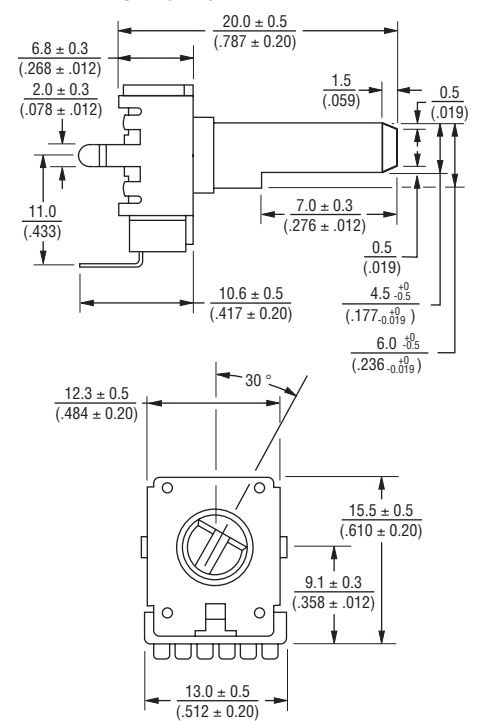
TERMINAL DETAIL

RECOMMENDED PCB LAYOUT



SHAFT SHOWN IN CCW POSITION

PTV112-4 DUAL GANG



SHAFT SHOWN IN CCW POSITION

## Dimensions Without Bushing

L	12.5 (.492)	15 (.591)	17.5 (.689)	20 (.787)
F	7 (.276)	7 (.276)	12 (.472)	12 (.472)

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

# PTV/PTT Series - 12 mm Potentiometer

**BOURNS®**

## How To Order

**PTV111 - 2 4 20 A - A1 104**

Model \_\_\_\_\_

(See Diagrams)

- PTV111 Standard
- PTT111 With Tap
- PTV112 Dual Gang

Pin Style \_\_\_\_\_

PC Pins vertical/  
Down Facing:

- 1 = With Bushing
- 2 = No Bushing

PC Pins horizontal/  
Rear Facing:

- 3 = With Bushing
- 4 = No Bushing

Center Detent Option \_\_\_\_\_

- 4 = No Detent
- 2 = Center Detent

Standard Shaft Length \_\_\_\_\_

- 12 = 12.5 mm\*
- 15 = 15 mm
- 17 = 17.5 mm\*
- 20 = 20 mm
- 22 = 22.5 mm\*\*
- 25 = 25 mm\*\*
- 27 = 27.5 mm\*\*

Shaft Styles \_\_\_\_\_

- A = Flat Type Insulated Shaft

Resistance Taper (See Taper Chart) \_\_\_\_\_

Taper Series followed by Curve Number

Resistance Code (See Table) \_\_\_\_\_

Other styles available.

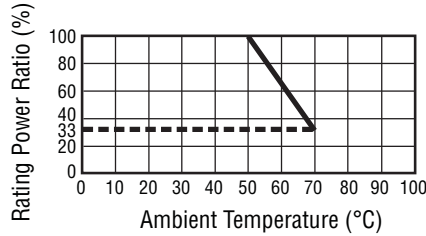
\* Available with Pin Styles 1 & 3 only.

\*\* Available with Pin Styles 2 & 4 only.

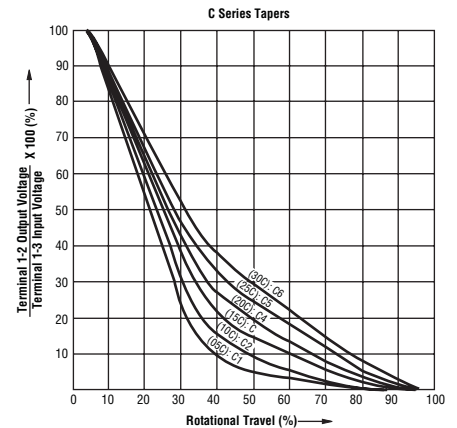
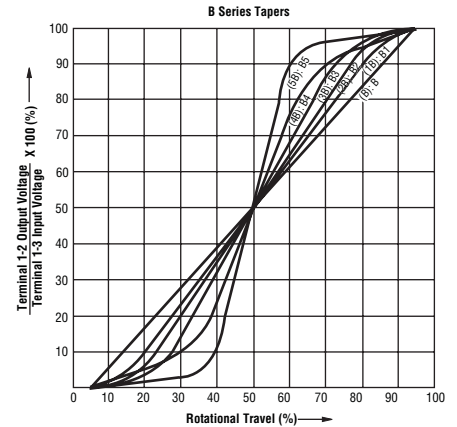
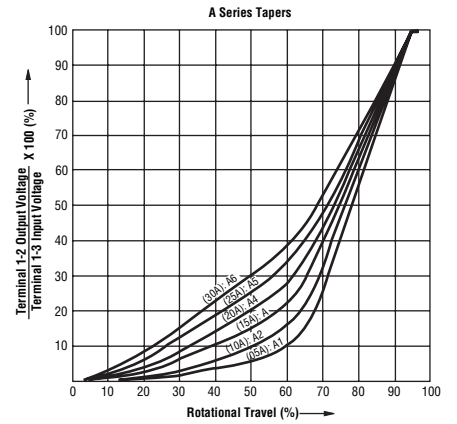
## Standard Resistance Table

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

## Derating Curve



## Tapers



REV. 07/10

Specifications are subject to change without notice.  
Customers should verify actual device performance in their specific applications.