

## 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

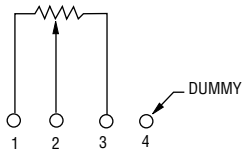
Operating Temperature  
 ..... -10 °C to +50 °C  
 Power Rating ..... 0.05 Watt  
 Maximum Operating Voltage  
 ..... 50 V AC, 20 V DC  
 Sliding Noise ..... 100 mV max.

### Mechanical Characteristics

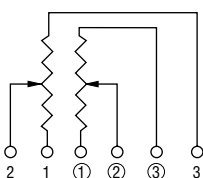
Mechanical Angle ..... 300 ° ±5 °  
 Rotational Torque ..... 20 to 200 g-cm  
 Detent Torque ..... 30 to 300 g-cm  
 Stop Strength  
 no bushing ..... 3 kg-cm min.  
 with bushing..... 3 kg-cm min.  
 Rotational Life ..... 15,000 cycles  
 Soldering Condition  
 ..... 300 °C max. within 3 seconds  
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

### Electrical Diagrams

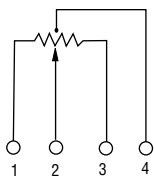
MODEL PTV 111



MODEL PTV 112

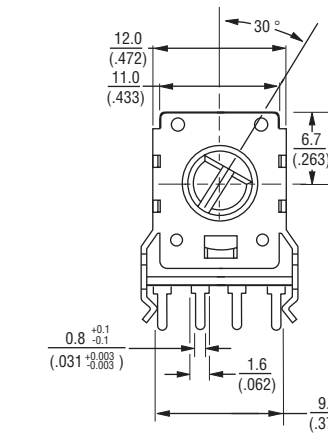
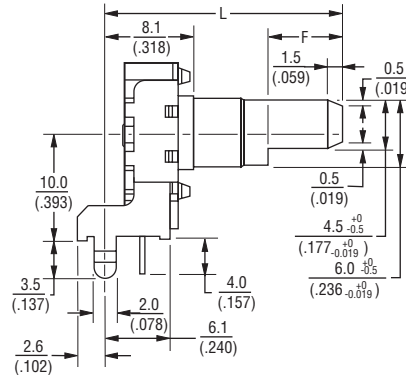


MODEL PTT 111

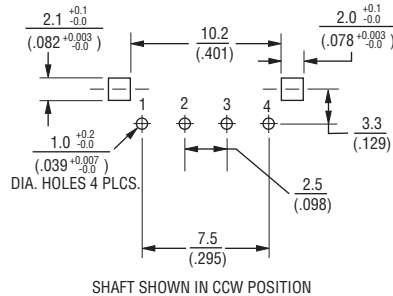


### Product Dimensions

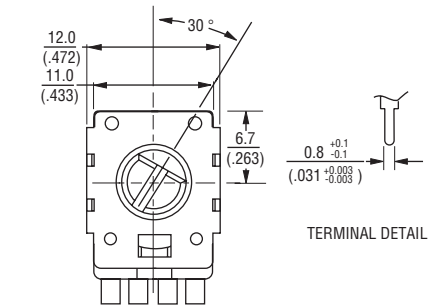
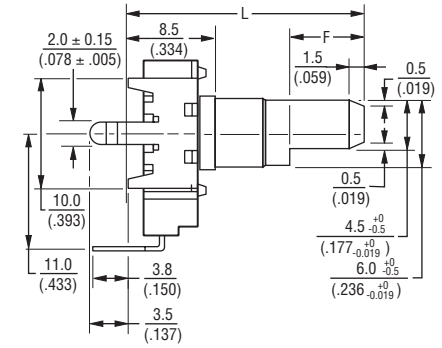
PTV111-2



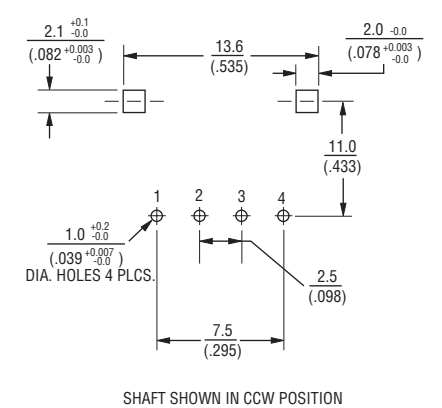
RECOMMENDED PCB LAYOUT



PTV111-4



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

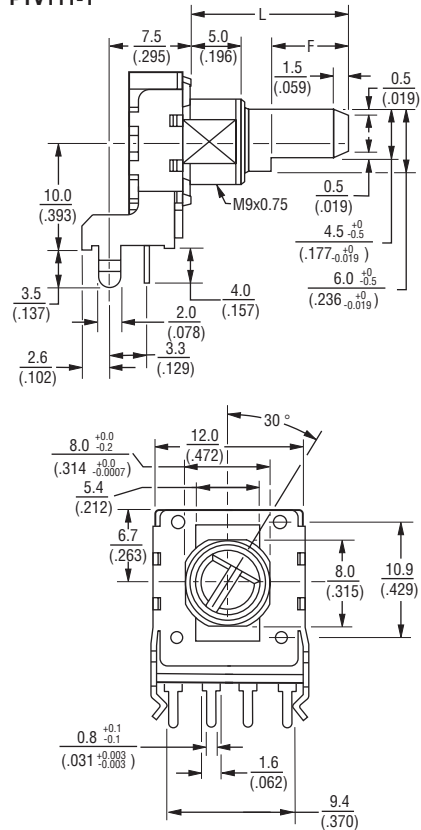
- Audio/TV sets
- Car radio
- Amplifiers/mixers/drum machines/synthesizers
- PCs/monitors
- Appliances

## PTV/PTT Series - 12 mm Potentiometer

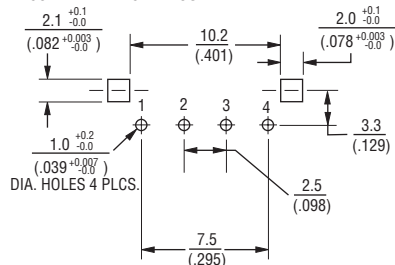
**BOURNS®**

### Product Dimensions

PTV111-1

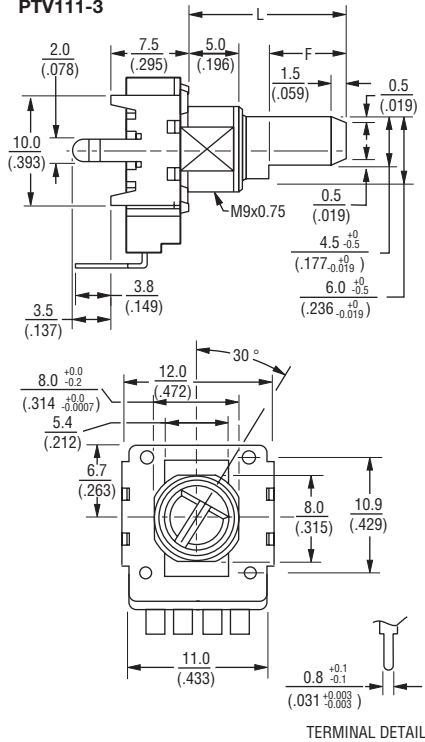


RECOMMENDED PCB LAYOUT



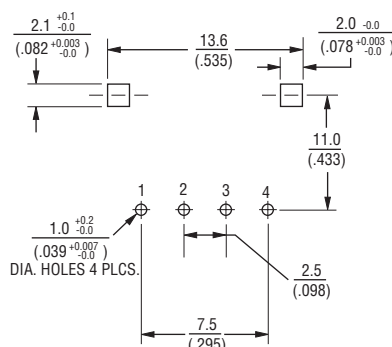
SHAFT SHOWN IN CCW POSITION

PTV111-3



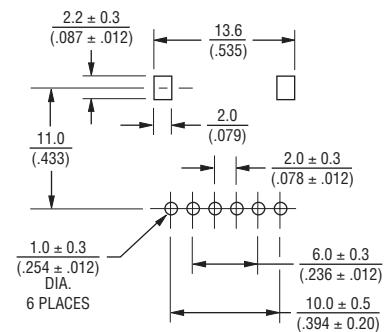
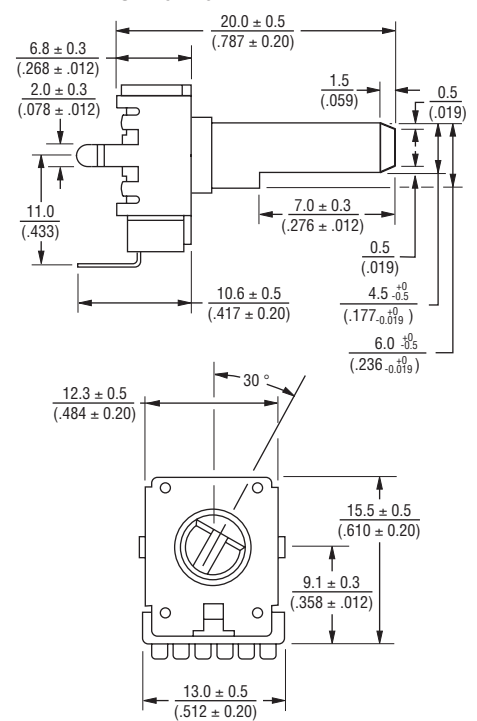
TERMINAL DETAIL

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

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

# PTV/PTT Series - 12 mm Potentiometer

**BOURNS®**

## How To Order

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

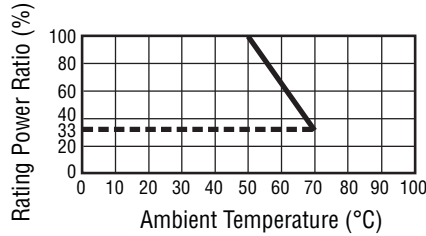
- Model \_\_\_\_\_  
 (See Diagrams)  
 • PTV111 Standard  
 • PTT111 With Tap  
 • PTV112 Dual Gang
- Pin Style \_\_\_\_\_  
 PC Pins vertical/  
 Down Facing:  
 • 1 = With Bushing  
 • 2 = No Bushing  
 PC Pins horizontal/  
 Rear Facing:  
 • 3 = With Bushing  
 • 4 = No Bushing
- Center Detent Option \_\_\_\_\_  
 • 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.

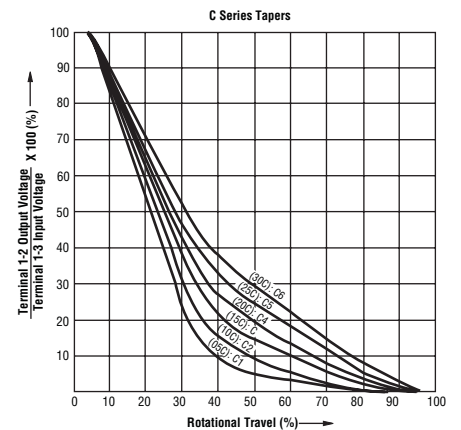
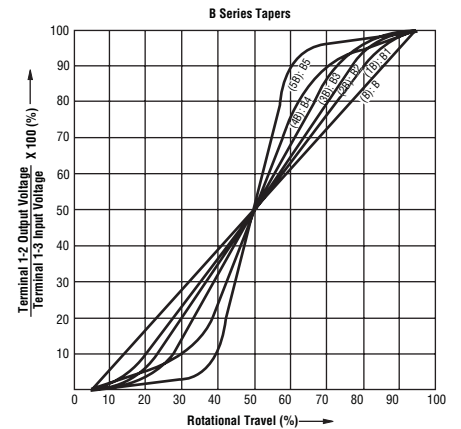
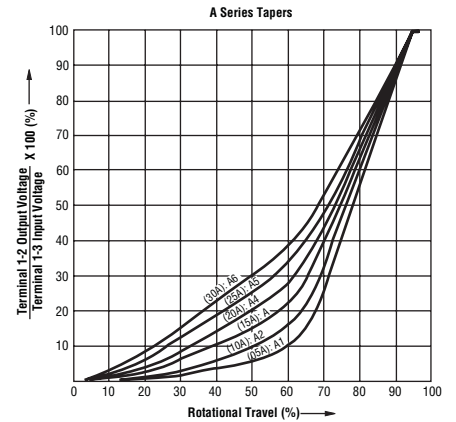
## Standard Resistance Table

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.