

\*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

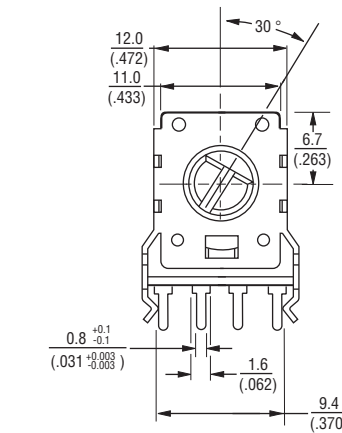
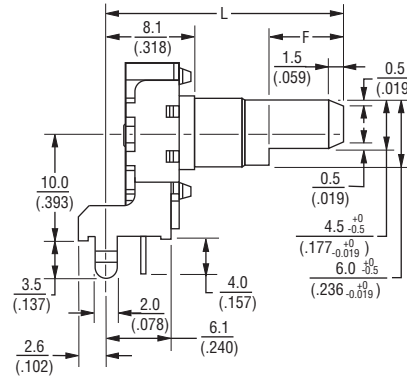


MODEL PTT 111

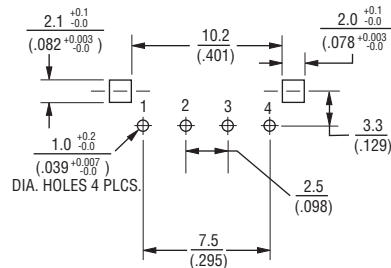


### Product Dimensions

PTV111-2



RECOMMENDED PCB LAYOUT

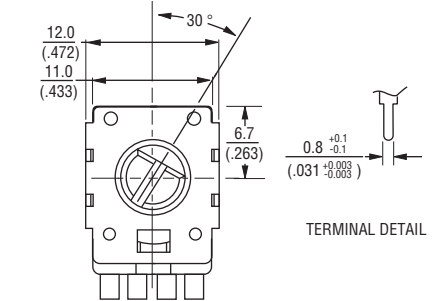
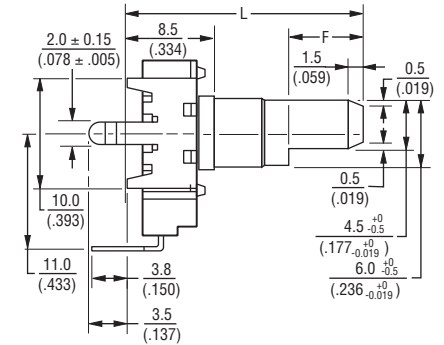


SHAFT SHOWN IN CCW POSITION

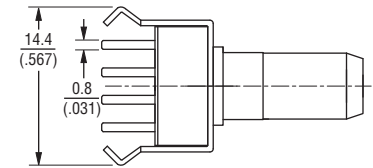
### Dimensions Without Bushing

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

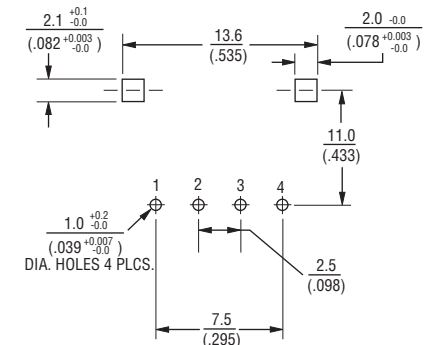
PTV111-4



TERMINAL DETAIL



RECOMMENDED PCB LAYOUT



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

\*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011. Specifications are subject to change without notice. The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time. Users should verify actual device performance in their specific applications.

## Applications

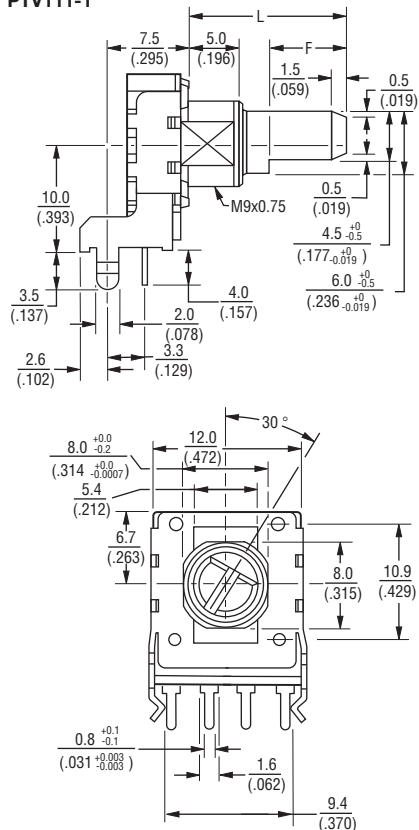
- Audio/TV sets
- Car radio
- Amplifiers/mixers/drum machines/synthesizers
- PCs/monitors
- Appliances

# PTV/PTT Series - 12 mm Potentiometer

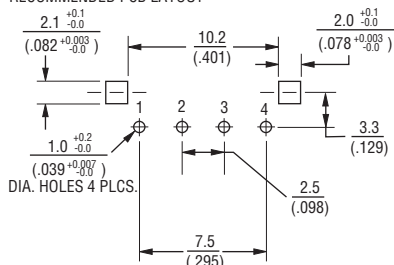
**BOURNS®**

## Product Dimensions

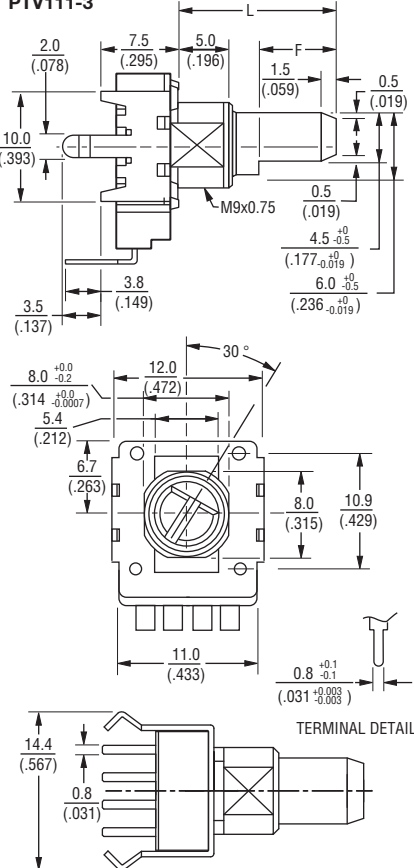
PTV111-1



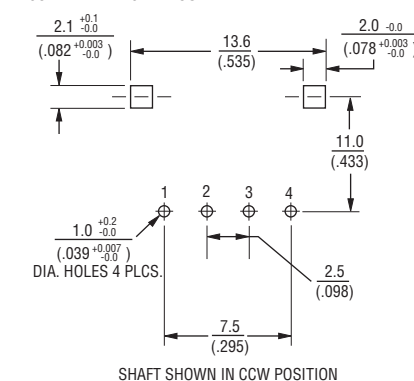
RECOMMENDED PCB LAYOUT



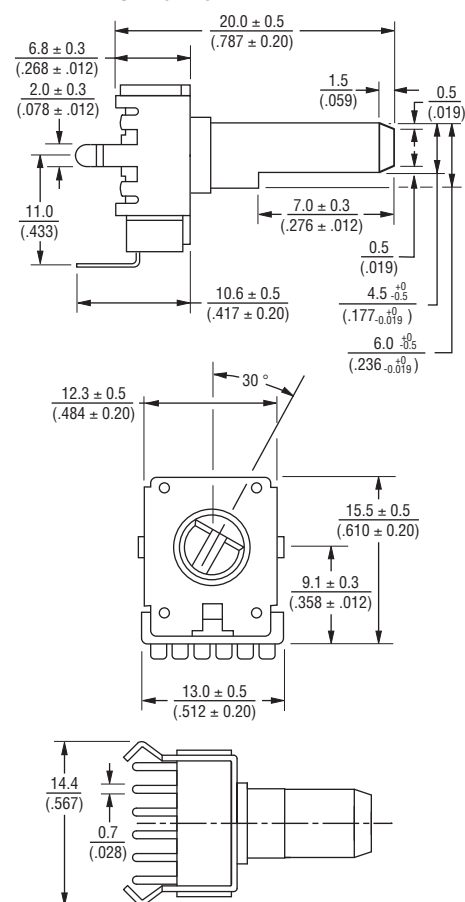
PTV111-3



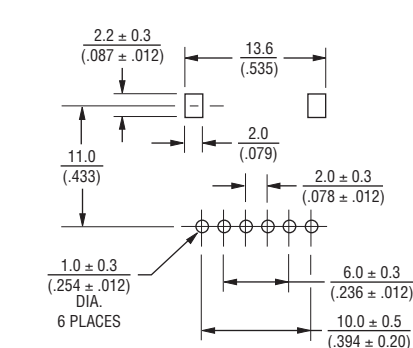
RECOMMENDED PCB LAYOUT



PTV112-4 DUAL GANG



RECOMMENDED PCB LAYOUT



## Dimensions Without Bushing

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

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

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# PTV/PTT Series - 12 mm Potentiometer



## 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.

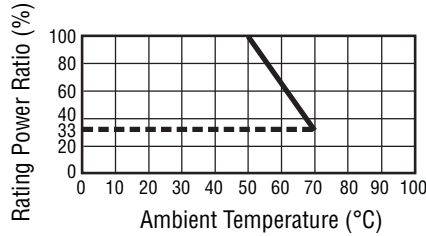
\* Available with Pin Styles 1 & 3 only.

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

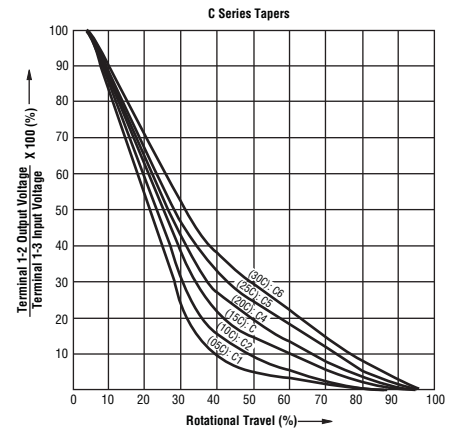
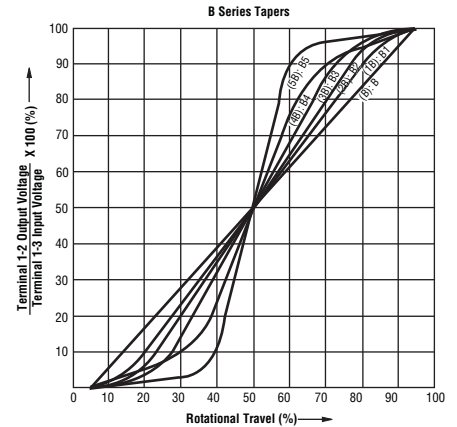
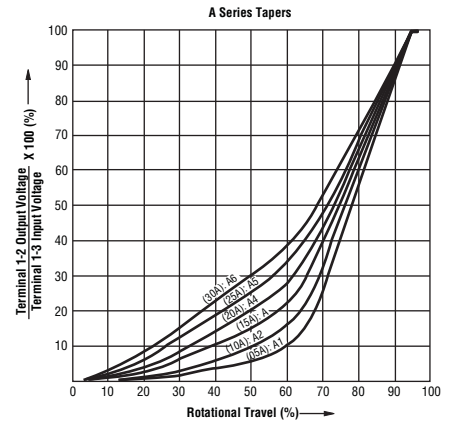
## Standard Resistance Table

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. 07/15

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## Данный компонент на территории Российской Федерации

### Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

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