

## 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..... $\pm 20\%$   
 Residual Resistance ..... 1 % max.

### Environmental Characteristics

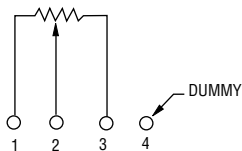
Operating Temperature  
 .....  $-10^{\circ}\text{C}$  to  $+50^{\circ}\text{C}$   
 Power Rating ..... 0.05 Watt  
 Maximum Operating Voltage  
 ..... 50 V AC, 20 V DC  
 Sliding Noise ..... 100 mV max.

### Mechanical Characteristics

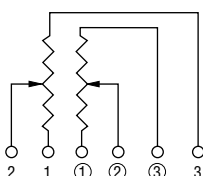
Mechanical Angle .....  $300^{\circ} \pm 5^{\circ}$   
 Rotational Torque ..... 20 to 200 g-cm  
 Detent Torque ..... 30 to 300 g-cm  
 Stop Strength  
   no bushing ..... 3 kg-cm min.  
   with bushing ..... 3 kg-cm min.  
 Rotational Life ..... 15,000 cycles  
 Soldering Condition  
   .....  $300^{\circ}\text{C}$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

### Electrical Diagrams

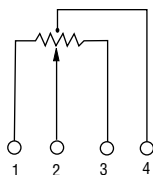
MODEL PTV 111



MODEL PTV 112

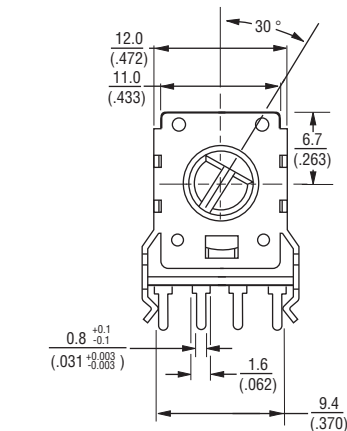
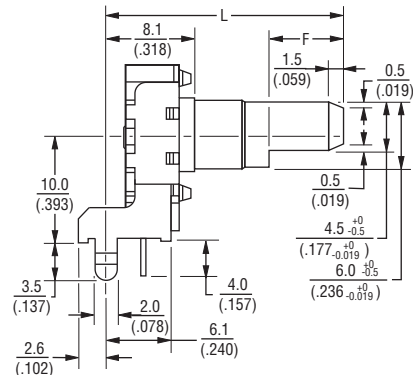


MODEL PTT 111

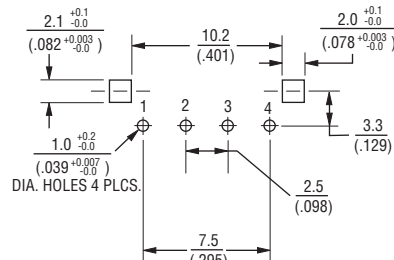


### Product Dimensions

PTV111-2



RECOMMENDED PCB LAYOUT

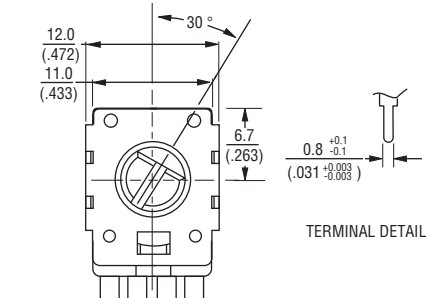
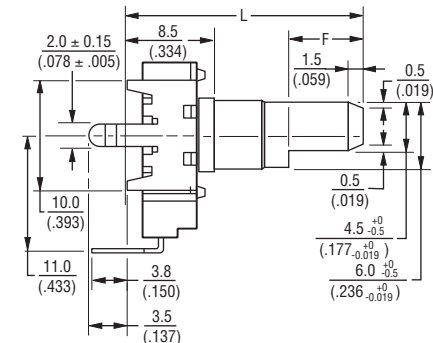


SHAFT SHOWN IN CCW POSITION

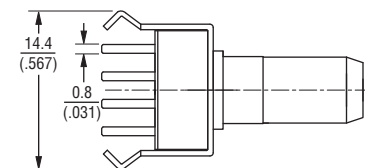
### Dimensions Without Bushing

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)

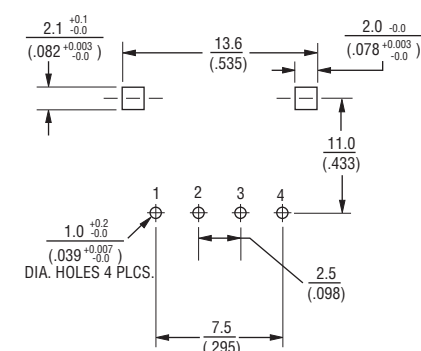
PTV111-4



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.

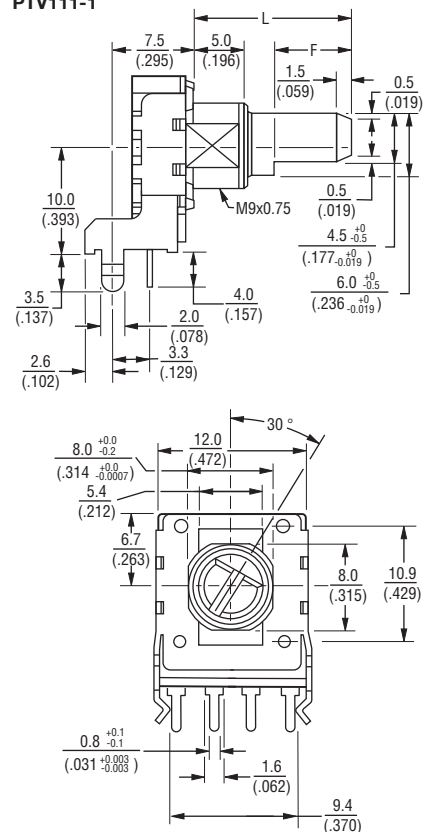
Specifications are subject to change without notice.

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.

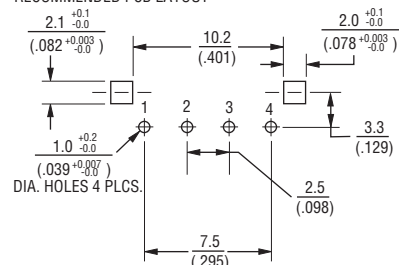
- Audio/TV sets
- Car radio
- Amplifiers/mixers/drum machines/synthesizers
- PCs/monitors
- Appliances

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## PTV111-1



## RECOMMENDED PCB LAYOUT

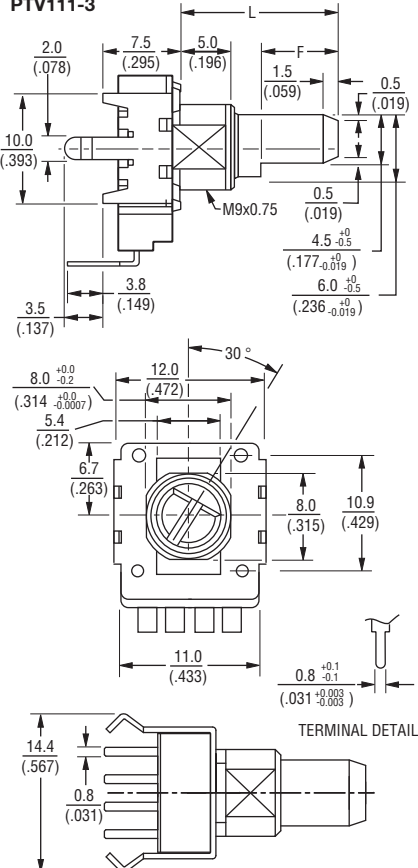


SHAFT SHOWN IN CCW POSITION

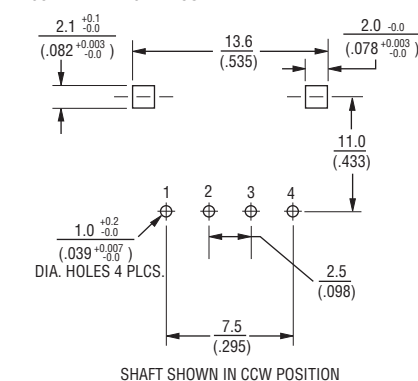
### Dimensions Without Bushing

L	$\frac{12.5}{(.492)}$	$\frac{15}{(.591)}$	$\frac{17.5}{(.689)}$	$\frac{20}{(.787)}$
F	$\frac{7}{(.276)}$	$\frac{7}{(.276)}$	$\frac{12}{(.472)}$	$\frac{12}{(.472)}$

PTV111-3

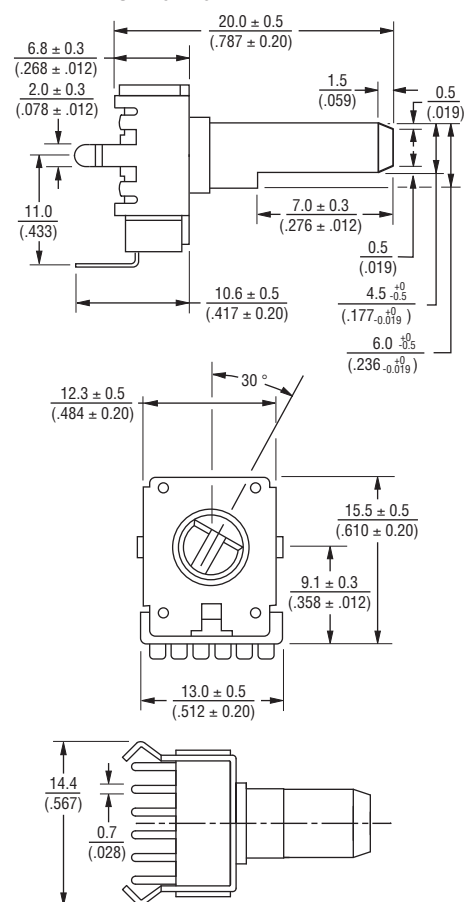


## RECOMMENDED PCB LAYOUT

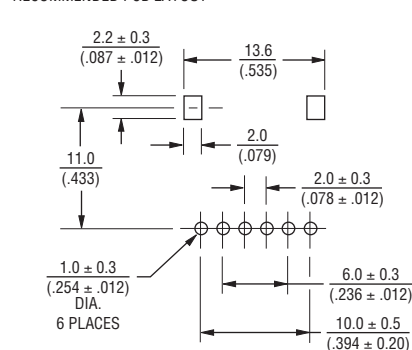


DIMENSIONS:  $\frac{\text{MM}}{(\text{INCHES})}$

PTV112-4 DUAL GANG



## RECOMMENDED PCB LAYOUT



SHAFT SHOWN IN CCW POSITION

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# PTV/PTT Series - 12 mm Potentiometer

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## 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.

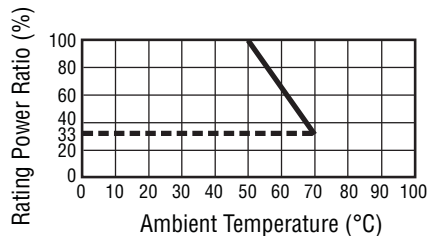
\* Available with Pin Styles 1 & 3 only.

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

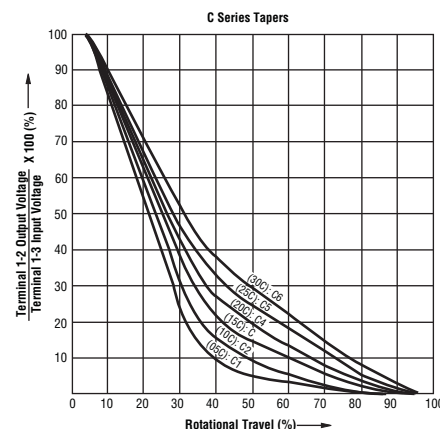
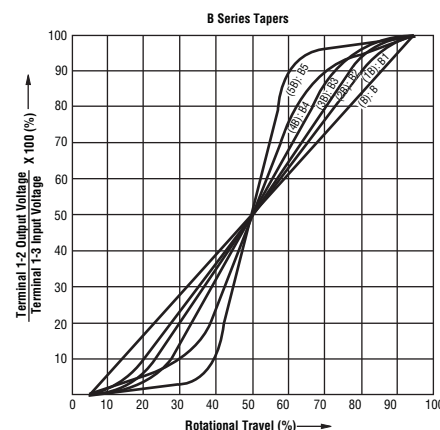
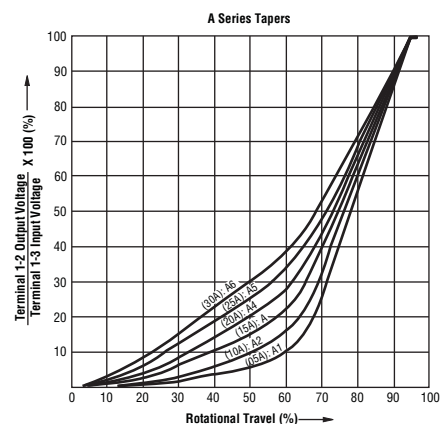
## Standard Resistance Table

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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