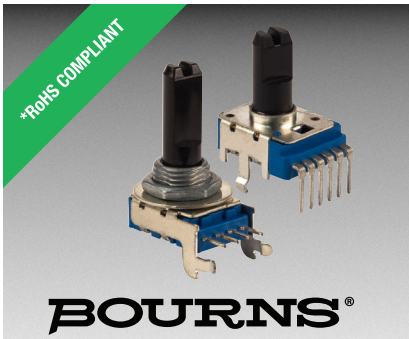




**THE DATASHEET OF
PTV111-1415A-B203**





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

Additional Information

Click these links for more information:



PRODUCT
SELECTOR

TECHNICAL
LIBRARY

INVENTORY

SAMPLES

CONTACT

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

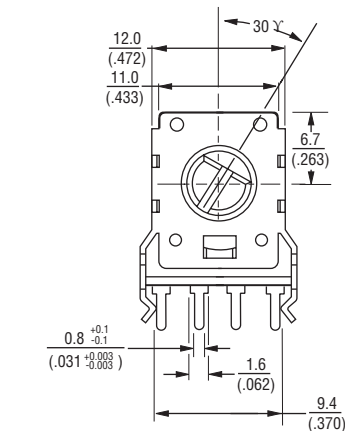
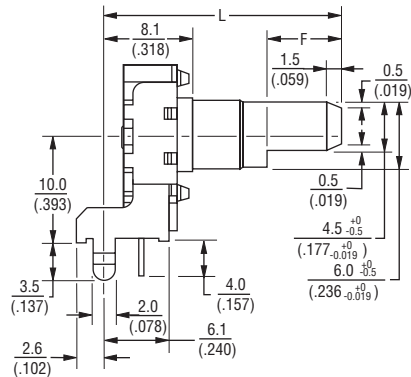
Operating Temperature
..... -10 °C to +50 °C
Power Rating..... 0.05 Watt
Maximum Operating Voltage
..... 50 VAC, 20 VDC
Sliding Noise..... 100 mV max.

Mechanical Characteristics

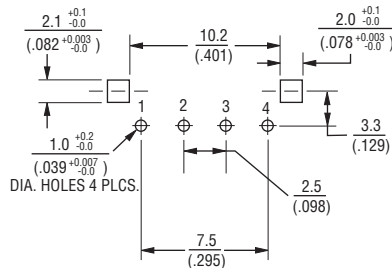
Mechanical Angle..... 300 ° ±5 °
Rotational Torque..... 20 to 200 g-cm
Detent Torque..... 30 to 300 g-cm
Stop Strength
no bushing..... 3 kg-cm min.
with bushing..... 3 kg-cm min.
Rotational Life..... 15,000 cycles
Soldering Condition
..... 300 °C max. within 3 seconds
Hardware..... One flat washer and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

Product Dimensions

PTV111-2



RECOMMENDED PCB LAYOUT

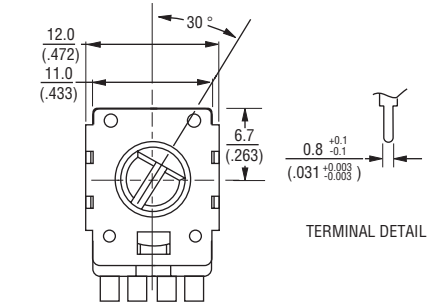
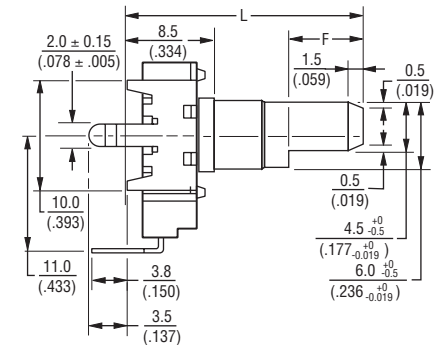


SHAFT SHOWN IN CCW POSITION

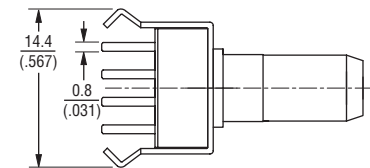
Dimensions Without Bushing

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)

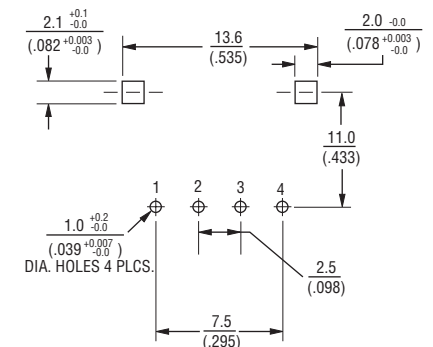
PTV111-4



TERMINAL DETAIL



RECOMMENDED PCB LAYOUT



SHAFT SHOWN IN CCW POSITION

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



WARNING Cancer and Reproductive Harm
www.P65Warnings.ca.gov

*RoHS Directive 2015/863, Mar 31, 2015 and Annex. Specifications are subject to change without notice. Users should verify actual device performance in their specific applications.

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Applications

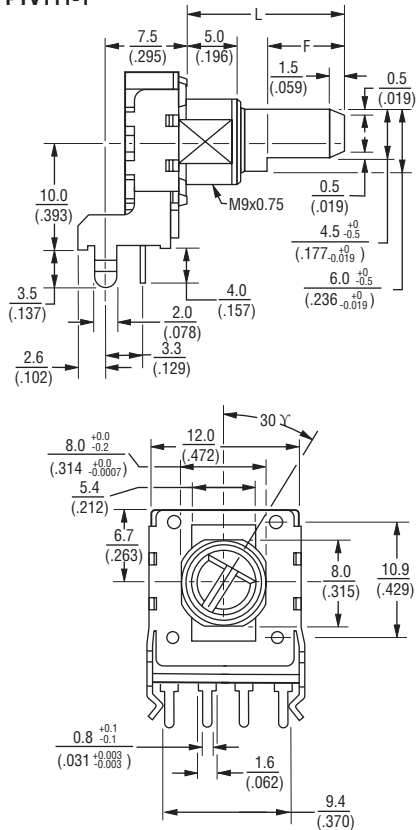
- Audio/TV sets
- Amplifiers/mixers/drum machines/synthesizers
- PCs/monitors
- Appliances

PTV/PTT Series - 12 mm Potentiometer

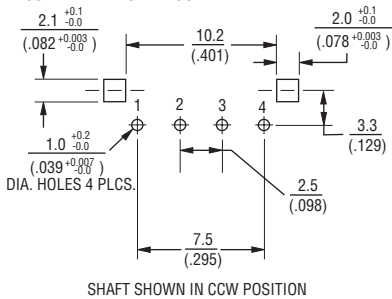
BOURNS®

Product Dimensions

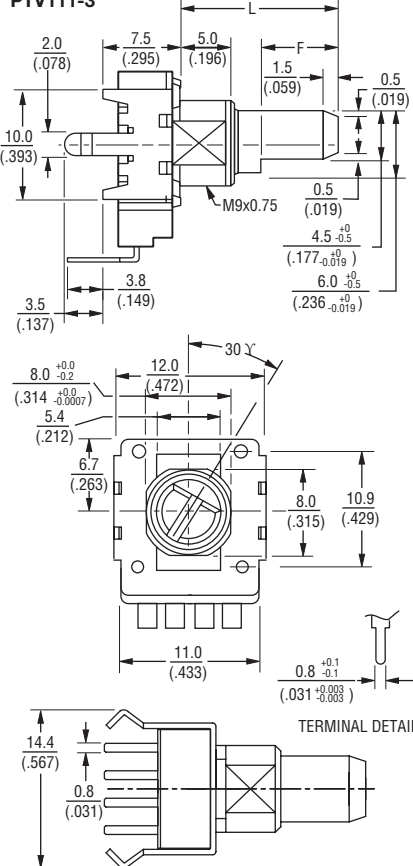
PTV111-1



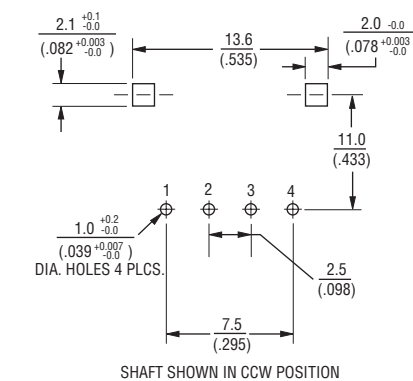
RECOMMENDED PCB LAYOUT



PTV111-3



RECOMMENDED PCB LAYOUT



Dimensions With Bushing

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

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

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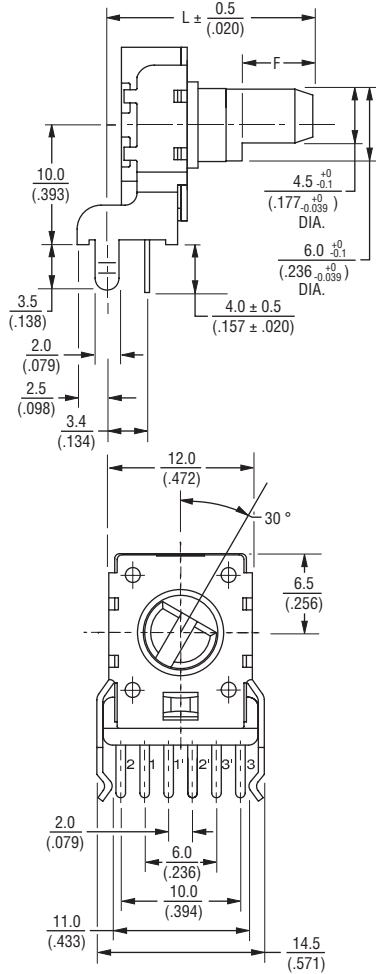
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PTV/PTT Series - 12 mm Potentiometer

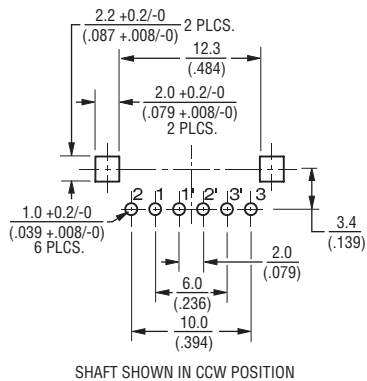
BOURNS®

Product Dimensions

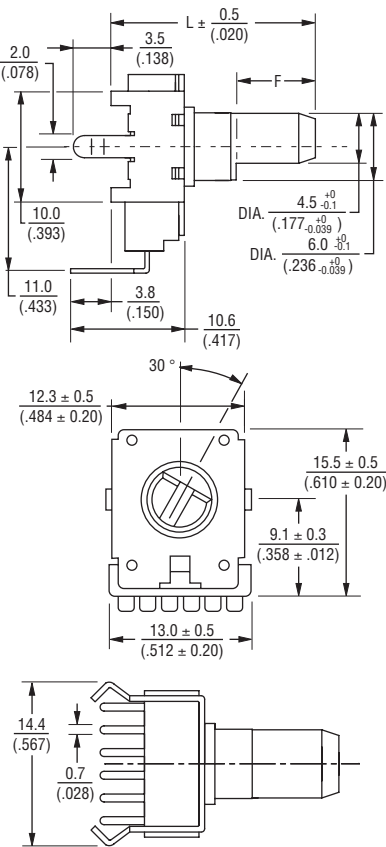
PTV112-2 DUAL GANG



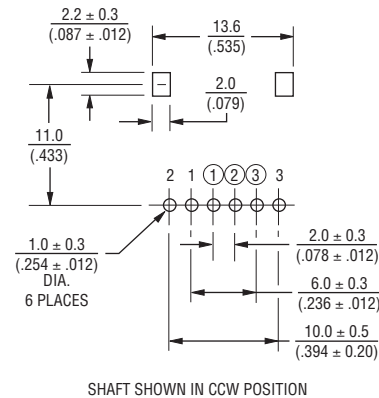
RECOMMENDED PCB LAYOUT



PTV112-4 DUAL GANG



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

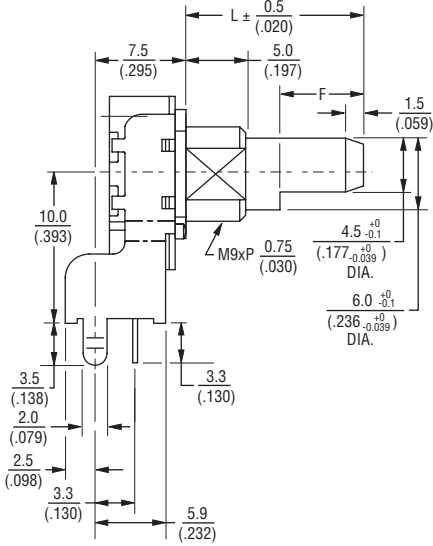
PTV/PTT Series - 12 mm Potentiometer

BOURNS®

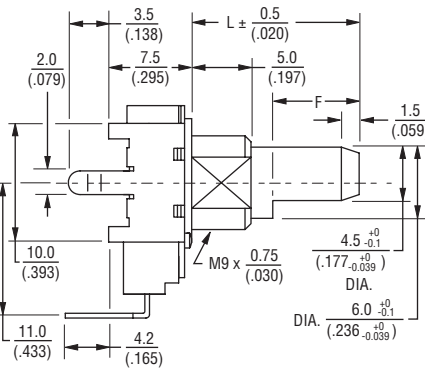
Product Dimensions

Dimensions With Bushing

PTV112-1 DUAL GANG

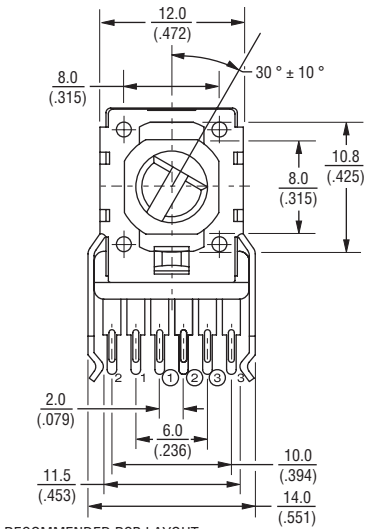


PTV112-3 DUAL GANG

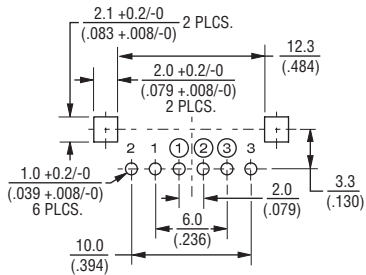


L	$\frac{12.5}{(.492)}$	$\frac{15}{(.591)}$	$\frac{17.5}{(.689)}$	$\frac{20}{(.787)}$
F	$\frac{7}{(.276)}$	$\frac{7}{(.276)}$	$\frac{12}{(.472)}$	$\frac{12}{(.472)}$

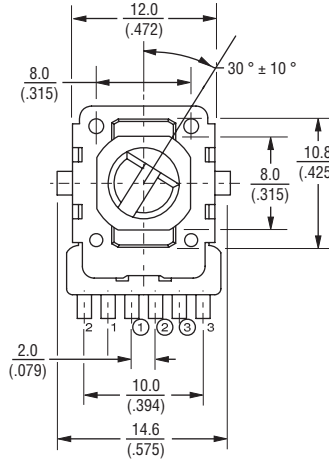
DIMENSIONS: $\frac{\text{MM}}{\text{INCHES}}$



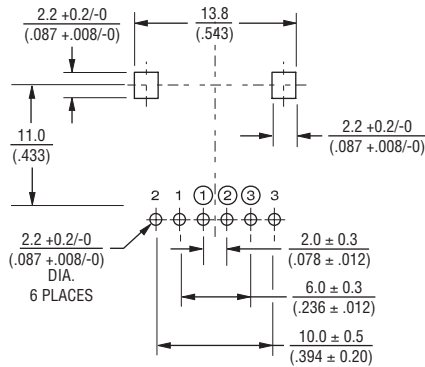
RECOMMENDED PCB LAYOUT



SHAFT SHOWN IN CCW POSITION



RECOMMENDED PCB LAYOUT



SHAFT SHOWN IN CCW POSITION

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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.

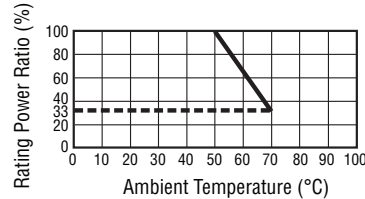
* Available with Pin Styles 1 & 3 only.

**Available with Pin Styles 2 & 4 only.

Standard Resistance Table

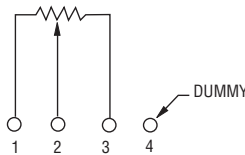
Resistance (Ohms)	Resistance Code
1,000	102
2,000	202
5,000	502
10,000	103
20,000	203
50,000	503
100,000	104
200,000	204
500,000	504
1,000,000	105

Derating Curve

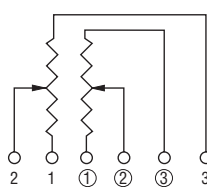


Electrical Diagrams

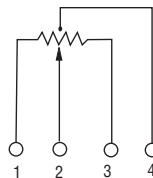
MODEL PTV 111



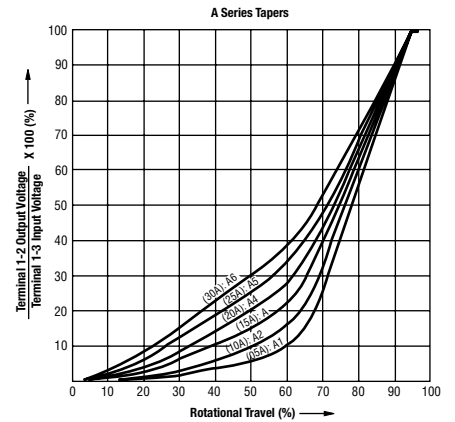
MODEL PTV 112



MODEL PTT 111

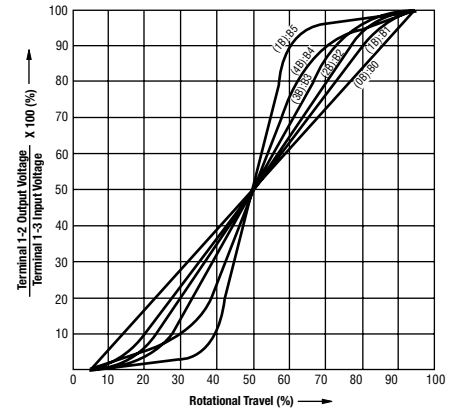


Tapers

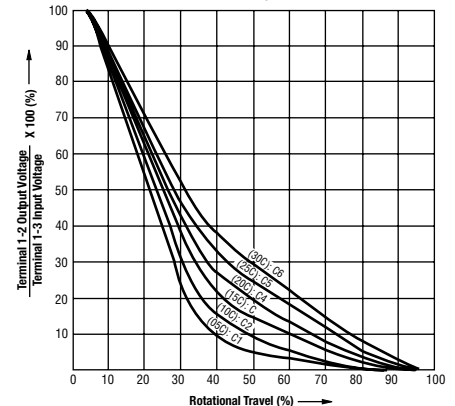


B Series Tapers

PTV111 Standard and PTT111: Linear taper "B" represents (0B)-B0 in taper chart.
PTV112 Dual Gang: Linear taper "B" represents (3B)-B3 in taper chart.



C Series Tapers



REV. 09/23

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-  Shortage Management
-  Alternative Solution
-  Excess Inventory Management