PTV/PTT Series - 12 mm Potentiometer

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

**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

**Product Dimensions**

**PTV111-2**

**PTV111-4**

**Dimensions Without Bushing**

<table>
<thead>
<tr>
<th>Model</th>
<th>L (mm)</th>
<th>F (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTV111-2</td>
<td>15 (.591)</td>
<td>4.5 (.177)</td>
</tr>
<tr>
<td>PTV111-4</td>
<td>20 (.787)</td>
<td>7 (.276)</td>
</tr>
<tr>
<td>PTV111-2</td>
<td>22.5 (0.886)</td>
<td>7 (.276)</td>
</tr>
<tr>
<td>PTV111-4</td>
<td>25 (1.004)</td>
<td>12 (.472)</td>
</tr>
<tr>
<td>PTV111-2</td>
<td>27.5 (1.083)</td>
<td>12 (.472)</td>
</tr>
</tbody>
</table>


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973-887-2550 • Toll Free 1-800-631-8083 • Fax 973-887-1940
http://www.potentiometers.com

Updated March 30, 2016
Applications
- Audio/TV sets
- Car radio
- Amplifiers/mixers/drum machines/synthesizers
- PCs/monitors
- Appliances

PTV/PTT Series - 12 mm Potentiometer

Product Dimensions

PTV111-1

Dimensions Without Bushing

<table>
<thead>
<tr>
<th></th>
<th>L (mm)</th>
<th>F (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.5</td>
<td>15.0</td>
<td>17.5</td>
</tr>
<tr>
<td>(0.492)</td>
<td>(0.591)</td>
<td>(0.689)</td>
</tr>
<tr>
<td>7.0</td>
<td>7.0</td>
<td>12.0</td>
</tr>
<tr>
<td>(0.276)</td>
<td>(0.276)</td>
<td>(0.472)</td>
</tr>
</tbody>
</table>

PTV111-3

PTV112-4 DUAL GANG

ReCOMMENDED PCB LAYOUT

Dimensions: MM (INCHES)

Shaft Shown in CCW Position

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THE POTENTIOMETER SPECIALISTS®
Updated March 30, 2016
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

<table>
<thead>
<tr>
<th>Resistance (Ohms)</th>
<th>Resistance Code</th>
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</thead>
<tbody>
<tr>
<td>1,000</td>
<td>102</td>
</tr>
<tr>
<td>2,000</td>
<td>202</td>
</tr>
<tr>
<td>5,000</td>
<td>502</td>
</tr>
<tr>
<td>10,000</td>
<td>103</td>
</tr>
<tr>
<td>20,000</td>
<td>203</td>
</tr>
<tr>
<td>50,000</td>
<td>503</td>
</tr>
<tr>
<td>100,000</td>
<td>104</td>
</tr>
<tr>
<td>200,000</td>
<td>204</td>
</tr>
<tr>
<td>500,000</td>
<td>504</td>
</tr>
<tr>
<td>1,000,000</td>
<td>105</td>
</tr>
</tbody>
</table>

Derating Curve

REV. 07/15
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.

For more information about this product, visit our website at: www.potentiometers.com