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 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**: 3 kg-cm min. with bushing
- **Rotational Life**: 15,000 cycles
- **Soldering Condition**: 300 °C max. within 3 seconds

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

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PTV/PTT Series - 12 mm Potentiometer

Product Dimensions

<table>
<thead>
<tr>
<th>Dimensions With Bushing</th>
</tr>
</thead>
<tbody>
<tr>
<td>L</td>
</tr>
<tr>
<td>F</td>
</tr>
</tbody>
</table>

Dimensions: MM (INCHES)

Applications

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

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### PTV/PTT Series - 12 mm Potentiometer

**Product Dimensions**

#### PTV112-1 DUAL GANG

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Value (in mm)</th>
</tr>
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<tbody>
<tr>
<td>L</td>
<td>12.5</td>
</tr>
<tr>
<td>F</td>
<td>7</td>
</tr>
<tr>
<td>M10 x P30</td>
<td>10.8</td>
</tr>
<tr>
<td>SHAFT SHOWN IN CCW</td>
<td>2.2 ±0.2</td>
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</tbody>
</table>

#### PTV112-3 DUAL GANG

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Value (in mm)</th>
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</thead>
<tbody>
<tr>
<td>L</td>
<td>15</td>
</tr>
<tr>
<td>F</td>
<td>7</td>
</tr>
<tr>
<td>M9 x P30</td>
<td>10.0</td>
</tr>
<tr>
<td>SHAFT SHOWN IN CCW</td>
<td>2.2 ±0.2</td>
</tr>
</tbody>
</table>

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### Dimensions With Bushing

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Value (in mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>L</td>
<td>17.5</td>
</tr>
<tr>
<td>F</td>
<td>12</td>
</tr>
<tr>
<td>M9 x P30</td>
<td>17.8</td>
</tr>
</tbody>
</table>

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### Recommended PCB Layout

SHAFT SHOWN IN CCW POSITION

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**PTV112-3 DUAL GANG**

- Dimensions: MM (INCHES)
- Recommended PCB Layout
- Shaft shown in CCW position

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**PTV112-1 DUAL GANG**

- Dimensions: MM (INCHES)
- Recommended PCB Layout
- Shaft shown in CCW position
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)

Tapers

A Series Tapers

B Series Tapers

C Series Tapers

Table: Standard Resistance Table

<table>
<thead>
<tr>
<th>Resistance (Ohms)</th>
<th>Resistance Code</th>
</tr>
</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>
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<td>103</td>
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<tr>
<td>500,000</td>
<td>504</td>
</tr>
<tr>
<td>1,000,000</td>
<td>105</td>
</tr>
</tbody>
</table>

Derating Curve

Ambient Temperature (°C)

Electrical Diagrams

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