**Features**
- Carbon element
- Assortment of resistance tapers
- Dual gang element
- Center detent option

### PTJ90 Series Dual Concentric Shaft Panel Control w/Push-Push Switch

#### Electrical Characteristics
- **Standard Resistance Characteristics**
  - Standard Resistance Range: 1K ohms to 1 megohm
- **Standard Resistance Tolerance**
  - R < 250K ohms: ±20%
  - R ≥ 250K ohms: ±30%
- **End Resistance**
  - R < 50K ohms: 30 ohms max.
  - R ≥ 50K ohm: 0.1% of TR max.
- **Insulation Resistance**
  - Switch Terminals: @ 50 VAC
  - Bushing to Terminals: @ 250 VAC
- **Dielectric Strength**
  - Contact Resistance: 100 milliohms
  - Power Rating: 3 A @ 16 VDC
- **Mechanical Characteristics**
  - Shaft Push/Pull Strength: 10 kgf max.
  - Mounting Torque: 10 kgf-cm max.
  - Stop Strength: 5 kgf-cm max.
  - Operating Torque: 20~250 gf-cm
  - Mechanical Angle: 300° ±3°
- **Environmental Characteristics**
  - Operational Life: 15,000 cycles
  - TR Shift: ±15%
  - Operational Life: 15,000 cycles
- **Resistance to Solder Heat**
  - ±5%
  - Operating Temperature Range: -10°C to +55°C
  - Operating Voltage: 50 VAC / 10 VDC
- **Power Rating**
  - Standard Taper: Linear, Audio
  - Wave: 260°C ±5°C for 5 sec.
  - Manual: 300°C ±5°C for 3 sec.
  - Resistance to Solder Heat: ±5%

#### Product Dimensions

#### Mounting Hole Detail

#### Locating Lug Detail

#### Hardware

---


Specifications are subject to change without notice.
Applications

- Multimedia sound systems
- Portable electronics
- Mixers / drums / DJ equipment
- Portable appliances
- Automotive sound systems

PTJ90 Series Dual Concentric Shaft Panel Control w/Push-Push Switch

Switch Circuit

Schematic

Dual Gang

Terminal 1
Output Voltage across Terminals 1-2
Input Voltage across Terminals 1-3 X 100 (%)

Terminal 3
Rotational Travel (%)

R1 1
R2 1

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>
</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>

Tapers

A Series Tapers

B Series Tapers

C Series Tapers

How To Order

PTJ90 2 - 0 30 F - 103 B2

Model Number
Designator
PTJ90 = Dual Concentric Shaft Panel Control w/Push-Push Switch
Number of Sections
2 = Dual Gang
0 = No Detent
1 = Center Detent
Shaft Length (FMS)
30 = 30 mm
Shaft Style
F = Flattened Metal
S = Slotted Metal
Resistance Code (See Standard Resistance Table)
Resistance Taper (See Taper Charts)
Taper Series followed by Curve Number

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

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.

© State Electronics
36 State Route 10, STE 6 • East Hanover, NJ 07936-0436
973-887-2550 • Toll Free 1-800-631-8083 • Fax 973-887-1940
http://www.potentiometers.com

Updated March 30, 2016