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

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

**Electrical Characteristics**
- Standard Resistance Range
  - 1k ohms to 1 meghm
- Standard Resistance Tolerance
  - R < 250K ohms ......... ±20 %
  - R ≥ 250K ohms ......... ±30 %
- End Resistance
  - R < 50K ohms ......... 30 ohms max.
  - R ≥ 50K ohms ........ 0.1 % of TR max.
- Insulation Resistance @ 250 VDC
  - 100 megohms min.
- Dielectric Strength
- Contact Resistance ......... 100 milliohms
- Power Rating .............. 3 A @ 16 VDC
- Hardware .................... One flat washer and 2 wave
- Manual ............... 300 °C ±5 °C for 3 sec.
- Soldering Condition
- Shaft Push/Pull Strength ......... 10 kgf max.
- Mounting Torque ................ 10 kgf-cm max.
- Stop Strength....................... 5 kgf-cm max.
- Operating Voltage ....... 50 VAC / 10 VDC
- Switch Type .............. Push on - Push off
- Switch Terminals @ 50 VAC
  - 100 megohms
- Contact Arrangement .............. SPDT
- Switch Stroke .............. 1.5 ± 0.1 mm
- Operating Force ............. 2 kgf max.
- Operating Life ............... 10,000 cycles

**Product Dimensions**

**PTJ902-xxxF**

**PTJ902-xxxF**

**Environmental Characteristics**
- Operational Life ............. 15,000 cycles
- TR Shift ..................... ±15 %
- Operating Temperature Range
  - -10 °C to +55 °C
- Resistance to Solder Heat ....... ±5 %
- IP Rating ............................................. IP 40

**Mechanical Characteristics**
- Mechanical Angle ............. 300 ° ±3 °
- Operating Torque ......... 20~250 gf-cm
- Stop Strength ............. 5 kgf-cm max.
- Mounting Torque ............. 10 kgf-cm max.
- Shaft Push/Pull Strength ......... 10 kgf max.
- Soldering Condition
  - Manual ............... 300 °C ±5 °C for 3 sec.
  - Wave ....................... 260 °C ±5 °C for 5 sec.
- Hardware .............. Not recommended
- One flat washer and one mounting nut supplied with each potentiometer

**Switch Characteristics**
- Power Rating ............. 3 A @ 16 VDC
- Contact Resistance ............. 100 milliohms
- Dielectric Strength
  - Bushing to Terminals .......... 300 VAC
  - Switch Terminals .......... 50 VAC
- Insulation Resistance
  - Bushing to Terminals @ 250 VAC
  - 100 megohms
  - Switch Terminals @ 50 VAC
  - 10 megohms
- Switch Type ............. Push on - Push off
- Contact Arrangement .............. SPDT
- Switch Stroke .............. 1.5 ± 0.1 mm
- Operating Force ............. 2 kgf max.
- Operating Life ............... 10,000 cycles

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

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**Applications**

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

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

**Switch Circuit**

- **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**
- **Center Detent**
- **0 = No Detent**
- **1 = Center Detent**
- **Shaft Length (FMS)**
- **30 = 30 mm**
- **Shaft Style**
- **F = Flatted Metal**
- **S = Slotted Metal**
- **Resistance Code**
- **(See Standard Resistance Table)**
- **Resistance Taper (See Taper Charts)**
- **Taper Series followed by Curve Number**

**Schematic**

**Dual Gang**

**Tapers**

**Standard Resistance Table**

<table>
<thead>
<tr>
<th>Resistance (Ohms)</th>
<th>Resistance Code</th>
</tr>
</thead>
<tbody>
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<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>
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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>

**Applications**

- Multimedia sound systems
- Mixers / drums / DJ equipment
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