



## 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 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 ohms	..... 0.1 % of TR max.
Insulation Resistance @ 250 VDC	..... 100 megohms min.
Dielectric Withstanding Voltage	..... 300 VAC
Standard Taper	..... Linear, Audio
Power Rating	
Linear	..... 0.05 watt
Audio	..... 0.025 watt
Slider Noise	..... 100 mV max.
Operating Voltage	..... 50 VAC / 10 VDC

### 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

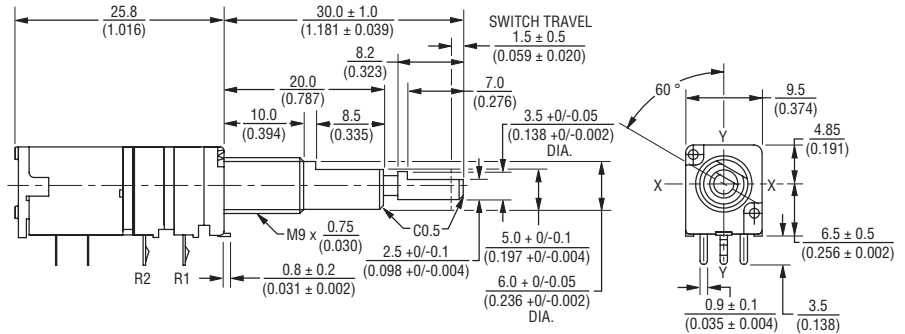
Mechanical Angle	..... 300 ° ±3 °
Operating Torque	..... 20~250 gf-cm
Stop Strength	..... 5 kgf-cm min.
Mounting Torque	..... 10 kgf-cm max.
Shaft Push/Pull Strength	..... 10 kgf max.
Soldering Condition	
Manual	..... 300 °C ±5 °C for 3 sec.
Wave	..... 260 °C ±5 °C for 5 sec.
Wash	..... Not recommended
Hardware	..... 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

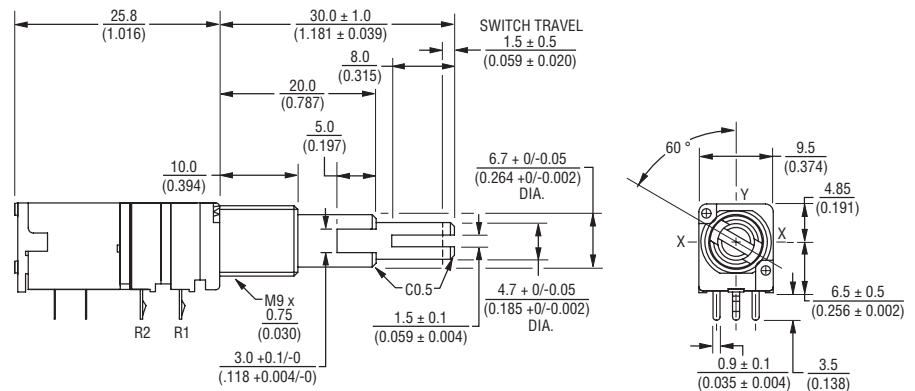
### Product Dimensions

#### PTJ902-xxxS



INNER AND OUTER SHAFT SHOWN IN CCW POSITION

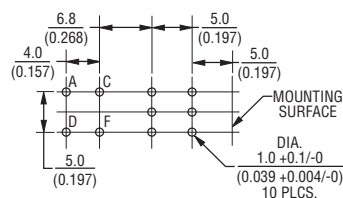
#### PTJ902-xxxF



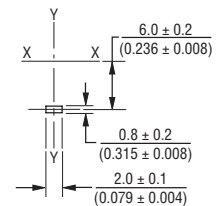
DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

INNER AND OUTER SHAFT SHOWN IN CCW POSITION

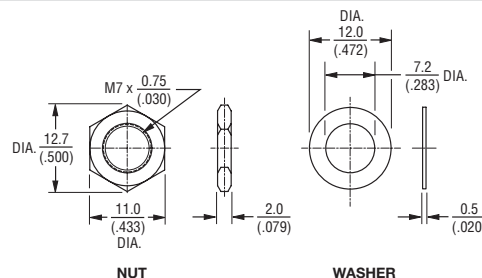
### Mounting Hole Detail



### Locating Lug Detail



### Hardware



\*RoHS Directive 2002/95/EC Jan 27, 2003 including Annex. Specifications are subject to change without notice. Customers should verify actual device performance in their specific applications.

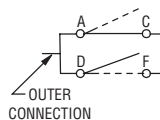
# Applications

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

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

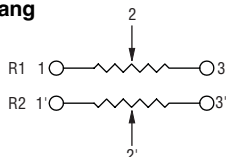


### Switch Circuit



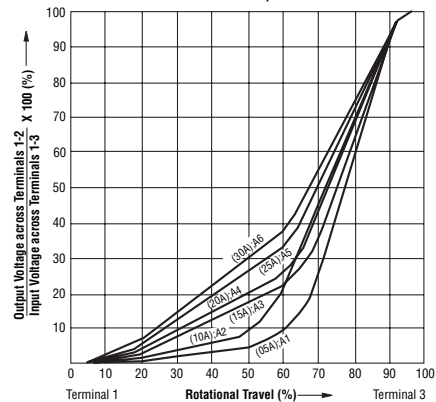
### Schematic

Dual Gang

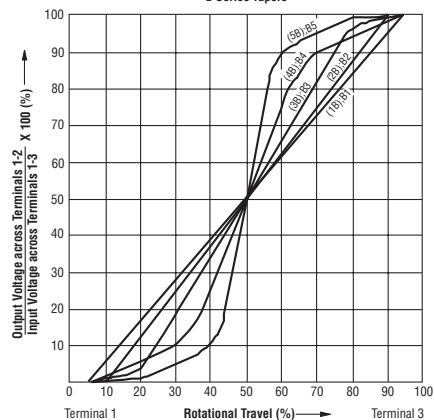


### Tapers

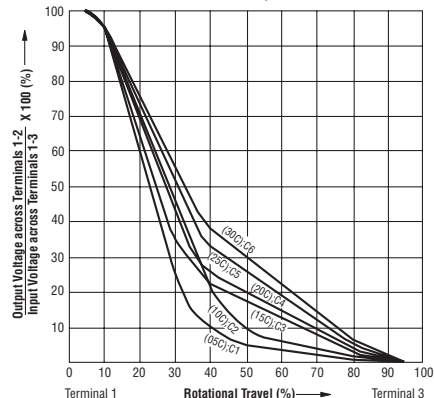
A Series Tapers



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
- 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

### 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