



## Features

- Long life carbon element
- Assortment of resistance tapers
- 45 mm, 60 mm and 100 mm travel lengths
- Single and dual gang elements
- Long operational life
- Tracking error within  $\pm 2$  dB



## PTF Series Long Life Slide Potentiometer

### Electrical Characteristics

|                                 |                           |
|---------------------------------|---------------------------|
| Standard Resistance Range       | ..... 1K ohms to 1 megohm |
| Standard Resistance Tolerance   | ... $\pm 20$ %            |
| End Resistance                  | ..... 1 ohm max.          |
| Insulation Resistance @ 500 VDC | ..... 100 megohms min.    |
| Dielectric Withstanding Voltage | ..... 1000 VAC            |
| Tracking Error                  | ..... $\pm 2$ dB          |
| Standard Taper                  | ..... Linear, Audio       |
| Power Rating - Linear           |                           |
| 45 mm                           | ..... 0.25 watt           |
| 60 & 100 mm                     | ..... 0.5 watt            |
| Power Rating - Audio            |                           |
| 45 mm                           | ..... 0.125 watt          |
| 60 & 100 mm                     | ..... 0.25 watt           |
| Slider Noise                    | ..... 60 mV max.          |

### Environmental Characteristics

|                             |                                                      |
|-----------------------------|------------------------------------------------------|
| Operational Life            | ..... 100,000 cycles                                 |
| TR Shift                    | ..... $\pm 15$ %                                     |
| Operating Temperature Range | ..... $-10^{\circ}\text{C}$ to $+55^{\circ}\text{C}$ |
| Resistance to Solder Heat   | ..... $\pm 5$ %                                      |

### Mechanical Characteristics

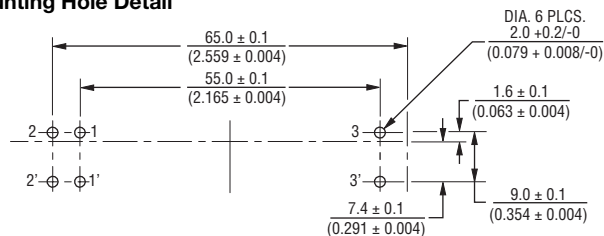
|                     |                                                              |
|---------------------|--------------------------------------------------------------|
| Mechanical Travel   | ..... See Product Dimensions                                 |
| Operating Force     | ..... 50 gf                                                  |
| Stop Strength       | ..... 5 kgf min.                                             |
| Shaft Axial Force   | ..... 10 kgf min.                                            |
| Shaft Wobble        | ... $2(2 \times L/25)$ mm p-p max.                           |
| Soldering Condition |                                                              |
| Manual              | ..... $300^{\circ}\text{C} \pm 5^{\circ}\text{C}$ for 3 sec. |
| Wave                | ..... $260^{\circ}\text{C} \pm 5^{\circ}\text{C}$ for 5 sec. |
| Wash                | ..... Not recommended                                        |

### Product Dimensions

#### 45 mm Length of Travel Lever End Style "A"

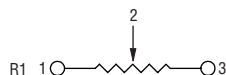


#### Mounting Hole Detail

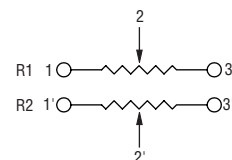


### Schematics

#### Single Gang



#### Dual Gang



- Mixing consoles
- Drum machines
- Keyboards and synthesizers
- Equalizers

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### 60 mm Length of Travel Lever End Style "A"



Technical drawing showing dimensions and tolerances for a mechanical part. The drawing includes a side view on the left and a front view on the right. Dimensions are given in millimeters (mm) and inches (in). Tolerances are specified as  $\pm$  values.

Key dimensions and tolerances:

- Overall length:  $80.0 \pm 0.1$  mm ( $3.150 \pm 0.004$  in)
- Distance from left face to center of hole 3:  $70.0 \pm 0.1$  mm ( $2.756 \pm 0.004$  in)
- Distance from center of hole 3 to center of hole 3':  $1.9$  mm ( $0.075$  in)
- Distance from center of hole 3' to center of hole 3'':  $7.1 \pm 0.1$  mm ( $0.280 \pm 0.004$  in)
- Distance from center of hole 3'' to center of hole 3''':  $9.0 \pm 0.1$  mm ( $0.354 \pm 0.004$  in)
- Distance from center of hole 3''' to center of hole 3'''':  $9.0 \pm 0.1$  mm ( $0.354 \pm 0.004$  in)
- Distance from center of hole 3'''' to center of hole 3''''' (hole 3):  $6.0 \pm 0.1$  mm ( $0.236 \pm 0.004$  in)
- Distance from center of hole 3 to center of hole 3':  $3.0$  mm ( $0.118$  in)
- Distance from center of hole 3' to center of hole 3'':  $2.0 \pm 0.2$  mm ( $0.079 \pm 0.008$  in)
- Distance from center of hole 3'' to center of hole 3''' (hole 3):  $9.0 \pm 0.1$  mm ( $0.354 \pm 0.004$  in)

Note: DIA. 6 PLCS. (Diameter 6 holes)

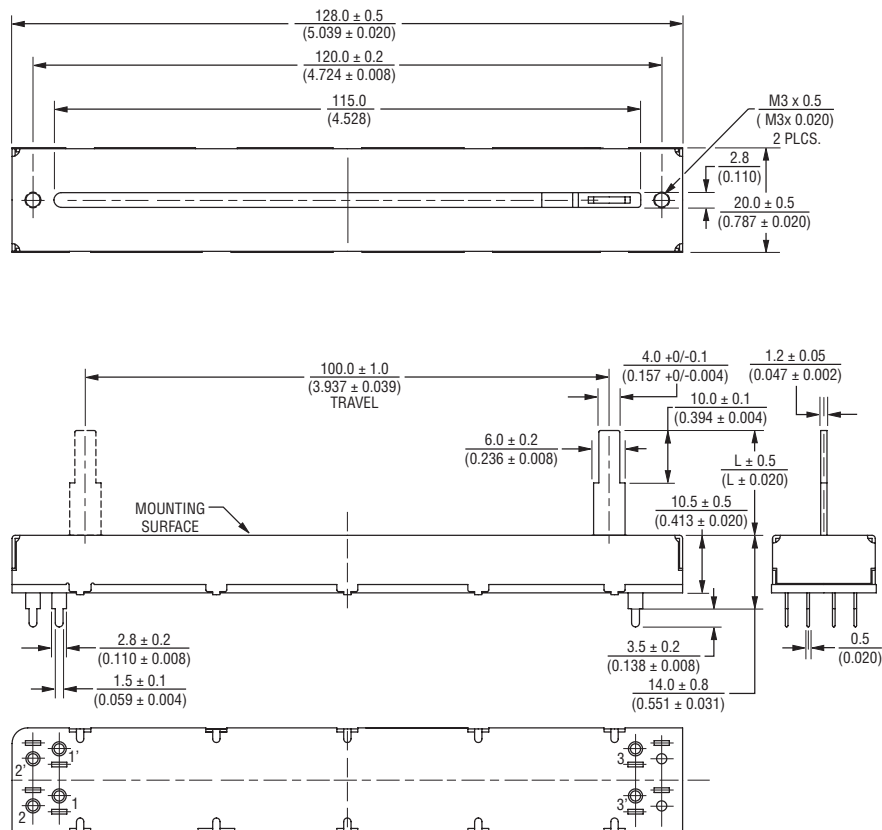
Specifications are subject to change without notice.  
Customers should verify actual device performance in their specific applications.

# PTF Series Long Life Slide Potentiometer

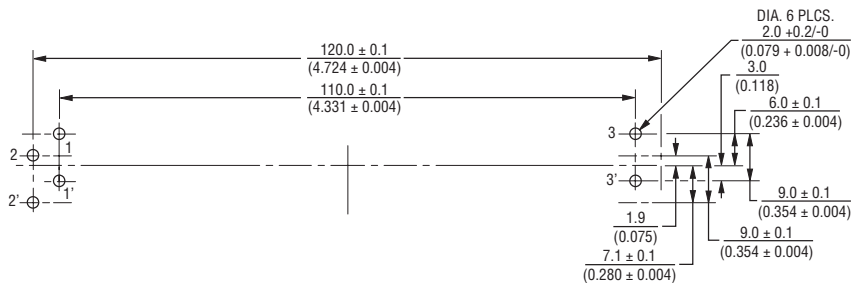
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## Product Dimensions

100 mm Length of Travel  
Lever End Style "A"



## Mounting Hole Detail



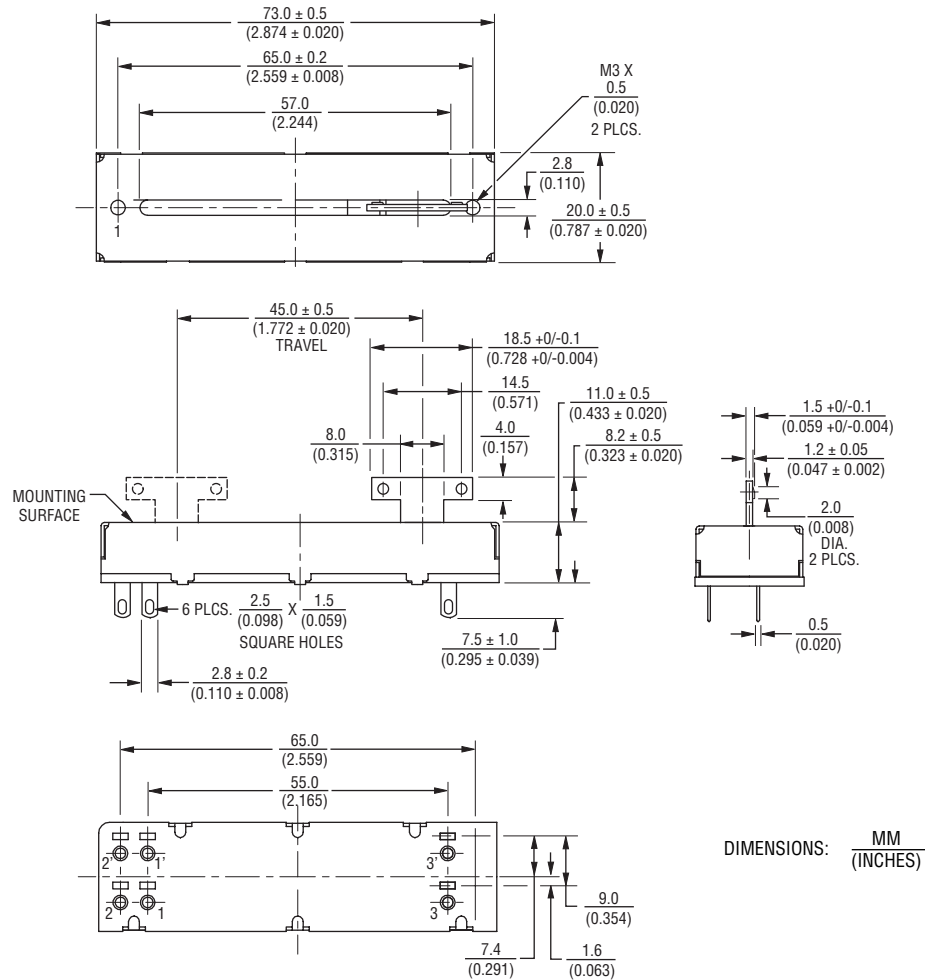
DIMENSIONS:  $\frac{MM}{(INCHES)}$

# PTF Series Long Life Slide Potentiometer

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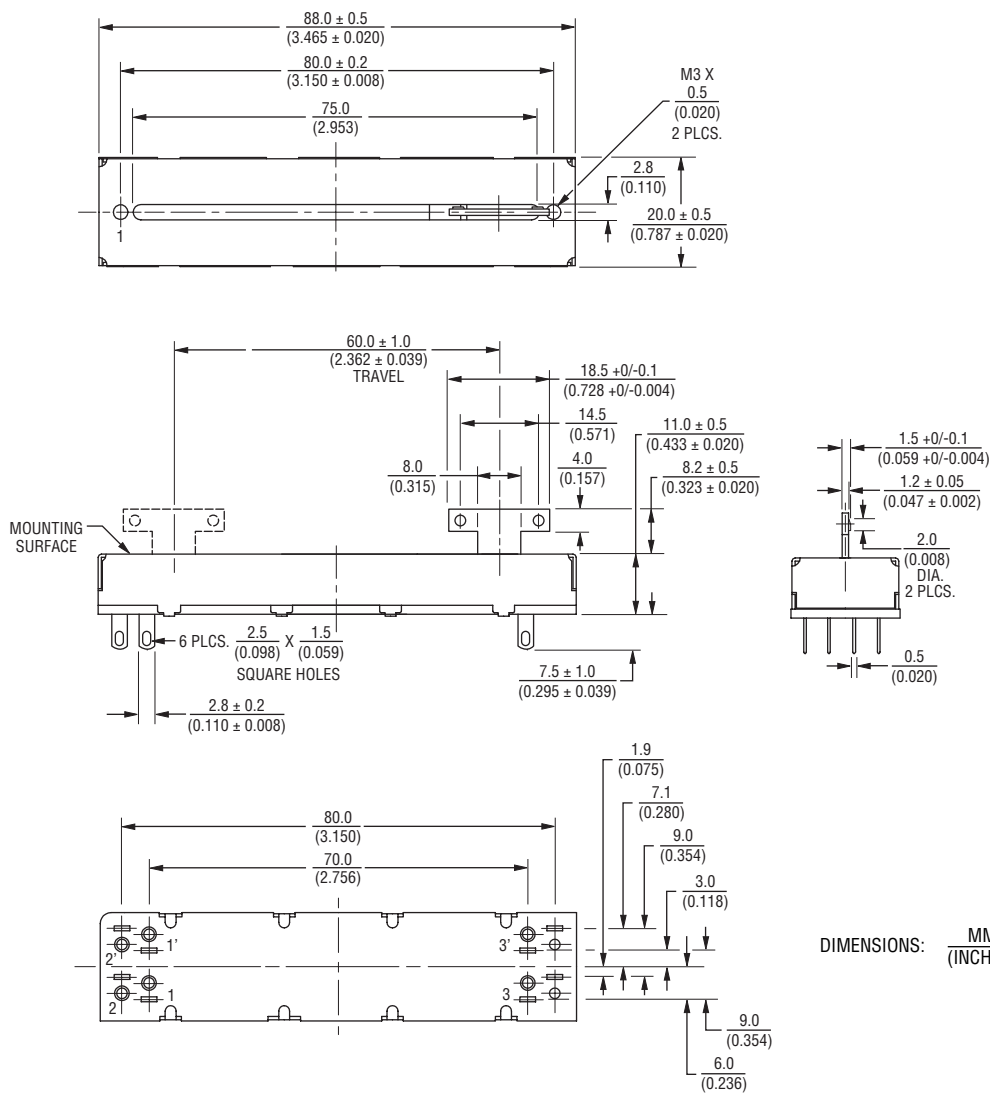
## Product Dimensions

45 mm Length of Travel  
Lever End Style "T"



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### 60 mm Length of Travel Lever End Style "T"



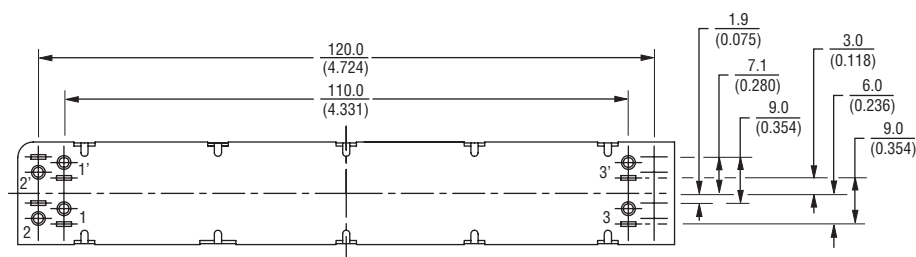
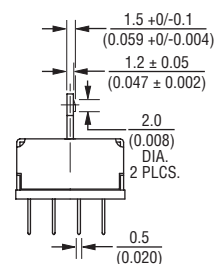
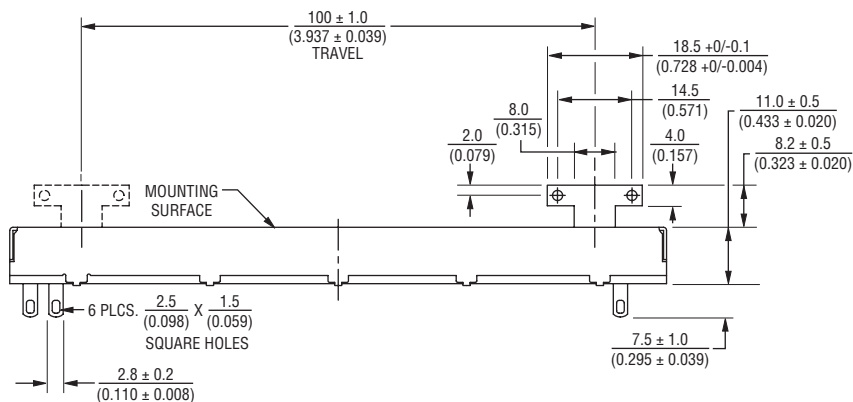
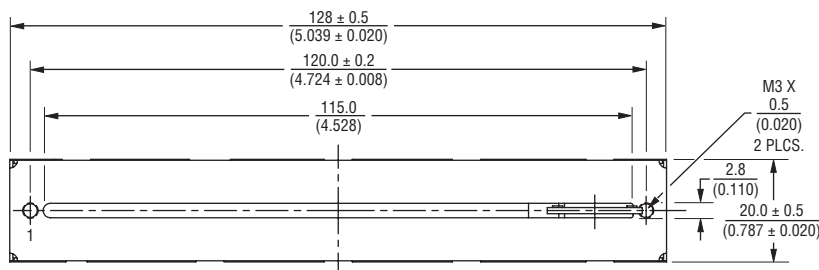
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# PTF Series Long Life Slide Potentiometer

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## Product Dimensions

100 mm Length of Travel  
Lever End Style "T"

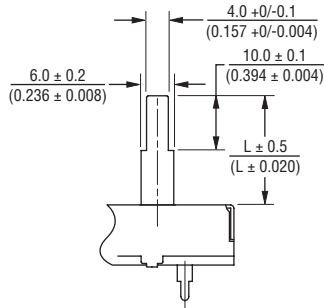


DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

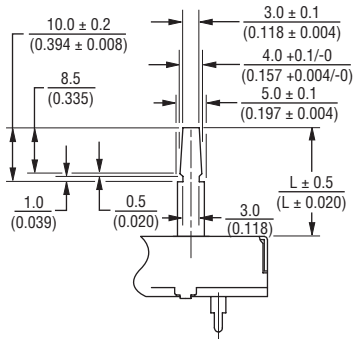
# PTF Series Long Life Slide Potentiometer

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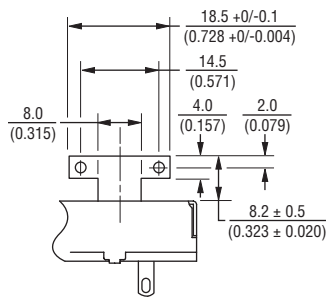
## Lever End Styles



LEVER END STYLE "A"



LEVER END STYLE "B"



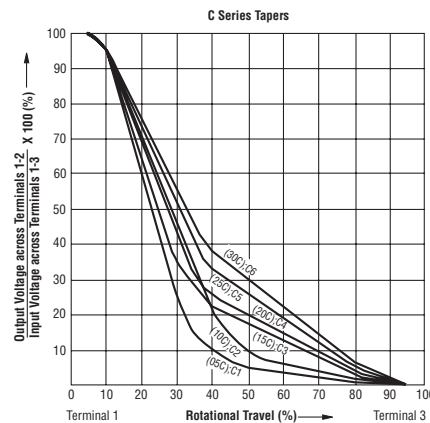
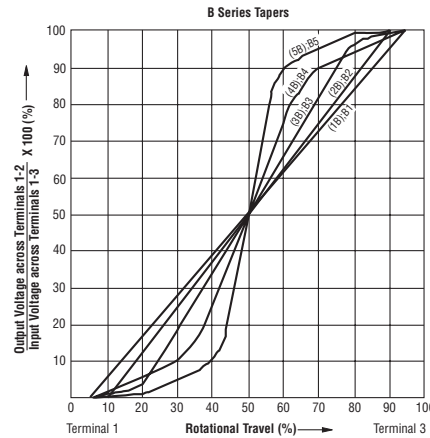
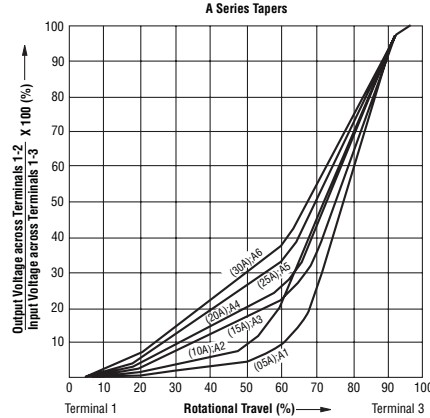
LEVER END STYLE "T"

### Lever Length (A & B Lever Only)

15.0  
(.591)

20.0  
(.787)

## Tapers



## 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             |

## How To Order

**PTF 45 - 15 2 A - 103 B2**

Model Number

Designator

PTF = Long Life Slide  
Potentiometer

Length of Travel

45 = 45 mm

60 = 60 mm

01 = 100 mm

Lever Length

08 = 8.2 mm ("T" Lever Only)

15 = 15 mm ("A" & "B" Lever  
Only)

20 = 20 mm ("A" & "B" Lever  
Only)

No. of Gangs

1 = Single Gang with PC Pins

2 = Dual Gang with PC Pins

3 = Single Gang with Solder Lugs

4 = Dual Gang with Solder Lugs

Lever End Style

A = Metal Lever (Refer to Drawing)

B = Metal Lever (Refer to Drawing)

T = Metal Lever (Refer to Drawing)

Resistance Code

(See Standard Resistance Table)

Resistance Taper (See Taper Charts)

Taper Series followed by Curve Number