



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 ± 2 dB



PTF Series Long Life Slide Potentiometer

Electrical Characteristics

Standard Resistance Range 1K ohms to 1 megohm
Standard Resistance Tolerance	... ± 20 %
End Resistance 1 ohm max.
Insulation Resistance @ 500 VDC 100 megohms min.
Dielectric Withstanding Voltage 1000 VAC
Tracking Error ± 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

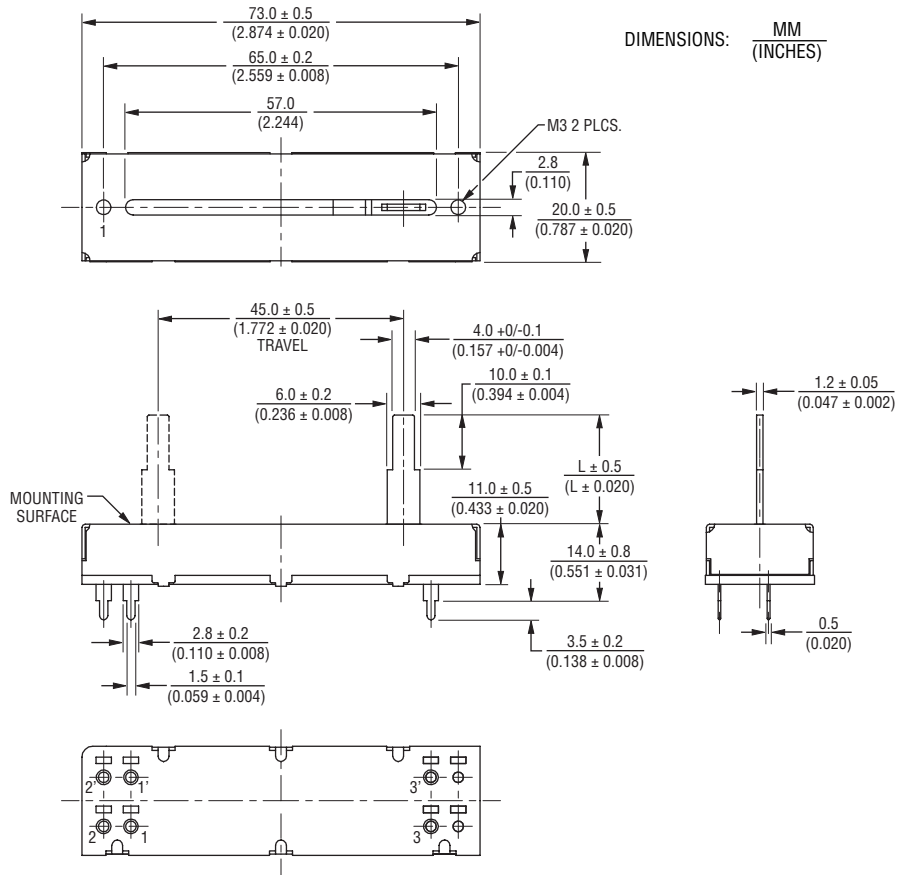
Operational Life 100,000 cycles
TR Shift ± 15 %
Operating Temperature Range -10°C to $+55^{\circ}\text{C}$
Resistance to Solder Heat ± 5 %

Mechanical Characteristics

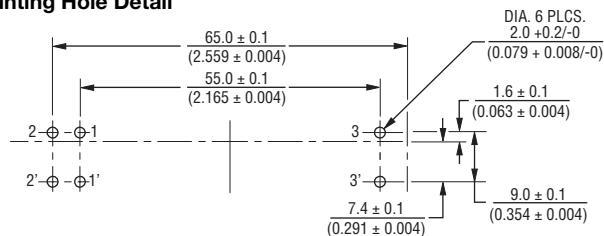
Mechanical Travel See Product Dimensions
Operating Force 50 gf
Stop Strength 5 kgf min.
Shaft Axial Force 10 kgf min.
Shaft Wobble	... $2(2 \times L/25)$ mm p-p max.
Soldering Condition	
Manual $300^{\circ}\text{C} \pm 5^{\circ}\text{C}$ for 3 sec.
Wave $260^{\circ}\text{C} \pm 5^{\circ}\text{C}$ for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

Product Dimensions

45 mm Length of Travel Lever End Style "A"

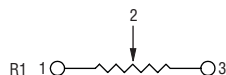


Mounting Hole Detail

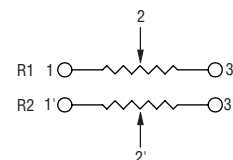


Schematics

Single Gang



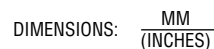
Dual Gang



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

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60 mm Length of Travel Lever End Style "A"



Technical drawing of a shaft with dimensions and tolerances. The drawing shows a shaft with a central section and a right-hand section. The central section has a diameter of 6 PLCS. The right-hand section has a diameter of 6.0 ± 0.1 (0.236 ± 0.004). The dimensions and tolerances are as follows:

- Overall length: 80.0 ± 0.1 (3.150 ± 0.004)
- Distance from left end to center: 70.0 ± 0.1 (2.756 ± 0.004)
- Distance from center to right end: 9.0 ± 0.1 (0.354 ± 0.004)
- Distance from left end to first step: 1.9 (0.075)
- Distance from first step to second step: 7.1 ± 0.1 (0.280 ± 0.004)
- Distance from second step to third step: 9.0 ± 0.1 (0.354 ± 0.004)
- Distance from third step to right end: 9.0 ± 0.1 (0.354 ± 0.004)
- Distance from left end to third step: 6.0 ± 0.1 (0.236 ± 0.004)
- Distance from center to third step: 3.0 (0.118)
- Distance from third step to right end: 3.0 (0.118)

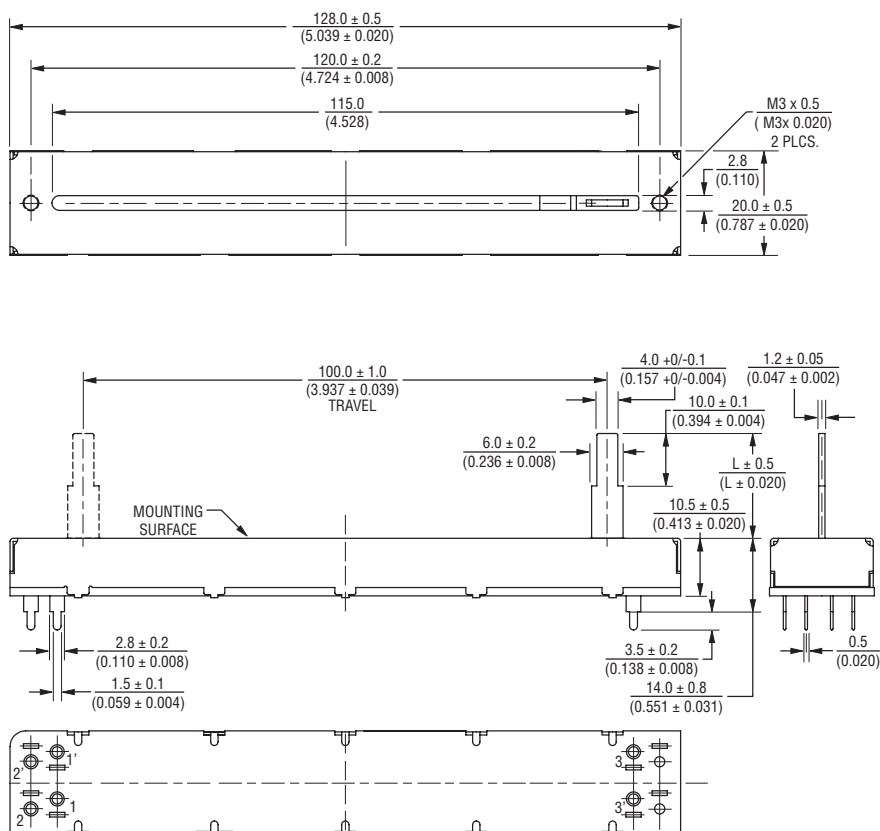
Specifications are subject to change without notice.
Customers should verify actual device performance in their specific applications.

PTF Series Long Life Slide Potentiometer

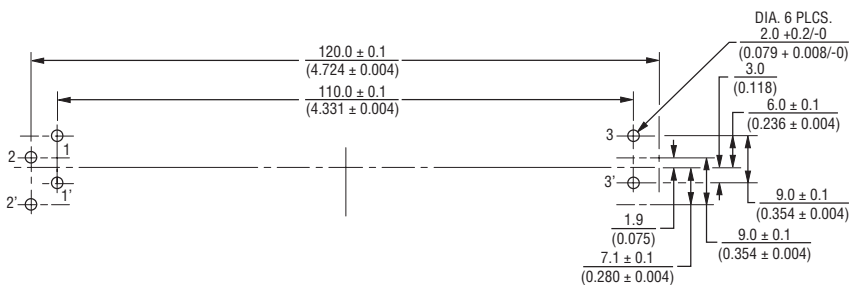
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Product Dimensions

100 mm Length of Travel
Lever End Style "A"



Mounting Hole Detail



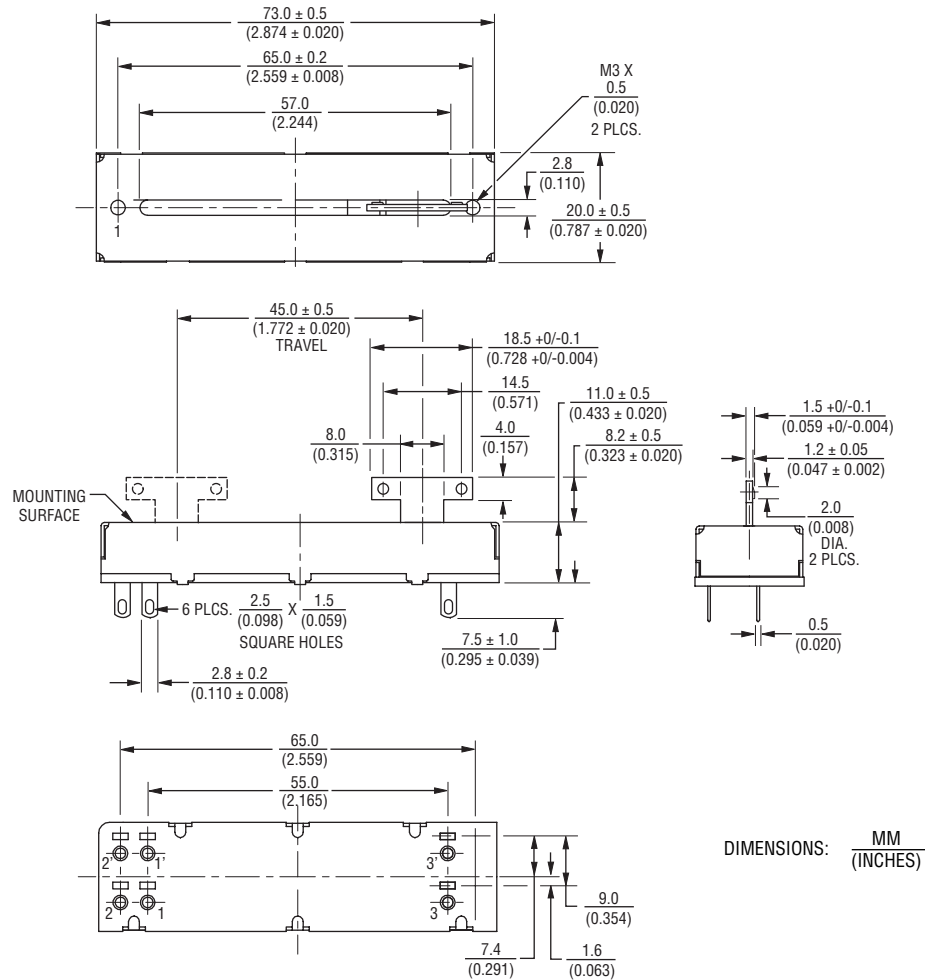
DIMENSIONS: $\frac{\text{MM}}{(\text{INCHES})}$

PTF Series Long Life Slide Potentiometer

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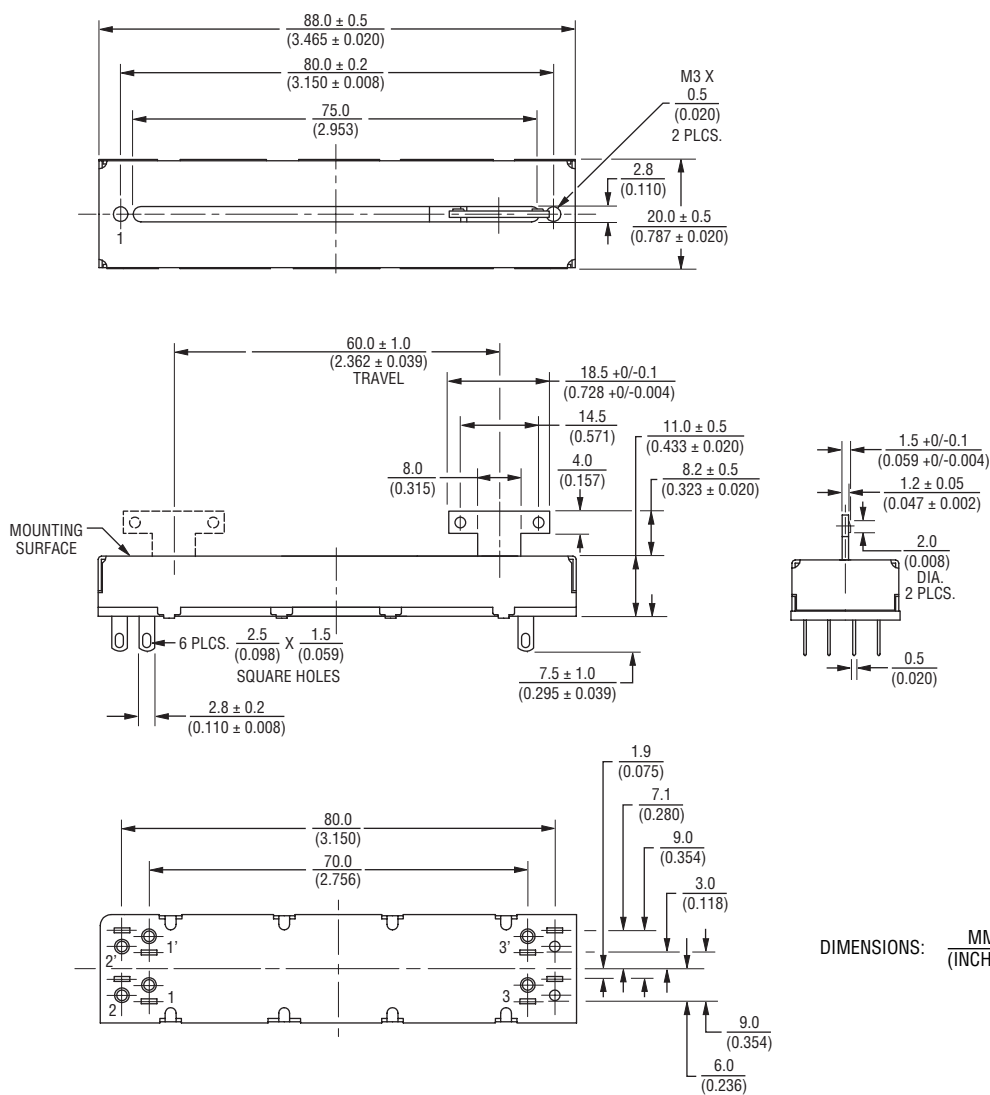
Product Dimensions

45 mm Length of Travel
Lever End Style "T"



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60 mm Length of Travel Lever End Style "T"



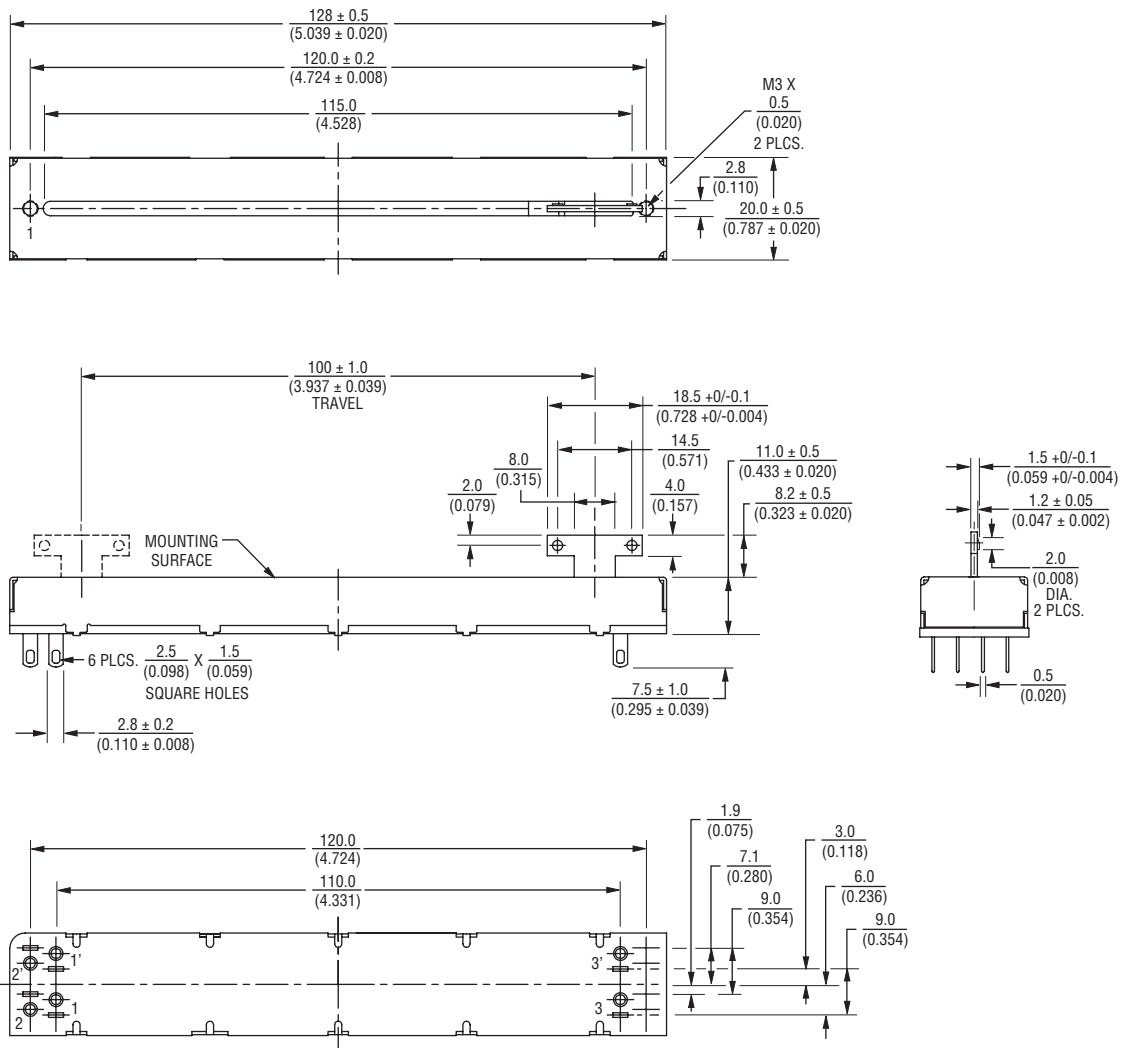
Specifications are subject to change without notice.
Customers should verify actual device performance in their specific applications.

PTF Series Long Life Slide Potentiometer

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Product Dimensions

100 mm Length of Travel
Lever End Style "T"

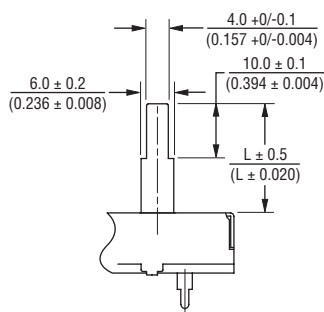


DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$

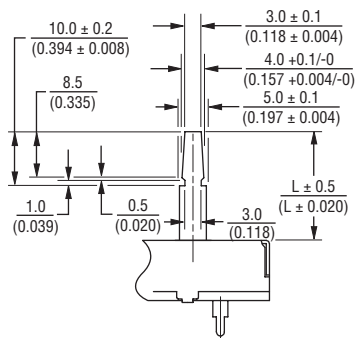
PTF Series Long Life Slide Potentiometer

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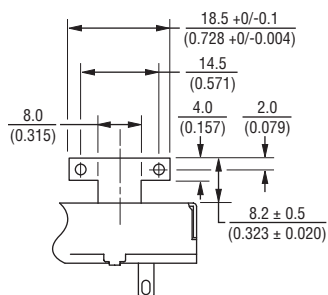
Lever End Styles



LEVER END STYLE "A"



LEVER END STYLE "B"



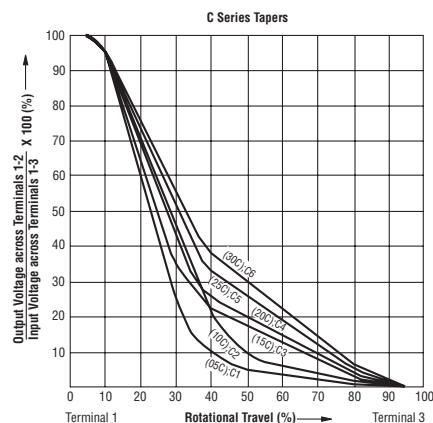
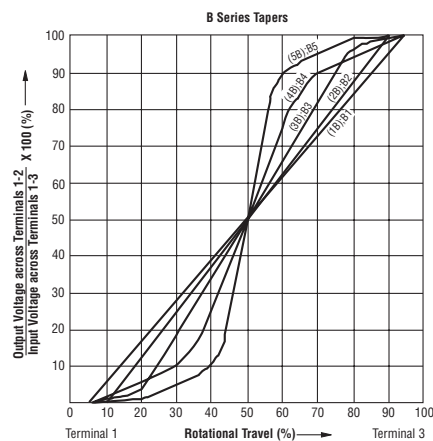
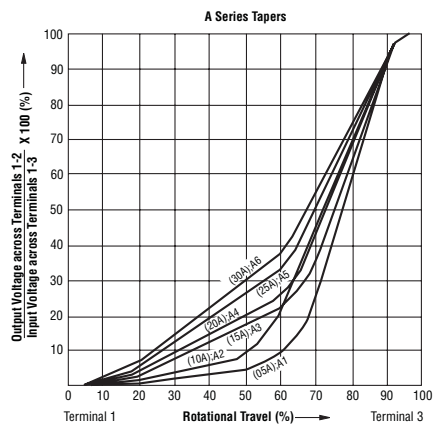
LEVER END STYLE "T"

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

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Bourns:

[PTF45-152A-202B2](#) [PTF60-202B-503B2](#) [PTF45-152B-202B2](#) [PTF60-202A-503B2](#) [PTF60-201A-104B2](#) [PTF60-201B-104B2](#) [PTF01-151B-202B2](#) [PTF01-151A-202B2](#) [PTF60-202A-102B2](#) [PTF60-152B-204B2](#) [PTF60-152A-204B2](#) [PTF60-202B-102B2](#) [PTF01-201B-103B2](#) [PTF45-201A-102B2](#) [PTF45-151B-204B2](#) [PTF60-151A-102B2](#) [PTF60-151B-102B2](#) [PTF01-201A-103B2](#) [PTF45-151A-204B2](#) [PTF45-201B-102B2](#) [PTF60-151A-503B2](#) [PTF45-201A-503B2](#) [PTF45-202A-204B2](#) [PTF45-201B-503B2](#) [PTF45-202B-204B2](#) [PTF60-151B-503B2](#) [PTF60-152B-104B2](#) [PTF60-152A-104B2](#) [PTF01-151A-102B2](#) [PTF45-152B-503B2](#) [PTF01-151B-102B2](#) [PTF45-152A-503B2](#) [PTF45-152B-102B2](#) [PTF45-152A-102B2](#) [PTF01-201B-203B2](#) [PTF01-151A-503B2](#) [PTF60-151A-202B2](#) [PTF60-151B-202B2](#) [PTF01-201A-203B2](#) [PTF01-151B-503B2](#) [PTF60-201B-204B2](#) [PTF60-201A-204B2](#) [PTF45-202B-104B2](#) [PTF45-202A-104B2](#) [PTF60-202B-202B2](#) [PTF45-151A-104B2](#) [PTF01-151B-105B2](#) [PTF01-202B-503B2](#) [PTF60-202A-202B2](#) [PTF01-151A-105B2](#) [PTF01-202A-503B2](#) [PTF45-151B-104B2](#) [PTF60-152A-102B2](#) [PTF01-202B-103B2](#) [PTF45-202A-102B2](#) [PTF45-152B-204B2](#) [PTF45-202B-102B2](#) [PTF60-152B-102B2](#) [PTF01-202A-103B2](#) [PTF45-152A-204B2](#) [PTF45-201A-502B2](#) [PTF45-202A-203B2](#) [PTF01-201B-503B2](#) [PTF01-202B-204B2](#) [PTF60-201B-202B2](#) [PTF60-151A-502B2](#) [PTF60-152A-203B2](#) [PTF60-151B-502B2](#) [PTF60-152B-203B2](#) [PTF01-201A-503B2](#) [PTF01-202A-204B2](#) [PTF60-201A-202B2](#) [PTF45-201B-502B2](#) [PTF45-202B-203B2](#) [PTF45-202A-503B2](#) [PTF01-151A-204B2](#) [PTF01-201B-102B2](#) [PTF01-152A-103B2](#) [PTF60-152A-503B2](#) [PTF01-152B-103B2](#) [PTF60-152B-503B2](#) [PTF01-201A-102B2](#) [PTF01-151B-204B2](#) [PTF45-202B-503B2](#) [PTF45-201B-104B2](#) [PTF45-201A-104B2](#) [PTF01-152B-202B2](#) [PTF60-202B-502B2](#) [PTF45-152A-105B2](#) [PTF60-151B-104B2](#) [PTF01-152A-202B2](#) [PTF60-202A-502B2](#) [PTF60-151A-104B2](#) [PTF45-152B-105B2](#) [PTF60-201A-103B2](#) [PTF45-151B-503B2](#) [PTF01-202A-105B2](#) [PTF45-151A-503B2](#) [PTF01-202B-105B2](#) [PTF60-201B-103B2](#)