Features

- Knurled or plain metal shaft
- Audio and linear tapers
- Low noise/low impedance
- Conductive polymer element
- 25k and 50k ohm resistance values for active electronics

BOURNS® PRO AUDIO

Model 95 Premium Guitar Potentiometer

Initial Electrical Characteristics[1]

Standard Resistance Value	25k, 50k, 250k, 300k and 500k ohms
Total Resistance Tolerance	20 %
Independent Linearity	±5 %
Absolute Minimum Resistance	2 ohms maximum
Effective Electrical Angle	225 ° ± 5 °
Contact Resistance Variation	±1 %
Dielectric Withstanding Voltage (MIL-STD-202, Method 301)	
Sea Level	1,500 VAC minimum
70,000 Feet	500 VAC minimum
Insulation Resistance (500 VDC)	1,000 megohms minimum
Power Rating (Voltage Limited By Power Dissipation or 350 VAC, Whichever Is Less)	
+70 °C	0.25 watt
+125 °C	0 watt
Theoretical Resolution	Essentially infinite

Environmental Characteristics[1]

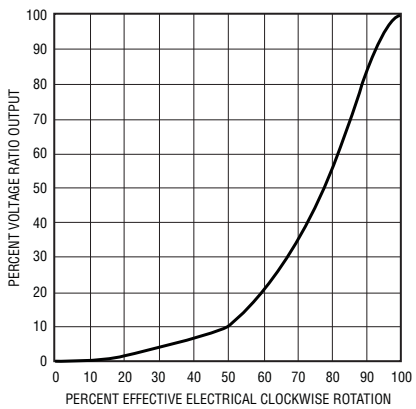
Operating Temperature Range	-40 °C to +125 °C
Storage Temperature Range	-55 °C to +125 °C
Temperature Coefficient Over Storage Temperature Range	±1,000 ppm/°C
Vibration	15 G
Total Resistance Shift	±2 % maximum
Voltage Ratio Shift	±5 % maximum
Shock	30 G
Total Resistance Shift	±2 % maximum
Voltage Ratio Shift	±5 % maximum
Load Life	1,000 hours
Total Resistance Shift	±10 % maximum
Rotational Life (No Load)	100,000 cycles
Total Resistance Shift	±20 % maximum
Contact Resistance Variation @ 50,000 cycles	±3 %
Moisture Resistance (MIL-STD-202, Method 103, Condition B)	
Total Resistance Shift	±20 % TRS maximum
Insulation Resistance (500 VDC)	100 megohms minimum
IP Rating	IP 40

Mechanical Characteristics[1]

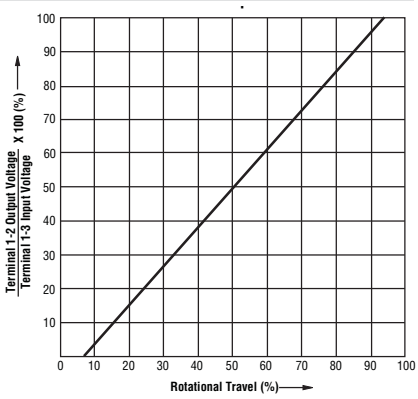
Mechanical Angle	300 ° ±5 °
Rotational Torque	0.7 oz-in (50 g-cm) typical
Weight	
Standard Bushing	14.25 grams
Long Bushing	18.15 grams
Terminals	Solder lugs
Soldering Condition	Recommended hand soldering using Sn95/Ag5 no clean solder, 0.025 " wire diameter. Maximum temperature 399 °C (750 °F) for 3 seconds. No wash process to be used with no clean flux.
Marking	Manufacturer's trademark, date code, resistance, manufacturer's part number
Hardware	One lockwasher, one flat washer, two mounting nuts and one solder lug washer are shipped with each potentiometer.

[1] AT ROOM AMBIENT: +25 °C NOMINAL AND 50 % RELATIVE HUMIDITY NOMINAL, EXCEPT AS NOTED.

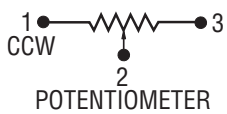
Audio Taper Plot



Linear Taper Plot



Schematic



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.

Additional Features

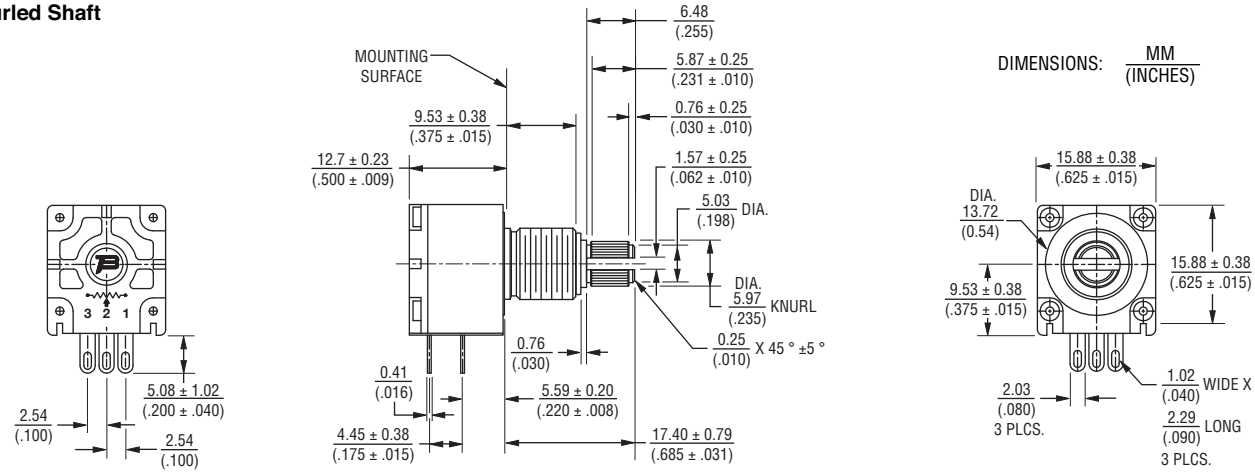
- Single-turn
- 250k, 300k and 500k standard resistance options
- Smooth rotational feel
- Long rotational life
- Long bushing option
- RoHS compliant*

Model 95 Premium Guitar Potentiometer

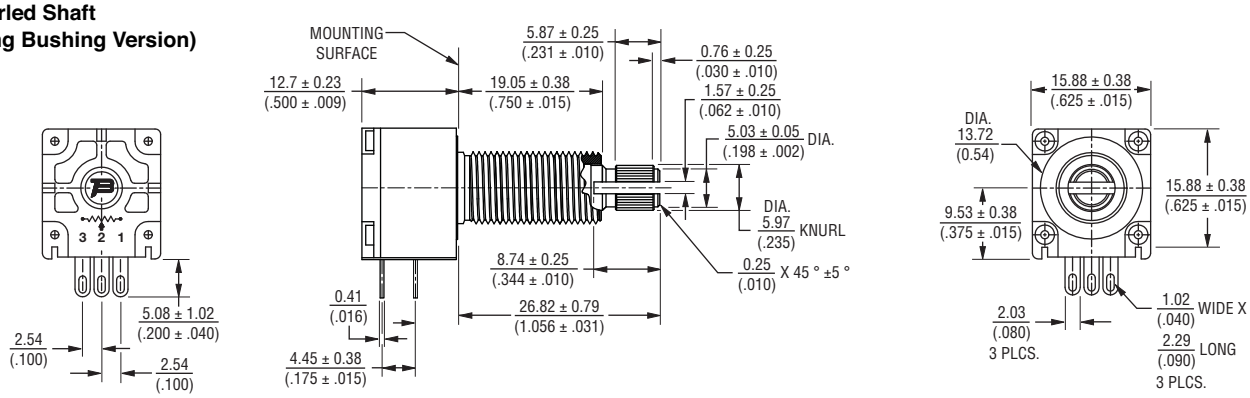
BOURNS®

Product Dimensions

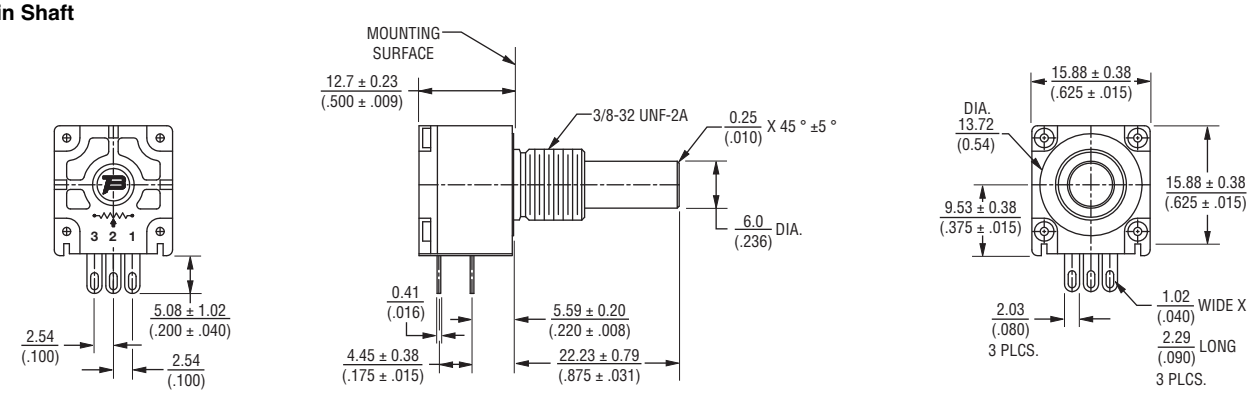
Knurled Shaft



Knurled Shaft (Long Bushing Version)



Plain Shaft



*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.

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Model 95 Premium Guitar Potentiometer

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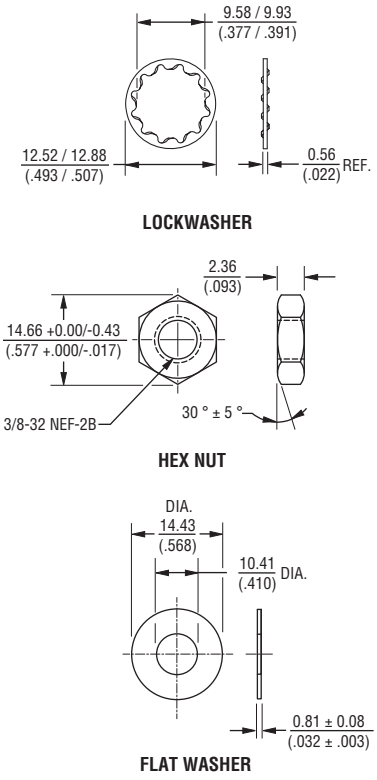
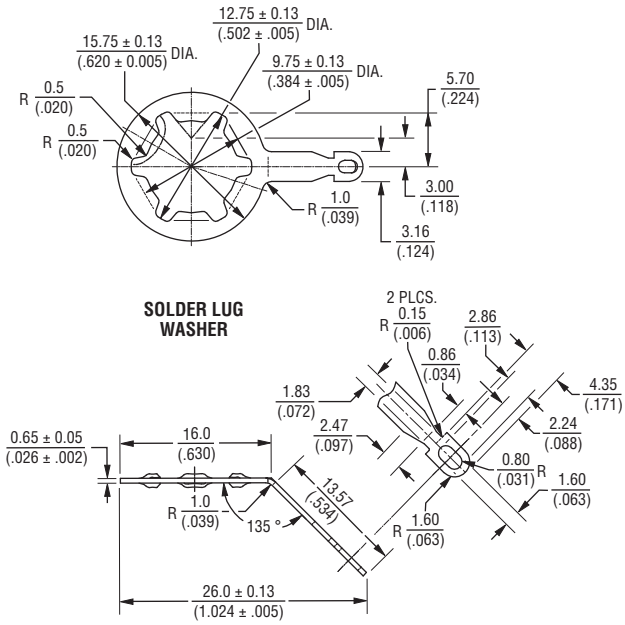
Product Dimensions

Hardware





DIMENSIONS: MM / (INCHES)

Selection Guide

Part Number	Taper	Shaft	Bushing	Resistance Value (kΩ)
95A1D-Z28-EA0/300L	Audio	Knurled	Standard	250
95A1D-Z28-EA0/301L	Audio	Plain	Standard	250
95A1D-Z28-EA0/302L	Audio	Knurled	Standard	500
95A1D-Z28-EA0/303L	Audio	Plain	Standard	500
95Z1D-Z33-EA0/304L	Audio	Knurled	Long	250
95Z1D-Z33-EA0/305L	Audio	Knurled	Long	500
95A1D-Z28-EA0/317L	Audio	Knurled	Standard	25
95A1D-Z28-EA0/318L	Audio	Knurled	Standard	50
95Z1D-Z33-EA0/319L	Audio	Knurled	Long	25
95Z1D-Z33-EA0/320L	Audio	Knurled	Long	50
95A1D-Z28-EA0/321L	Linear	Knurled	Standard	300
95A1D-Z28-EA0/322L	Linear	Knurled	Standard	500
95Z1D-Z33-EA0/323L	Linear	Knurled	Long	300
95Z1D-Z33-EA0/324L	Linear	Knurled	Long	500

REV. 10/13

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