

BOURNS®

Features

- Long life carbon element
- Plain or slotted shaft option
- Anti-rotation pin
- Metal shaft
- Audio or linear taper options
- Variety of resistance values
- RoHS compliant*

Applications

- Medical diagnostic equipment**
- Test and measurement equipment
- Avionics controls
- Communications equipment
- Medical laboratory equipment**

PDF24 - 24 mm Long Life Potentiometer

Electrical Characteristics

Taper.....Audio, linear
 Standard Resistance1K to 1M ohms
 Standard Resistance Tolerance.....±10 %
 Linearity.....±3 %

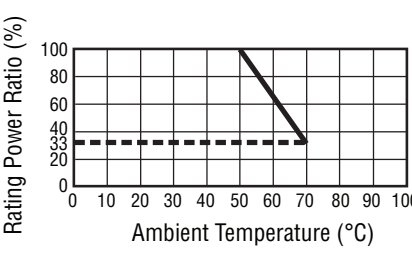
Environmental Characteristics

Operating Temperature...-10 °C to +85 °C
 Power Rating
 Linear Taper 0.5 watt
 Audio Taper 0.25 watt
 Maximum Operating Voltage
 Linear and Audio Taper 200 VDC
 Sliding Noise
 Linear 100 mV max.
 Other Tapers 200 mV max.
 IP Rating**.....IP40
 Moisture Sensitivity Level..... 1
 ESD Classification (HBM)..... N/A
 **Please consult factory for other options.

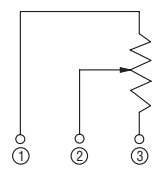
Mechanical Characteristics

Mechanical Angle 300 ° ±10 °
 Rotational Torque 5 to 70 g-cm
 Stop Strength..... 9 kg-cm min.
 Rotational Life
 1,000,000 shaft revolutions
 Soldering Condition
 Manual Soldering
 350 °C ± 10 °C for 3.5 ± 0.5 sec.
 Hardware One flat washer and
 mounting nut supplied per
 potentiometer with bushing

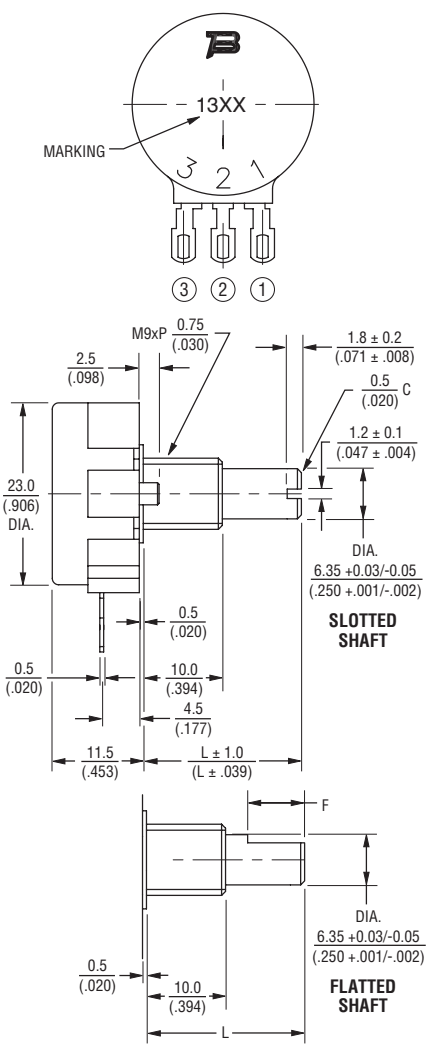
Derating Curve



Circuit



Product Dimensions



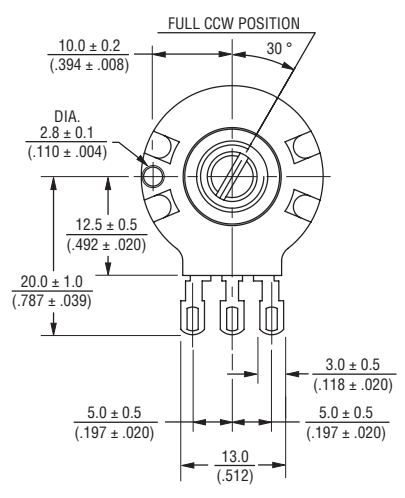
S-Type

L	20 (.787)	25 (.984)	30 (1.181)	35 (1.378)	40 (1.575)
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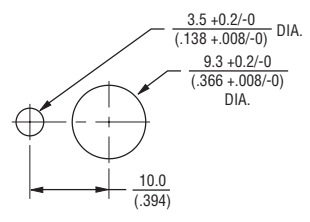
F-Type

L	20 (.787)	25 (.984)	30 (1.181)	35 (1.378)
F	7 (.276)	7 (.276)	12 (.472)	12 (.472)

DIMENSIONS: MM (INCHES)

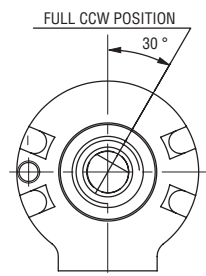


Recommended Pad Layout

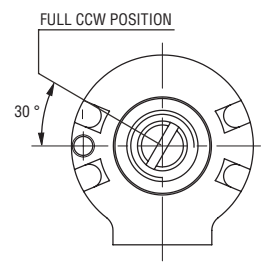


Shaft Types

F-Type



S-Type



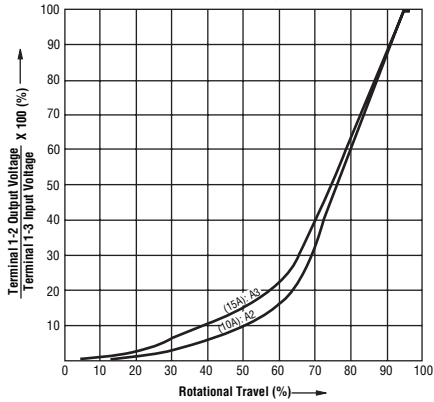
* RoHS Directive 2015/863, Mar 31, 2015 and Annex.
 ** Excluding FDA Class III devices and generally equivalent classification outside of the United States.
 Specifications are subject to change without notice.
 The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.
 Users should verify actual device performance in their specific applications.

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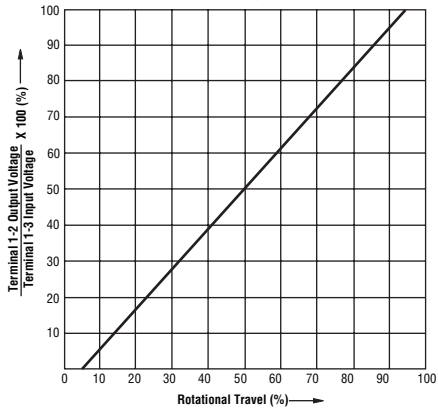
BOURNS®

Tapers

A Series Tapers



B0 Taper



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

PDF24 1 - S 4 20 F - 103 B0

Model _____
 Number of Units _____
 1 = Single
 Orientation _____
 S = Solder Lugs
 Down Facing
 Detents _____
 4 = No Detents
 Shaft Length (FMS) _____
 20 = 20 mm
 25 = 25 mm
 30 = 30 mm
 35 = 35 mm
 40 = 40 mm*
 Shaft Type _____
 F = Flatted Shaft
 S = Slotted Shaft
 Resistance Code (See Table) _____
 Resistance Taper (See Taper Charts) _____

* Available in slotted shaft style only.

BOURNS®

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