

# BI 43 Potentiometer Datasheet

<http://www.manuallib.com/bi/43-potentiometer-datasheet.html>

Standard Resistance Range 10 Ohms to 2 Megohms

Standard Resistance Tolerance  $\pm 10\%$

Input Voltage 300 Vdc Max. or rms not to exceed power rating

Power Rating 0.5 Watts at 70°C derating to 0 at 125°C

End Resistance 1% or 2 Ohms Max., whichever is greater

Actual Electrical Travel 210° nominal

Dielectric Strength 900 Vrms

Insulation Resistance 1,000 Megohms Min.

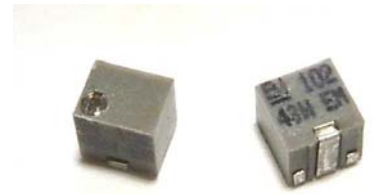
Resolution Essentially infinite

Contact Resistance Variation 1% or 3 Ohms Max., whichever is greater

ManualLib.com collects and classifies the global product instruction manuals to help users access anytime and anywhere, helping users make better use of products.

<http://www.manuallib.com>

MODEL 43  
 3 mm Multi-Turn  
 Sealed Surface Mount  
 Cermet Trimming  
 Potentiometer  
 RoHS compliant



**MODELS AVAILABLE**

J hook surface mount	43W
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**ELECTRICAL<sup>1</sup>**

Resistance Range	10 Ohm to 2 Megohms
Standard Resistance Tolerance	± 20%
Input Voltage, Maximum	200 Vdc or rms, not to exceed power rating
Power rating, Watts	0.125 @ 70°C, derating to 0 @ 150°C
End Resistance, Maximum	1% or 3 Ohms, whichever is greater
Actual Electrical Travel, Nominal	11 turns
Dielectric Strength	600 V AC
Insulation Resistance, Minimum	100 Megohms
Resolution	Essentially infinite
Contact Resistance Variation, Maximum	3% or 3 Ohms, whichever is greater
Temperature Coefficient of Resistance	±100 ppm/°C

**MECHANICAL**

Mechanical Stop	Wiper idles
Torque, Maximum	2.5 in. oz.
Weight, Approx.	0.01 oz.
Wiper Position	Approx. 50%

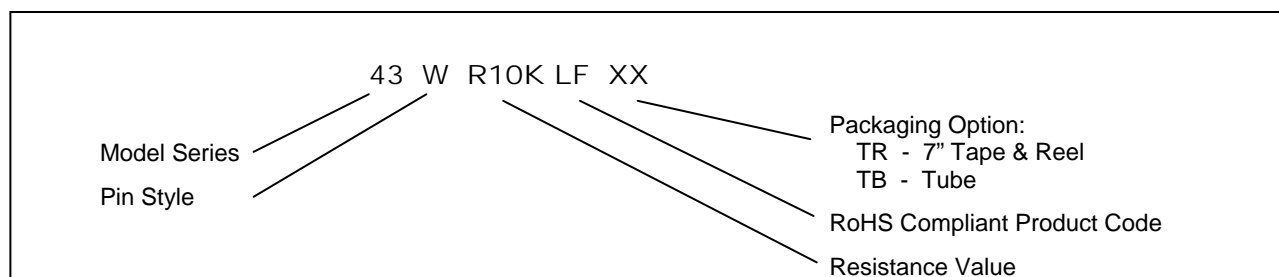
<sup>1</sup> Specifications subject to change without notice.

# MODEL 43

## ENVIRONMENTAL

Seal	85°C Fluorinert®
Operating Temperature Range	-65°C to +150°C
Thermal Shock, 5 cycles, -55°C to +125°C	2% ΔR, 2% ΔV Ratio max.
Moisture Resistance, Ten 24 Hour Cycles	3% ΔR
Shock, 6 ms Sawtooth 100G's	1% ΔR, 1% ΔV Ratio max.
Vibration, 20G's to 2000 Hz	1% ΔR, 1% ΔV Ratio max.
High Temperature Exposure, 250 Hours @ 125°C	2% ΔR, 2% ΔV Ratio max.
Rotational Life, 200 Cycles	3% ΔR
Load Life, 0.125W, 1000 Hours, 70°C	4% ΔR or 4 ohms which ever is greatest, 2% ΔV Ratio max.
Resistance to Solder Heat	260°C for 5 sec.

## ORDERING INFORMATION<sup>2</sup>



## PACKAGING INFORMATION

### Tape & Reel

Tape Width	12 mm
Sprocket Pitch	4 mm
Reel Diameter	7 inches
Quantity per Reel	500 units

### Tubes

Anti-Static Tubes, all units oriented with #1 pin to the same side	50 units per tube
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## STANDARD RESISTANCE VALUES, OHMS

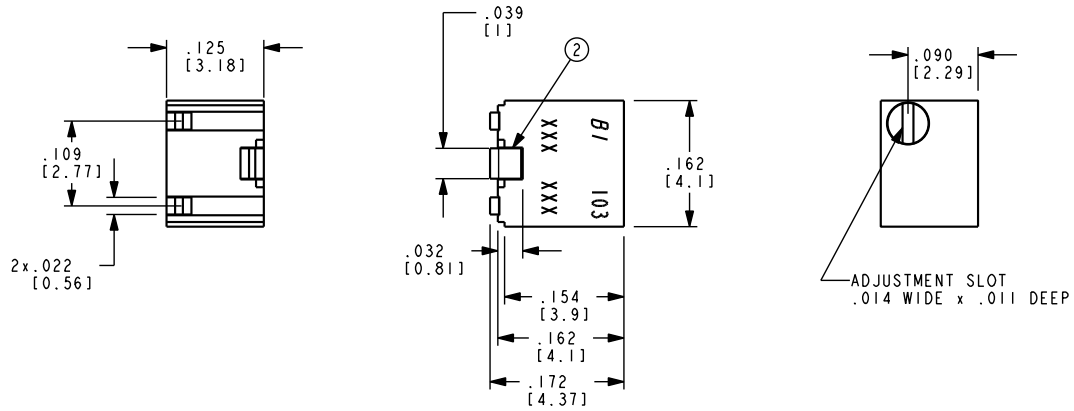
10	100	1K	10K	100K	1 Meg
20	200	2K	20K	200K	2 Meg
50	500	5K	50K	500K	

<sup>2</sup> Contact our customer service for custom designs and features.

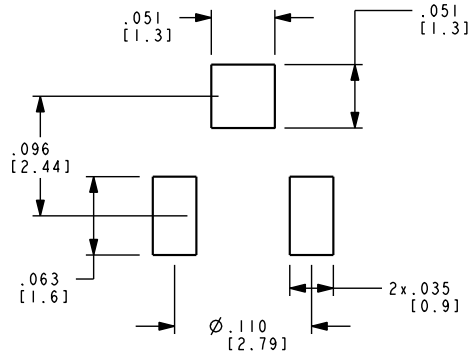
# MODEL 43

## OUTLINE DRAWING<sup>3</sup>

### Model 43W

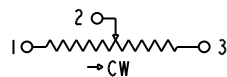


### RECOMMENDED PCB LAYOUT (INCH/mm)



DIMENSIONS ARE : INCHES (mm)  
TOLERANCES :  $\pm .010$  (.25) EXCEPT WHERE NOTED

## CIRCUIT DIAGRAM



<sup>3</sup> Dimensions are Inches (mm), Tolerances are  $\pm .01$  inch ( $\pm .025$  mm) unless otherwise stated.