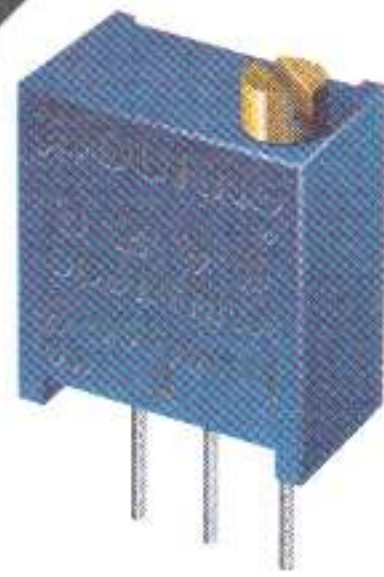


AVAILABLE THROUGH DISTRIBUTION



**BOURNS®**

# 3296 3/8" Square Trimming Potentiometer

## Features

- Multiturn / Cermet / Industrial / Sealed
- 5 terminal styles
- Tape and reel packaging available
- Chevron seal design
- Listed on the QPL for style RJ24 per MIL-R-22097 and RJ24 per High-Rel Mil-R-39035
- Mounting hardware available (H-117P)
- RoHS compliant<sup>†</sup> version available

## Electrical Characteristics

Standard Resistance Range  
.....10 ohms to 2 megohms  
(see standard resistance table)

Resistance Tolerance .....±10 % std.  
(tighter tolerance available)

Absolute Minimum Resistance  
.....1 % or 2 ohms max.  
(whichever is greater)

Contact Resistance Variation  
.....1.0 % or 3 ohms max.  
(whichever is greater)

Adjustability  
Voltage .....±0.01 %  
Resistance .....±0.05 %

Resolution .....Infinite

Insulation Resistance .....500 vdc.  
1,000 megohms min.

Dielectric Strength  
Sea Level .....900 vac  
70,000 Feet .....350 vac

Effective Travel .....25 turns nom.

## Environmental Characteristics

Power Rating (300 volts max.)  
70 °C .....0.5 watt  
125 °C .....0 watt

Temperature Range .....-55 °C to +150 °C

Temperature Coefficient .....±100 ppm/°C

Seal Test .....85 °C Fluorinert<sup>\*</sup>

Humidity .....MIL-STD-202 Method 103  
96 hours (2 % ΔTR, 10 Megohms IR)

Vibration .....20 G (1 % ΔTR; 1 % ΔVR)

Shock .....100 G (1 % ΔTR; 1 % ΔVR)

Load Life .....1,000 hours 0.5 watt @ 70 °C  
(3 % ΔTR; 3 % or 3 ohms, whichever is greater, CRV)

Rotational Life .....200 cycles  
(4 % ΔTR; 3 % or 3 ohms, whichever is greater, CRV)

## Physical Characteristics

Torque .....3.0 oz-in. max.

Mechanical Stops .....Wiper idles

Terminals .....Solderable pins

Weight .....0.03 oz.

Marking .....Manufacturer's trademark, resistance code, wiring diagram, date code, manufacturer's model number and style

Wiper .....50 % (Actual TR) ±10 %

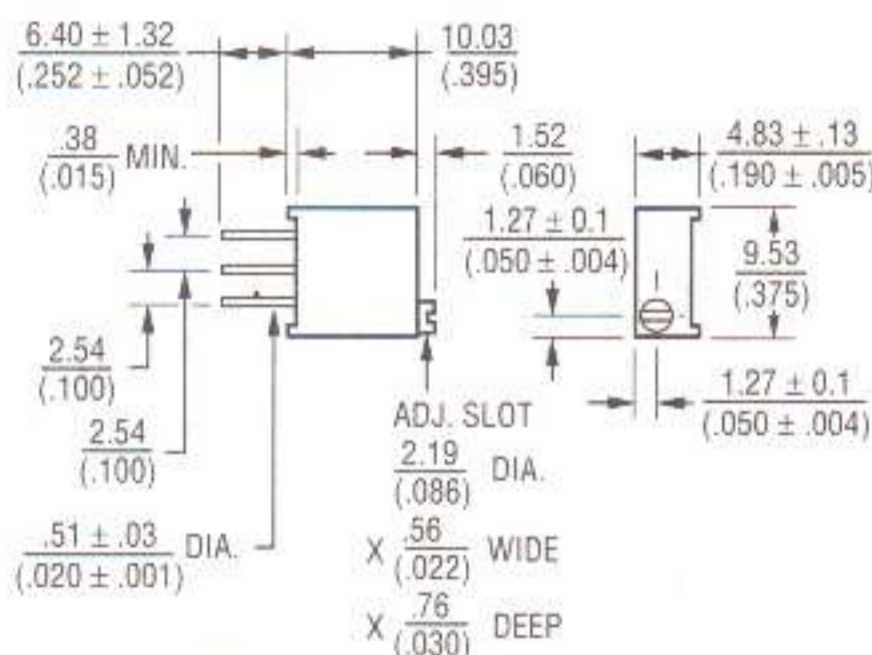
Flammability .....U.L. 94V-0

Standard Packaging .....50 pcs. per tube

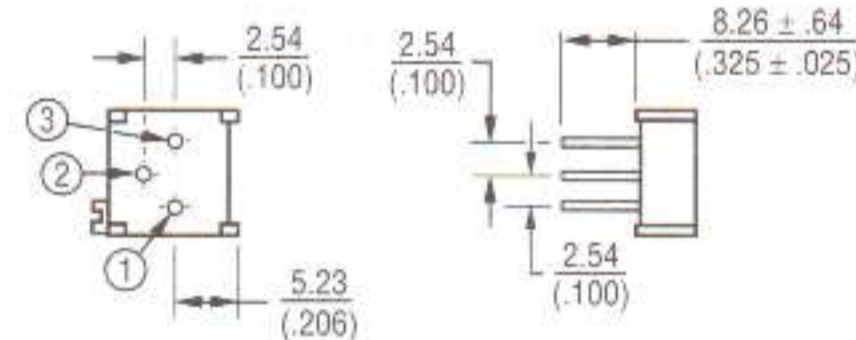
Adjustment Tool .....H-90

## Product Dimensions

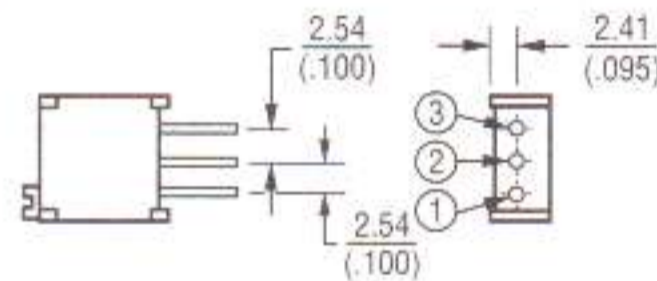
### Common Dimensions



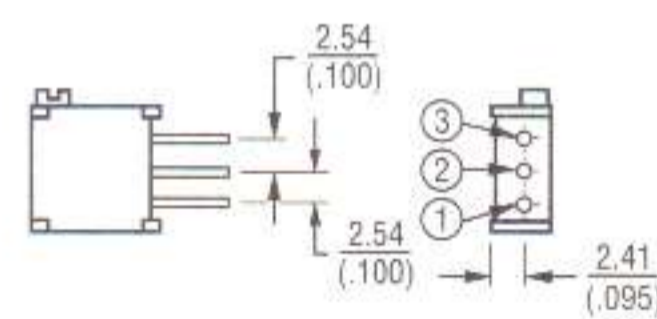
### 3296P



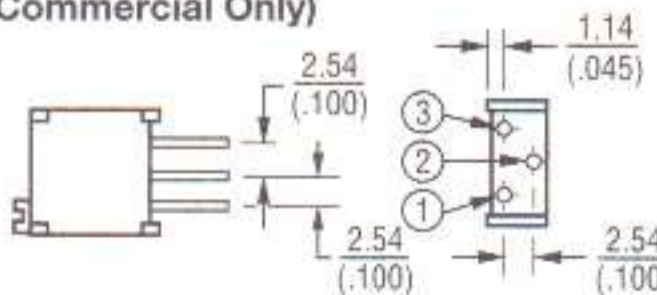
### 3296W



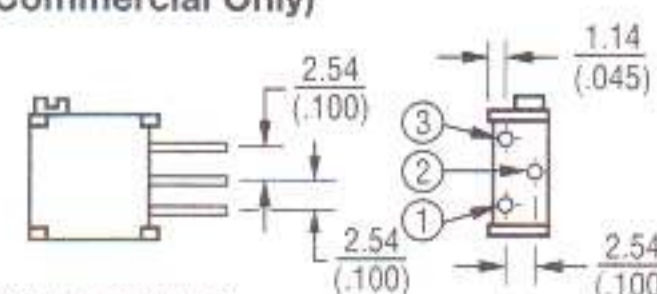
### 3296X



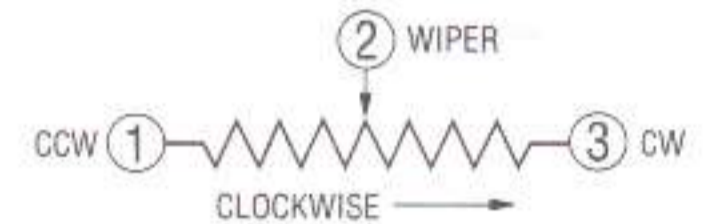
### 3296Y (Commercial Only)



### 3296Z (Commercial Only)



DIMENSIONS: MM/(INCHES)  
TOLERANCES: ±.25/(±.010)  
EXCEPT WHERE NOTED



## Standard Resistance Table

Resistance		Resistance	
Ohms	Code	Ohms	Code
<b>10</b>	<b>100</b>	<b>20,000</b>	<b>203</b>
<b>20</b>	<b>200</b>	<b>25,000</b>	<b>253</b>
<b>50</b>	<b>500</b>	<b>50,000</b>	<b>503</b>
<b>100</b>	<b>101</b>	<b>100,000</b>	<b>104</b>
<b>200</b>	<b>201</b>	<b>200,000</b>	<b>204</b>
<b>500</b>	<b>501</b>	<b>250,000</b>	<b>254</b>
<b>1,000</b>	<b>102</b>	<b>500,000</b>	<b>504</b>
<b>2,000</b>	<b>202</b>	<b>1,000,000</b>	<b>105</b>
<b>5,000</b>	<b>502</b>	<b>2,000,000</b>	<b>205</b>
<b>10,000</b>	<b>103</b>		

Popular distribution resistance values listed in **boldface**.  
Special resistances available.

## How To Order

**3296 W - 1 - 103 LF**

Model \_\_\_\_\_  
Style \_\_\_\_\_  
Standard or Modified Product Indicator \_\_\_\_\_  
-1 = Standard Product  
Resistance Code \_\_\_\_\_  
Packaging Designator \_\_\_\_\_  
Blank = Tube (Standard)  
R = Tape and Reel (X and W Pin Styles Only)  
A = Ammo Pack (X and W Pin Styles Only)

Terminations  
LF = 100 % Tin-plated (RoHS compliant)  
Blank = 90 % Tin / 10 % Lead-plated (Standard)

Consult factory for other available options.

<sup>\*</sup>Fluorinert<sup>™</sup> is a registered trademark of 3M Co.  
<sup>†</sup>RoHS Directive 2002/95/EC Jan 27 2003 including Annex. Specifications are subject to change without notice. Customers should verify actual device performance in their specific applications. REV 09/04