

## Features

- Low TCR
- Multiturn / Cermet / Industrial / Sealed
- 3 terminal styles
- Chevron seal design
- Mounting hardware available (H-117P)
- RoHS compliant\* version available



Model 3296-LTC is obsolete and not recommended for new designs. Model 3296 is preferred.

## Applications

- Rheostat applications with wiper currents less than 25 microamps
- Process control instrumentation
- Power supplies

# 3296-LTC - 3/8 " Square Trimpot® Trimming Potentiometer

### Electrical Characteristics

Standard Resistance Range ..... 2K to 25K ohms  
 (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

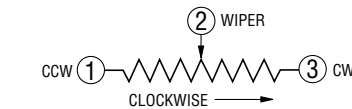
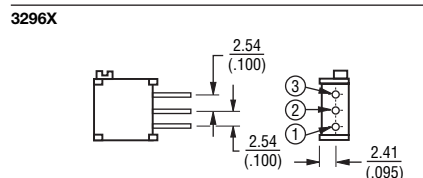
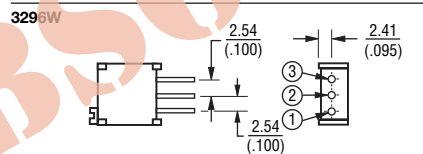
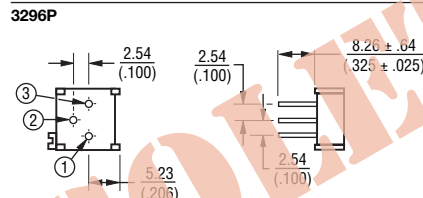
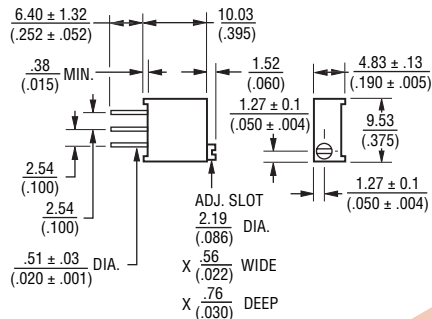
Power Rating (300 volts max.)  
 70 °C ..... 0.5 watt  
 125 °C ..... 0 watt  
 Temperature Range ..... -55 °C to +150 °C  
 Temperature Coefficient  
 End to End ..... ±20 ppm/°C  
 Through the Wiper ..... ±50 ppm/°C  
 Seal Test ..... 85 °C Fluorinert†  
 Humidity ..... MIL-STD-202 Method 103  
 96 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 % ±10 %  
 Flammability ..... U.L. 94V-0  
 Standard Packaging ..... 50 pcs. per tube  
 Adjustment Tool ..... H-90

### Product Dimensions

#### Common Dimensions



DIMENSIONS:  $\frac{\text{MM}}{\text{INCHES}}$   
 TOLERANCES: ±  $\frac{0.25}{(.010)}$  EXCEPT WHERE NOTED

NOTE: TCR through the wiper applies when 40 % or more of the resistance element is in the circuit.

### Standard Resistance Table

Resistance (Ohms)	Resistance Code
<b>1,000</b>	<b>102</b>
<b>2,000</b>	<b>202</b>
<b>5,000</b>	<b>502</b>
<b>10,000</b>	<b>103</b>
<b>20,000</b>	<b>203</b>
<b>25,000</b>	<b>253</b>

Popular values listed in boldface. Special resistances available.

### How To Order

**3296 W - LTC - 103 LF**

Model \_\_\_\_\_  
 Style \_\_\_\_\_  
 Product Indicator \_\_\_\_\_  
 Resistance Code \_\_\_\_\_  
 Terminations \_\_\_\_\_  
 LF = 100 % Tin-plated (RoHS compliant)  
 Blank = 90 % Tin / 10 % Lead-plated (Standard)

Consult factory for other available options.

\*RoHS Directive 2002/95/EC Jan 27 2003 including Annex.

"Trimpot" is a registered trademark of Bourns, Inc.

†"Fluorinert" is a registered trademark of 3M Co.

Specifications are subject to change without notice.

Customers should verify actual device performance in their specific applications.