

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Model 3296-LTC is obsolete and not recommended for new designs.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

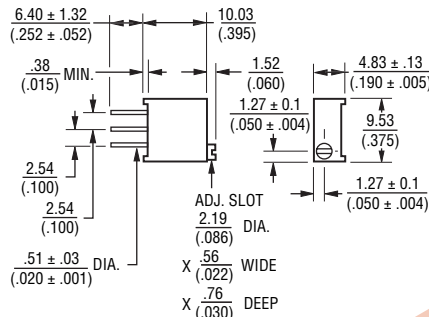
Power Rating (300 volts max.)
 70 °C 0.5 watt
 125 °C 0 watt
 Temperature Range -55 °C to +150 °C
 Temperature Coefficient
 End to End ±20 ppm/°C
 Through the Wiper ±50 ppm/°C
 Seal Test 85 °C Fluorinert†
 Humidity MIL-STD-202 Method 103
 96 hours
 (2 % ΔTR, 10 Megohms IR)
 Vibration 20 G (1 % ΔTR; 1 % 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

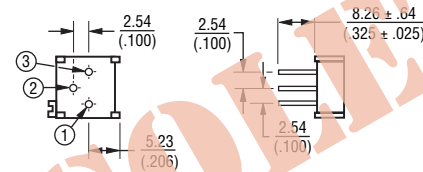
Torque..... 3.0 oz-in. max.
 Mechanical Stops..... Wiper idles
 Terminals Solderable pins
 Weight 0.03 oz.
 Marking..... Manufacturer's trademark, resistance code, wiring diagram, date code, manufacturer's model number and style
 Wiper 50 % ±10 %
 Flammability U.L. 94V-0
 Standard Packaging..... 50 pcs. per tube
 Adjustment Tool..... H-90

Product Dimensions

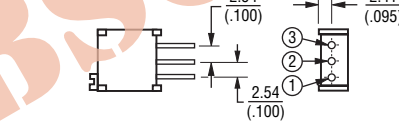
Common Dimensions



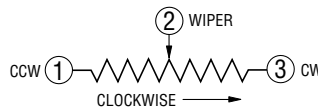
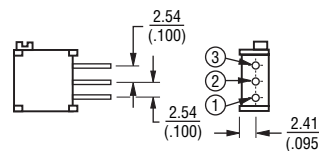
3296P



3296W



3296X



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 |
|-------------------|-----------------|
| 1,000 | 102 |
| 2,000 | 202 |
| 5,000 | 502 |
| 10,000 | 103 |
| 20,000 | 203 |
| 25,000 | 253 |

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.

†"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.