

## Features

- 3/8 " Square/ Multiturn / Cermet / Industrial / Sealed
- Five popular terminal styles
- Standoffs
- Patent #4427966 drive mechanism
- RoHS compliant\* version available

# 3299 - 3/8 " Square Trimming Potentiometer

### Electrical Characteristics

Standard Resistance Range ..... 10 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

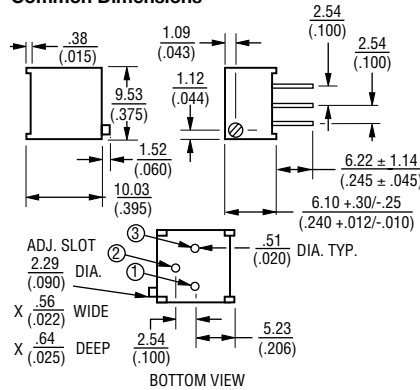
Power Rating (300 volts max.)  
 70 °C ..... 0.5 watt  
 125 °C ..... 0 watt  
 Temperature Range ..... -55 °C to +125 °C  
 Temperature Coefficient ..... ±100 ppm/°C  
 Seal Test ..... 85 °C Fluorinert†  
 Humidity ..... MIL-STD-202 Method 103  
 96 hours  
 (2 % ΔTR, 10 Megohms IR)  
 Vibration ..... 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

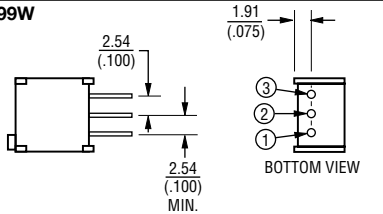
Torque ..... 3.0 oz-in. max.  
 Mechanical Stops ..... Wiper idles  
 Terminals ..... Solderable pins  
 Weight ..... 0.035 oz.  
 Marking ..... Manufacturer's trademark, resistance code, wiring diagram, date code, manufacturer's model number and style  
 Wiper ..... 50 % (Actual TR) ±10 %  
 Flammability ..... U.L. 94V-0  
 Standard Packaging ..... 50 pcs. per tube  
 Adjustment Tool ..... H-90

### 3299P

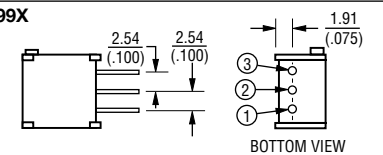
#### Common Dimensions



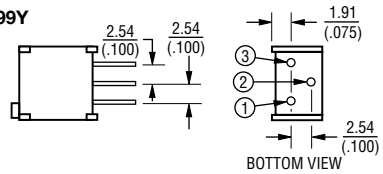
### 3299W



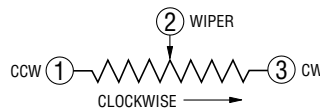
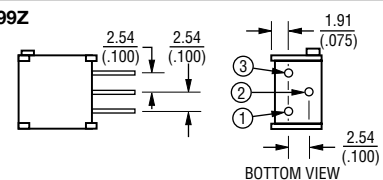
### 3299X



### 3299Y



### 3299Z



TOLERANCES: ± 0.25 (.010) EXCEPT WHERE NOTED

DIMENSIONS ARE:  $\frac{\text{MM}}{\text{(INCHES)}}$

### Standard Resistance Table

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

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

### How To Order

Model **3299 W - 1 - 103 LF**  
 Style \_\_\_\_\_  
 Standard or Modified \_\_\_\_\_  
 Product Indicator \_\_\_\_\_  
 -1 = Standard Product  
 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.