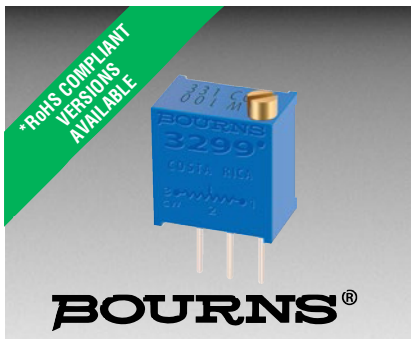




**THE DATASHEET OF**  
**3299Z-1-503LF**





## Features

- 3/8" Square/ Multiturn / Cermet / Industrial / Sealed
- Five popular terminal styles
- Standoffs
- RoHS compliant\* version available
- For trimmer applications/processing guidelines, [click here](#)

## 3299 - 3/8" Square Trimpot® Trimming Potentiometer

### Electrical Characteristics

Standard Resistance Range ..... 10 to 2 megohms  
 (see standard resistance table)  
 Resistance Tolerance .....  $\pm 10\%$  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 .....  $\pm 0.01\%$   
 Resistance .....  $\pm 0.05\%$   
 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.

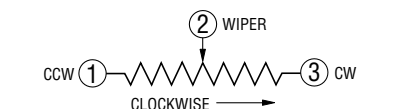
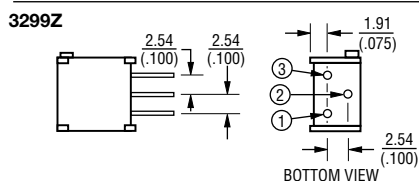
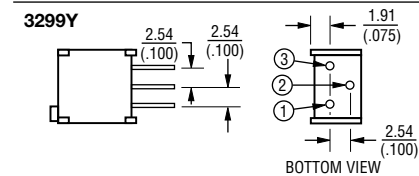
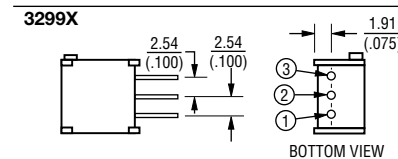
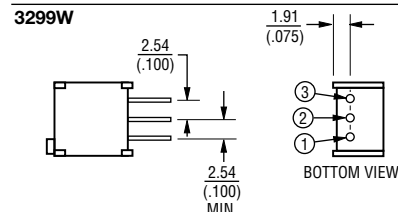
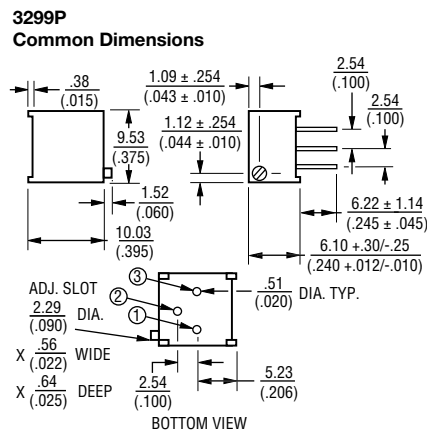
### Environmental Characteristics

Power Rating (300 volts max.)  
 70 °C ..... 0.5 watt  
 125 °C ..... 0 watt  
 Temperature Range ... -55 °C to +125 °C  
 Temperature Coefficient ...  $\pm 100$  ppm/°C  
 Seal Test ..... 85 °C Fluorinert†  
 Humidity ..... MIL-STD-202 Method 103  
 96 hours  
 (2 %  $\Delta$ TR, 10 Megohms IR)  
 Vibration ..... 20 G (1 %  $\Delta$ TR; 1 %  $\Delta$ V)  
 Shock ..... 100 G (1 %  $\Delta$ TR; 1 %  $\Delta$ V)  
 Load Life  
 ..... 1,000 hours 0.5 watt @ 70 °C  
 (3 %  $\Delta$ TR; 3 % or 3 ohms,  
 whichever is greater, CRV)  
 Rotational Life ..... 200 cycles  
 (4 %  $\Delta$ TR; 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)  $\pm 10\%$   
 Flammability ..... U.L. 94V-0  
 Standard Packaging ..... 50 pcs. per tube  
 Adjustment Tool ..... H-90

### Product Dimensions



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

### Standard Resistance Table

Resistance (Ohms)	Resistance Code
<b>10</b>	<b>100</b>
<b>20</b>	<b>200</b>
<b>50</b>	<b>500</b>
<b>100</b>	<b>101</b>
<b>200</b>	<b>201</b>
<b>500</b>	<b>501</b>
<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>
<b>50,000</b>	<b>503</b>
<b>100,000</b>	<b>104</b>
<b>200,000</b>	<b>204</b>
<b>250,000</b>	<b>254</b>
<b>500,000</b>	<b>504</b>
<b>1,000,000</b>	<b>105</b>
<b>2,000,000</b>	<b>205</b>

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

### How To Order

Model **3299**  
 Style **W**  
 Standard or Modified Product Indicator **-1**  
 Product Indicator **-103**  
 Resistance Code **LF**

-1 = Standard Product

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

Consult factory for other available options.



**WARNING Cancer and Reproductive Harm**  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

REV. 11/16

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

\*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.

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