

## Features

- Multiturn / Cermet / Industrial / Sealed
  - Low temperature coefficient:  $\pm 100$  ppm/ $^{\circ}\text{C}$
  - Stable, infinite resolution cermet element
  - CRV 1.0 % or 1 ohm
  - Panel mount option available
  - RoHS compliant\* version available
- For trimmer applications/processing guidelines, [click here](#)

## 3009 - 3/4 " Rectangular 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  
 ..... 1.0 % or 2 ohms max.  
 (whichever is greater)  
 Contact Resistance Variation  
 ..... 1.0 % or 1 ohm max.  
 (whichever is greater)  
 Adjustability  
 Voltage .....  $\pm 0.01$  %  
 Resistance .....  $\pm 0.05$  %  
 Resolution ..... Infinite  
 Insulation Resistance ..... 500 vdc  
 100 megohms min.

### Dielectric Strength

Sea Level ..... 1,000 vac  
 80,000 Feet ..... 250 vac  
 Adjustment Angle ..... 15 turns nom.

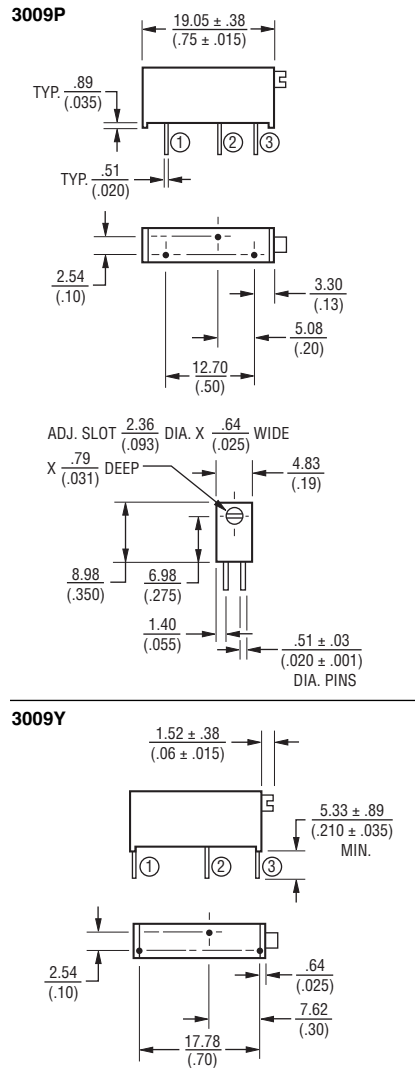
### Environmental Characteristics

Power Rating (400 volts max.)  
 70  $^{\circ}\text{C}$  ..... 0.75 watt  
 150  $^{\circ}\text{C}$  ..... 0 watt  
 Temperature Range ..... -55  $^{\circ}\text{C}$  to +125  $^{\circ}\text{C}$   
 Temperature Coefficient  
 .....  $\pm 100$  ppm/ $^{\circ}\text{C}$   
 Seal Test ..... 85  $^{\circ}\text{C}$  Fluorinert†  
 Humidity ..... MIL-STD-202 Method 103  
 96 hours  
 (3 %  $\Delta\text{TR}$ , 20 megohms IR)  
 Vibration ..... 20 G (2 %  $\Delta\text{TR}$ ; 2 %  $\Delta\text{VR}$ )  
 Shock ..... 50 G (2 %  $\Delta\text{TR}$ ; 2 %  $\Delta\text{VR}$ )  
 Load Life  
 ..... 1,000 hours, 0.75 watt @ 70  $^{\circ}\text{C}$   
 (4 %  $\Delta\text{TR}$ )  
 Rotational Life ..... 200 cycles  
 (3 %  $\Delta\text{TR}$ ; 1 % or 1 ohm,  
 whichever is greater, CRV)

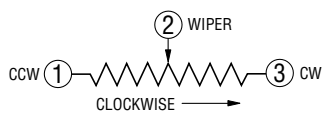
### Physical Characteristics

Torque ..... 5.0 oz-in. max.  
 Mechanical Stops ..... Wiper idles  
 Terminals ..... Solderable pins  
 Weight ..... 0.05 oz.  
 Marking ..... Manufacturer's  
 trademark, resistance code,  
 terminal numbers, date code,  
 manufacturer's model number  
 and style  
 Standard Packaging ..... 25 pcs. per tube

### Product Dimensions



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



### 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

### How To Order

**3009 P - 1 - 103 Z LF**

Model \_\_\_\_\_  
 Style \_\_\_\_\_  
 Standard or Modified  
 Product Indicator \_\_\_\_\_  
 -1 = Standard Product  
 -11 = 5 % Resistance Tolerance  
 Resistance Code \_\_\_\_\_  
 Optional Suffix Letter \_\_\_\_\_  
 Z = Panel Mount (Factory Installed)  
 Terminations \_\_\_\_\_  
 LF = 100 % Tin-plated (RoHS compliant)  
 Blank = 90 % Tin / 10 % Lead-plated  
 (Standard)  
 Consult factory for other available options.

REV. 04/14

\*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.  
 "Trimpot" is a registered trademark of Bourns, Inc.  
 †"Fluorinert" is a registered trademark of 3M Co.  
 Specifications are subject to change without notice.  
 The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.  
 Users should verify actual device performance in their specific applications.