

## 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

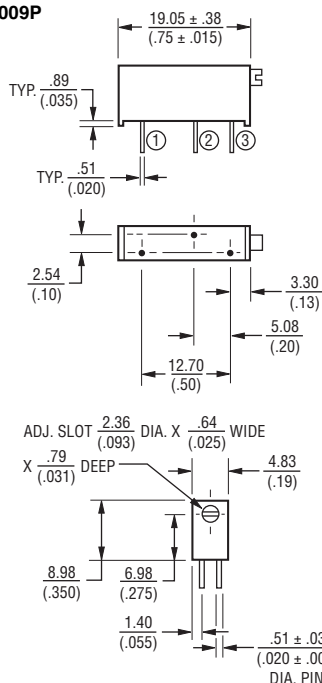
Power Rating (400 volts max.)	
70 $^{\circ}\text{C}$	0.75 watt
150 $^{\circ}\text{C}$	0 watt
Temperature Range	-55 $^{\circ}\text{C}$ to +125 $^{\circ}\text{C}$
Temperature Coefficient	
	$\pm 100$ ppm/ $^{\circ}\text{C}$
Seal Test	85 $^{\circ}\text{C}$ Fluorinert†
Humidity	MIL-STD-202 Method 103
	96 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

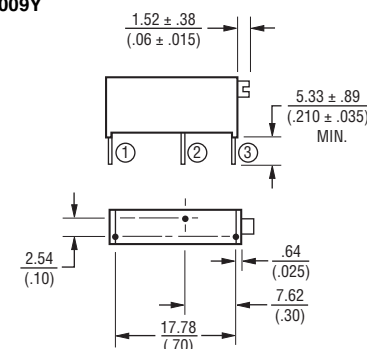
Torque	5.0 oz-in. max.
Mechanical Stops	Wiper idles
Terminals	Solderable pins
Weight	0.05 oz.
Marking	Manufacturer's
	trademark, resistance code,
	terminal numbers, date code,
	manufacturer's model number
	and style
Standard Packaging	25 pcs. per tube

### Product Dimensions

#### 3009P

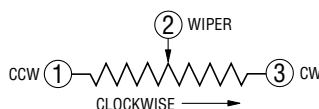


#### 3009Y



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

Model 3009 P - 1 - 103 Z LF

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.

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

## Bourns:

[3009P-1-105Z](#) [3009P-1-103Z](#) [3009Y-1-253](#) [3009Y-1-202](#) [3009Y-1-204](#) [3009Y-1-200](#) [3009Y-1-205](#) [3009Y-1-201](#)  
[3009Y-1-203](#) [3009P-1-403](#) [3009P-1-502](#) [3009P-1-501](#) [3009P-1-500](#) [3009P-1-503](#) [3009P-1-504](#) [3009Y-1-501](#)  
[3009Y-1-502](#) [3009Y-1-500](#) [3009Y-1-503](#) [3009Y-1-504](#) [3009Y-1-101](#) [3009Y-1-105](#) [3009Y-1-103](#) [3009Y-1-102](#)  
[3009Y-1-104](#) [3009Y-1-100](#) [3009P-1-501Z](#) [3009P-1-154](#) [3009P-1-102](#) [3009P-1-104](#) [3009P-1-105](#) [3009P-1-100](#)  
[3009P-1-103](#) [3009P-1-101](#) [3009P-1-253Z](#) [3009P-1-303](#) [3009P-1-753](#) [3009P-1-101LF](#) [3009P-1-102LF](#) [3009P-1-](#)  
[103LF](#) [3009P-1-104LF](#) [3009P-1-105LF](#) [3009P-1-201LF](#) [3009P-1-202LF](#) [3009P-1-203LF](#) [3009P-1-204LF](#) [3009P-1-](#)  
[254LF](#) [3009P-1-501LF](#) [3009P-1-501ZLF](#) [3009P-1-502LF](#) [3009P-1-503LF](#) [3009P-1-504LF](#) [3009Y-1-102LF](#) [3009Y-1-](#)  
[103LF](#) [3009Y-1-104LF](#) [3009Y-1-202LF](#) [3009Y-1-203LF](#) [3009Y-1-502LF](#) [3009Y-1-503LF](#) [3009P-1-203Z](#) [3009P-1-](#)  
[100LF](#) [3009P-1-100ZLF](#) [3009P-1-103ZLF](#) [3009P-1-105ZLF](#) [3009P-1-154LF](#) [3009P-1-200LF](#) [3009P-1-203ZLF](#)  
[3009P-1-205LF](#) [3009P-1-253LF](#) [3009P-1-253ZLF](#) [3009P-1-303LF](#) [3009P-1-403LF](#) [3009P-1-500LF](#) [3009P-1-753LF](#)  
[3009Y-1-100LF](#) [3009Y-1-101LF](#) [3009Y-1-103ZLF](#) [3009Y-1-105LF](#) [3009Y-1-200LF](#) [3009Y-1-201LF](#) [3009Y-1-204LF](#)  
[3009Y-1-205LF](#) [3009Y-1-253LF](#) [3009Y-1-500LF](#) [3009Y-1-501LF](#) [3009Y-1-504LF](#) [3009Y-1-10KLF](#) [3009P-1-253](#)  
[3009P-1-201](#) [3009P-1-204](#) [3009P-1-205](#) [3009P-1-200](#) [3009P-1-202](#) [3009P-1-203](#) [3009P-1-254](#) [3009Y-1-103Z](#)  
[3009P-1-100Z](#)