

## Features

- 1-1/4" Rectangular / Multiturn Cermet / Industrial / Sealed
- Panel mount option available
- Listed on the QPL for style RJ12 per MIL-PRF-22097
- RoHS compliant\* version available

# 3059 - Timpot® 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 1 ohm 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 ..... 22 turns nom.

## Environmental Characteristics

Power Rating @ 70 °C (400 volts max.) ..... 1.0 watt  
 Power Rating @ 150 °C ..... 0 watt  
 Temperature Range ..... -55 °C to +150 °C  
 Temperature Coefficient ..... ±100 ppm/°C  
 Seal Test ..... 85 °C Fluorinert†  
 (pin styles only)  
 Humidity ..... MIL-STD-202 Method 106  
 (2 % ΔTR, 10 Megohms IR)  
 Vibration ..... 20 G (1 % ΔTR; 1 % ΔVR)  
 Shock ..... 50 G (1 % ΔTR; 1 % ΔVR)  
 Load Life .1,000 hours 1.0 watt @ 70 °C  
 (3 % ΔTR; 1 % or 1 ohms, whichever is greater, CRV)  
 Rotational Life ..... 200 cycles  
 (2 % ΔTR; 1 % or 1 ohm, whichever is greater, CRV)

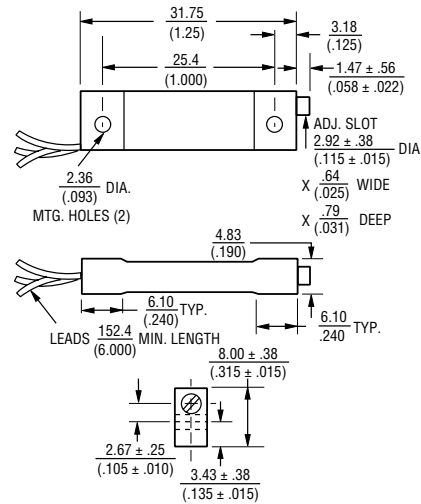
## Physical Characteristics

Torque ..... 5.0 oz-in. max.  
 Mechanical Stops ..... Wiper idles  
 Terminals ..... Solderable printed circuit pins  
 Flexible leads ..... (7 strands of 30 AWG)  
 Weight ..... 0.1 oz.  
 Marking ..... Manufacturer's trademark, resistance code, terminal numbers, date code, manufacturer's model number and style  
 Wiper ..... 50 % (Actual TR) ±10 %  
 Flammability ..... U.L. 94V-0  
 Standard Packaging  
 P&Y Styles ..... 10 pcs. per tube  
 L&J Styles ..... 25 pcs. per bag  
 Adjustment Tool ..... H-90

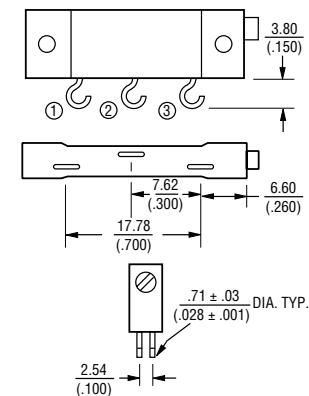
## Product Dimensions

### 3059L

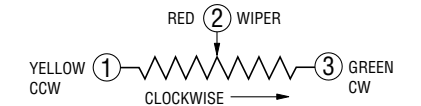
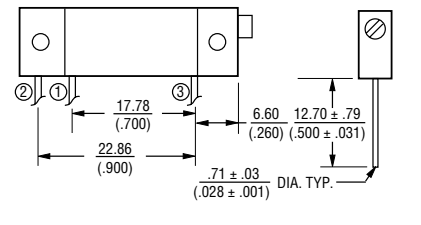
#### Common Dimensions



### 3059J



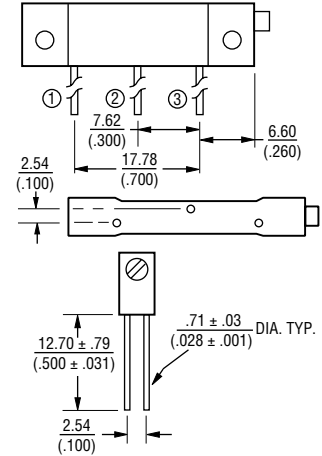
### 3059P



TOLERANCES: ± 0.25 (.010) EXCEPT WHERE NOTED

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

### 3059Y



## Standard Resistance Table

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

Popular values listed in boldface. Special resistances available.

## How To Order

**3059 L - 1 - 103 M LF**

Model \_\_\_\_\_  
 Style \_\_\_\_\_  
 Standard or Modified Product Indicator  
 -1 = Standard Product  
 Resistance Code \_\_\_\_\_  
 Optional Suffix Letter \_\_\_\_\_  
 M = Panel Mount (Factory Installed)  
 Terminations \_\_\_\_\_  
 LF = 100 % Tin-plated (RoHS compliant)  
 Blank = 90 % Tin / 10 % Lead-plated (Standard)

\*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.