

## Features

- Compact
- Lightweight
- Long life
- Infinite resolution
- Free shaft rotation
- AC or DC
- Shaft options available
- Flexible wire leads
- Economical
- RoHS compliant†

# 3048 Linear Motion Potentiometer

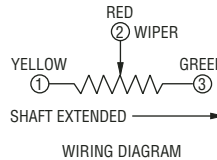
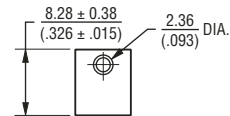
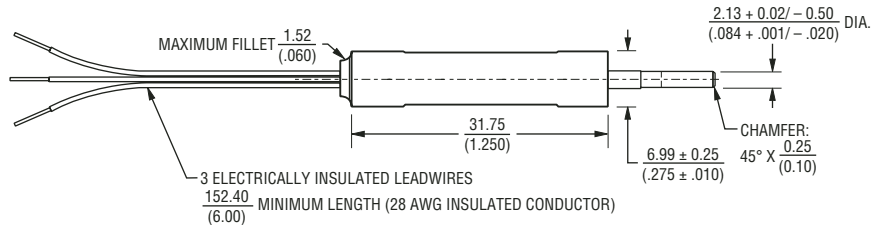
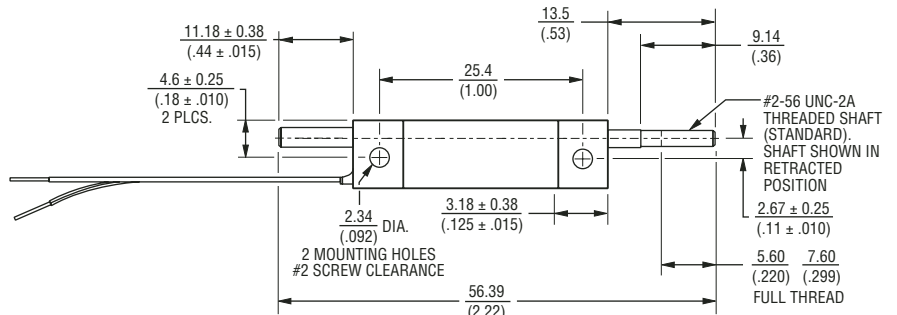
## Specifications\*

Standard Electrical Travel	0.2, 0.3, 0.4, 0.5 in. (5.08, 7.62, 10.16, 12.70 mm)
Standard Resistances	1K ohms to 50K ohms (± 20%)
Independent Linearity	± 5%
Resolution	Infinite
Power Rating @ 70 °C (158 °F)	
Range 2, 3	0.12 watt
Range 4, 5	0.25 watt
Operating Temperature Range	-55 °C to +125 °C
Temperature Coefficient	1000 PPM/°C
Insulation Resistance	50 megohms @ 500 VDC
Backlash	Negligible
Shaft Actuating Force	4 oz. max. @ 70 °F
Life	500,000 cycles
Shock	50 G for 7msec
Vibration	20 G, 10-2 kHz
Marking	Manufacturer's trademark, resistance code, wiring diagram, date code, manufacturer's model number and style

Specifications are typical. Contact factory for special requirements.

\*Specifications applicable from 5 % to 95 % of electrical travel.

## Product Dimensions



TOLERANCES: ±  $\frac{.010}{(0.25)}$  EXCEPT WHERE NOTED

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

## How to Order

Model	3048 L - 2 - 502
Style	
Range (Travel)	
2 = 0.2 " (5.08 mm)	
3 = 0.3 " (7.62 mm)	
4 = 0.4 " (10.16 mm)	
5 = 0.5 " (12.70 mm)	
Resistance Value	

## Standard Resistance Table

Resistance (Ohms)	Resistance Code
1,000	102
2,500	252
5,000	502
10,000	103
20,000	203
50,000	503


REV. 09/04

†RoHS Directive 2002/95/EC Jan 27 2003 including Annex. Specifications are subject to change without notice. Customers should verify device performance in their specific applications.

# MATERIAL DATA SHEET



Reliable Electronic Solutions

Material #		3048 series					
Product Line		Trimmer					
Date		8/25/2004					
RoHS Compliant		Yes					
No.	Construction element	Material group	Material weight [g]	Materials	CAS if applicable	Average mass [%]	Sum [%]
1	Contact Spring	Ni/Ag	0.0024	Nickel	7440-02-0	0.05	0.35
			0.0096	Copper	7440-50-8	0.20	
			0.0048	Zinc	7440-66-6	0.10	
2	Housing	PBT	1.683	Poly (Butylene terephthalate)	30965-26-5	34.84	34.84
			Trace	Antimony Trioxide	1309-64-4		
			Trace	Tetrabromobisphenol A Polymer			
3	Post	Nylon	0.0171	Polyhexamethylene adipamide	32131-17-2	0.36	0.36
4	Potting	Epoxy	0.2983	DGEBA(Diglycidyl Ether Bisphenol A Epoxy)	25068-38-6	6.17	6.17
			Trace	Antimony Trioxide (flame retardant)	1309-64-4		
5	Shaft	Brass	1.90	Brass with Nickel plate		39.33	39.33
6	Element	Ceramic	0.3515	Alumina	1344-28-1	7.28	7.28
7	Resistor/Conductor	Conductive Plastic Ink	0.0125	Resin A		0.26	0.38
			0.006	Resin B		0.12	
8	Pins	Copper with Silver plate; Teflon covered	0.546	Copper	7440-50-8	11.30	11.30
				Silver	7440-22-4		
Total weight			4.831				