

**MODEL 7246**  
**7/8" Diameter**  
**10-Turn**  
**Wirewound**  
**Precision Potentiometer**



**2**

**ELECTRICAL**

Resistance Range, Ohms	10 to 125K
Standard Resistance Tolerance	±5%
Minimum Practical Resistance Tolerance	±3%
Independent Linearity	±0.25%
Minimum Practical Independent Linearity	±0.25%, <100 Ohms ±0.15%, ≥ 100 Ohms
Power Rating, Watts	2.0 at 25°C derating to 0 at 85°C
Dielectric Strength	1,000V rms
Insulation Resistance, Minimum	1,000 Megohms
Noise, Maximum	100 Ohms
Actual Electrical Travel	3600° + 10° - 0°
Tap Tolerance	±5°, ≤20 Ohms ±3°, 21-50 Ohms ±2°, >50 Ohms
End Voltage, Maximum (% of input voltage)	0.5%, <100 Ohms 0.25%, ≥100 Ohms

**ENVIRONMENTAL (MIL-R-12934)**

Operating Temperature Range	-25°C to +85°C
Temperature Cycling	5 cycles, -25°C to +85°C (10% ΔR)
Shock, 6ms Sawtooth	50G's (0.1ms discontinuity max.)
Vibration	10G's, 10 to 500 Hz (2% ΔR, 0.1ms discontinuity max.)
Moisture Resistance	Five 24 hour cycles (25% ΔR)
High Temperature Exposure	Mechanical Operation at 85°C (0.5% ΔR)
Rotational Load Life	1 mil. shaft rev. (10% ΔR)

Specifications subject to change without notice.  
 Available in a Hybrid version – contact factory for details.

**MECHANICAL**

Total Mechanical Travel	3600° + 10° - 0°
Number of Gangs, Maximum	1
Weight, Nominal	1.25 oz.
Static Stop Strength	60 oz.-in.
Backlash, Maximum	2°
Panel Nut Tightening Torque, Maximum	25 lb.-in.
Shaft End Play, Maximum	.015"
Shaft Radial Play, Maximum	.005"
Start/Run Torque, Maximum	0.8 / 0.6 oz.-in.

**STANDARD RESISTANCE VALUES, OHMS**

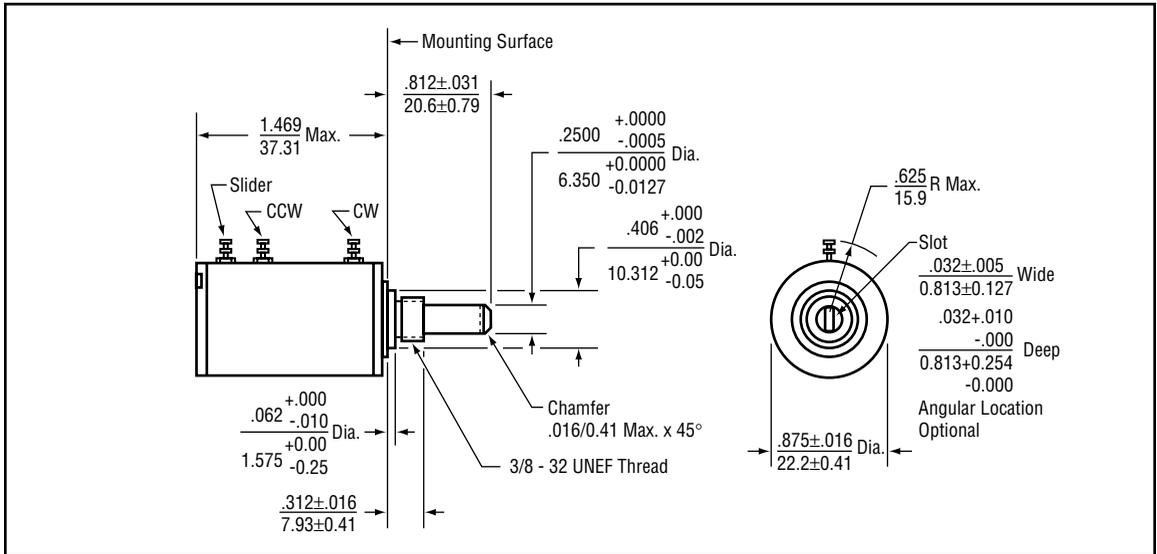
Total Resistance	Theoretical Resolution (% Nominal)	Tempco of Wire
10	0.083	+ 800 ppm/°C *
50	0.048	+ 800 ppm/°C *
100	0.040	+ 800 ppm/°C *
200	0.033	+ 800 ppm/°C *
500	0.031	±20 ppm/°C
1K	0.028	±20 ppm/°C
2K	0.025	±20 ppm/°C
5K	0.020	±130 ppm/°C *
10K	0.018	±130 ppm/°C *
20K	0.016	±130 ppm/°C *
50K	0.012	±20 ppm/°C
100K	0.011	±20 ppm/°C

\* Lower tempco available as a special model.

**SPECIAL FEATURES**

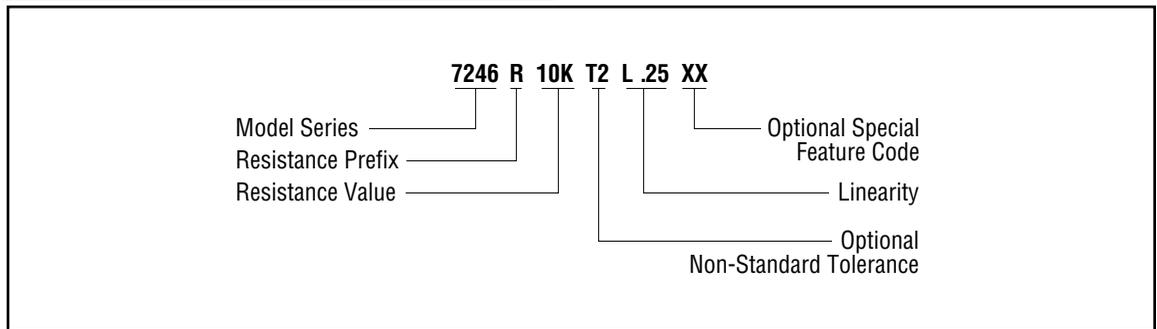
Center Tap	CT
Linearity Tape	LT
Flatted Shaft	FS
Shaft Lock	SL

## OUTLINE DIMENSIONS (Inch/mm)



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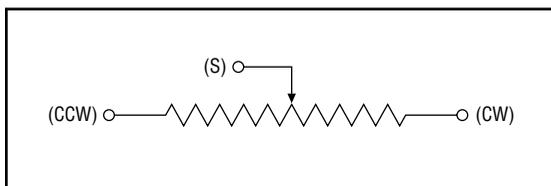
## ORDERING INFORMATION



## MATCHING TURNS COUNTING DIALS

2606, 2606S, 2607, 2607S, 2626, 2627, 2646, 2646S, 2647, 2647S, 2126, RB

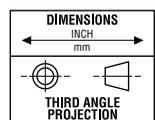
## CIRCUIT DIAGRAM



## NOTES

Metric equivalents, based on 1 inch = 25.4mm are rounded to the same number of significant figures as in the original English units and are provided for general information only.

Tolerances unless otherwise specified:  
 Linear = ± .01 inches  
 (.25mm)  
 Angular = ± 2 degrees



# Mouser Electronics

Authorized Distributor

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