



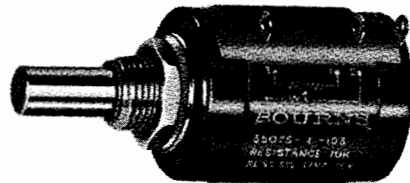
Model 3507
 7/8" Diameter, 10-Turn Bushing Mount
 Wirewound Element

OBSOLETE 1983

FEATURES

- Space-saving housing depth 1 1/8 inch.
- SILVERWELD® termination eliminates vulnerable single-wire termination.
- Special rotor and slider design assures excellent wiper stability.
- Individual inspection of each potentiometer to guaranteed electrical and physical specifications.
- High performance at low cost.

Actual Size



STANDARD RESISTANCES

Resistance (Ohms)	Part Number*	Resolution (Percent)
50	3507S-1-500	0.044
100	3507S-1-101	0.056
200	3507S-1-201	0.043
500	3507S-1-501	0.033
1,000	3507S-1-102	0.029
2,000	3507S-1-202	0.023
5,000	3507S-1-502	0.019

* The last three digits of the part number represent the resistance value in standard code.

Resistance (Ohms)	Part Number*	Resolution (Percent)
10,000	3507S-1-103	0.019
20,000	3507S-1-203	0.017
30,000	3507S-1-303	0.016
50,000	3507S-1-503	0.012
100,000	3507S-1-104	0.010
250,000	3507S-1-254	0.006

.032 WIDE AND .032 DEEP SHAFT SLOT AVAILABLE AS PART NUMBER 3507S-3-(RC)

BOURNS® Potentiometer Model 3507

STANDARD SPECIFICATIONS

ELECTRICAL CHARACTERISTICS

Resistance Range	50 to 250,000 ohms
Resistance Tolerance*	±5%
Linearity (Independent)*	±.25% maximum
Resolution	See standard resistance table
Effective Electrical Angle*	3600° (+10°, -2°)
Absolute Minimum Resistance*	1Ω or .25%, whichever is greater
Noise*	100Ω maximum
Power Rating	
25°C	2.0 watts
105°C	0 watt
Dielectric Strength	MIL-R-12934
Sea Level	1,000 volts AC minimum
70,000 feet	250 volts AC minimum
Insulation Resistance, 500 volts DC*	1,000 megohms minimum

ENVIRONMENTAL CHARACTERISTICS

Operating Temperature Range	-55° to +105°C
Temperature Coefficient of Wire	20 ppm/°C maximum
Humidity	MIL-R-12934
Vibration	MIL-R-12934, 10Gs
Wiper Bounce	0.1 millisecond maximum
Wiper Shift	1.0% maximum

Shock	MIL-R-12934, 50Gs
Wiper Bounce and Wiper Shift	Same as vibration
Load Life	MIL-R-12934, 4.6.20.2, 1,000 hours
Resistance Shift	2.0% maximum
Sand and Dust	MIL-E-5272
Fungus	MIL-E-5272
Salt Spray	MIL-R-12934

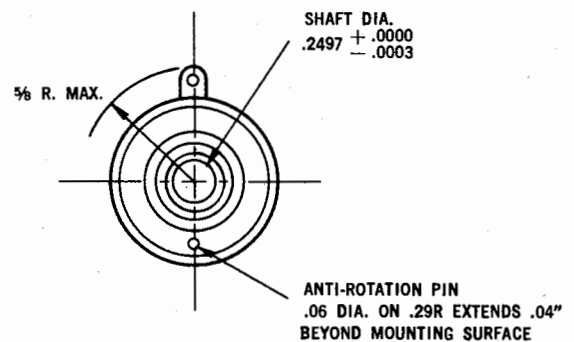
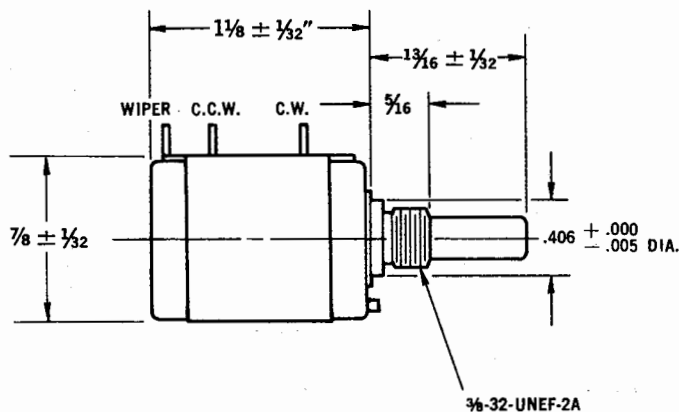
MECHANICAL AND PHYSICAL CHARACTERISTICS

Mechanical Angle*	3600° (+10°, -0°)
Rotational Life	200,000 shaft revolutions
Stop Strength	48 oz.-in. minimum
Torque*	
Running	2.0 oz.-in. maximum
Weight	Approximately 1.0 oz.
Terminals	Gold plated solder lugs
Markings*	Manufacturer's name and part number, resistance value and tolerance, linearity tolerance, wiring diagram, and date code.

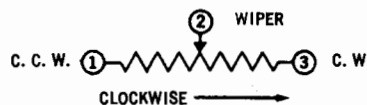
NOTES

* 100% or statistical sample inspection performed to insure highest quality. Specifications are subject to change without notice.

3507



TOLERANCES: UNLESS OTHERWISE SPECIFIED
 DECIMAL .XX ± .010 .XXX ± .005
 FRACTION: ± 1/32



NOTE:
 LOCKWASHER AND HEX NUT
 SUPPLIED WITH EACH UNIT



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