


BOURNS
INC
TRIMPOT® Potentiometer**Model 3052**
**Infinite Resolution, High Temp., Humidity-Proof
Cermet Element**
OBSOLETE
FEATURES

- Meets or exceeds all requirements of MIL-R-22097 Characteristic C — Style RJ12.
- Stable infinite resolution BOURNS® cermet element.
- Complete resistance range: 10 to 2,000,000 ohms.
- High operating temperature (175°C).
- High power dissipation 1.0 watt at 70°C.
- Low temperature coefficient.
- Excellent shock and vibration stability.
- Wiper assembly idles at both ends of travel preventing damage from forced adjustments.
- Outstanding Mil Spec humidity performance.

Actual Size



3052L



3052S



3052P



3052Y



PANEL MOUNT MODEL 3052 ①

STANDARD RESISTANCES

Resistance (Ohms)	Part Numbers*			
	3052L Stranded Insulated Lead Wires	3052S Gold Plated Solder Lugs	3052P Gold Plated Printed Circuit Pins	3052Y Gold Plated Printed Circuit Pins
10	3052L-1-100	3052S-1-100	3052P-1-100	3052Y-1-100
20	3052L-1-200	3052S-1-200	3052P-1-200	3052Y-1-200
50	3052L-1-500	3052S-1-500	3052P-1-500	3052Y-1-500
100	3052L-1-101	3052S-1-101	3052P-1-101	3052Y-1-101
200	3052L-1-201	3052S-1-201	3052P-1-201	3052Y-1-201
500	3052L-1-501	3052S-1-501	3052P-1-501	3052Y-1-501
1,000	3052L-1-102	3052S-1-102	3052P-1-102	3052Y-1-102
2,000	3052L-1-202	3052S-1-202	3052P-1-202	3052Y-1-202
5,000	3052L-1-502	3052S-1-502	3052P-1-502	3052Y-1-502

SPECIAL RESISTANCES AVAILABLE FROM 10 TO 2,000,000 OHMS

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

Resistance (Ohms)	Part Numbers*			
	3052L Stranded Insulated Lead Wires	3052S Gold Plated Solder Lugs	3052P Gold Plated Printed Circuit Pins	3052Y Gold Plated Printed Circuit Pins
10,000	3052L-1-103	3052S-1-103	3052P-1-103	3052Y-1-103
20,000	3052L-1-203	3052S-1-203	3052P-1-203	3052Y-1-203
50,000	3052L-1-503	3052S-1-503	3052P-1-503	3052Y-1-503
100,000	3052L-1-104	3052S-1-104	3052P-1-104	3052Y-1-104
200,000	3052L-1-204	3052S-1-204	3052P-1-204	3052Y-1-204
500,000	3052L-1-504	3052S-1-504	3052P-1-504	3052Y-1-504
1,000,000	3052L-1-105	3052S-1-105	3052P-1-105	3052Y-1-105
2,000,000	3052L-1-205	3052S-1-205	3052P-1-205	3052Y-1-205

① When ordering Panel Mount Model, add "M" to part number. Example: 3052L-1-203M.

Model 3052 TRIMPOT® Potentiometer

SPECIFICATIONS

ELECTRICAL CHARACTERISTICS

Standard Resistance Range	10 to 2,000,000 ohms
Resistance Tolerance	±10% standard, closer tolerances available
Absolute Minimum Resistance	2 ohms maximum
Continuity	Maintained for full mechanical range
Insulation Resistance, 500 volts DC	1,000 megohms minimum
Contact Resistance Variation, Maximum	3Ω or 3.0%, whichever is greater

ENVIRONMENTAL CHARACTERISTICS

Power Ratings:	
70°C	1.0 watt or 500V maximum
125°C	0.5 watt or 500V maximum
175°C	0 watt
Operating Temperature Range	-65° to +175°C
Temperature Coefficient, Maximum	±100 ppm/°C all resistances
Humidity, MIL-R-22097	100 megohms minimum insulation resistance
Vibration	MIL-R-22097, 30Gs
Contact Bounce	0.1 millisecond maximum
Wiper Shift, Maximum	1.0% voltage ratio
Shock	MIL-R-22097, 100Gs
Contact Bounce and Wiper Shift	Same as vibration
Salt Spray	Materials meet MIL-R-22097

Load Life	1,000 hours per MIL-R-22097
Resistance Shift, Maximum	3.0%
Mechanical Life	200 cycles without discontinuity
Dielectric Strength	MIL-R-22097
Room Conditions	1,000 volts AC
80,000 feet (0.8" Hg)	400 volts AC

PHYSICAL CHARACTERISTICS

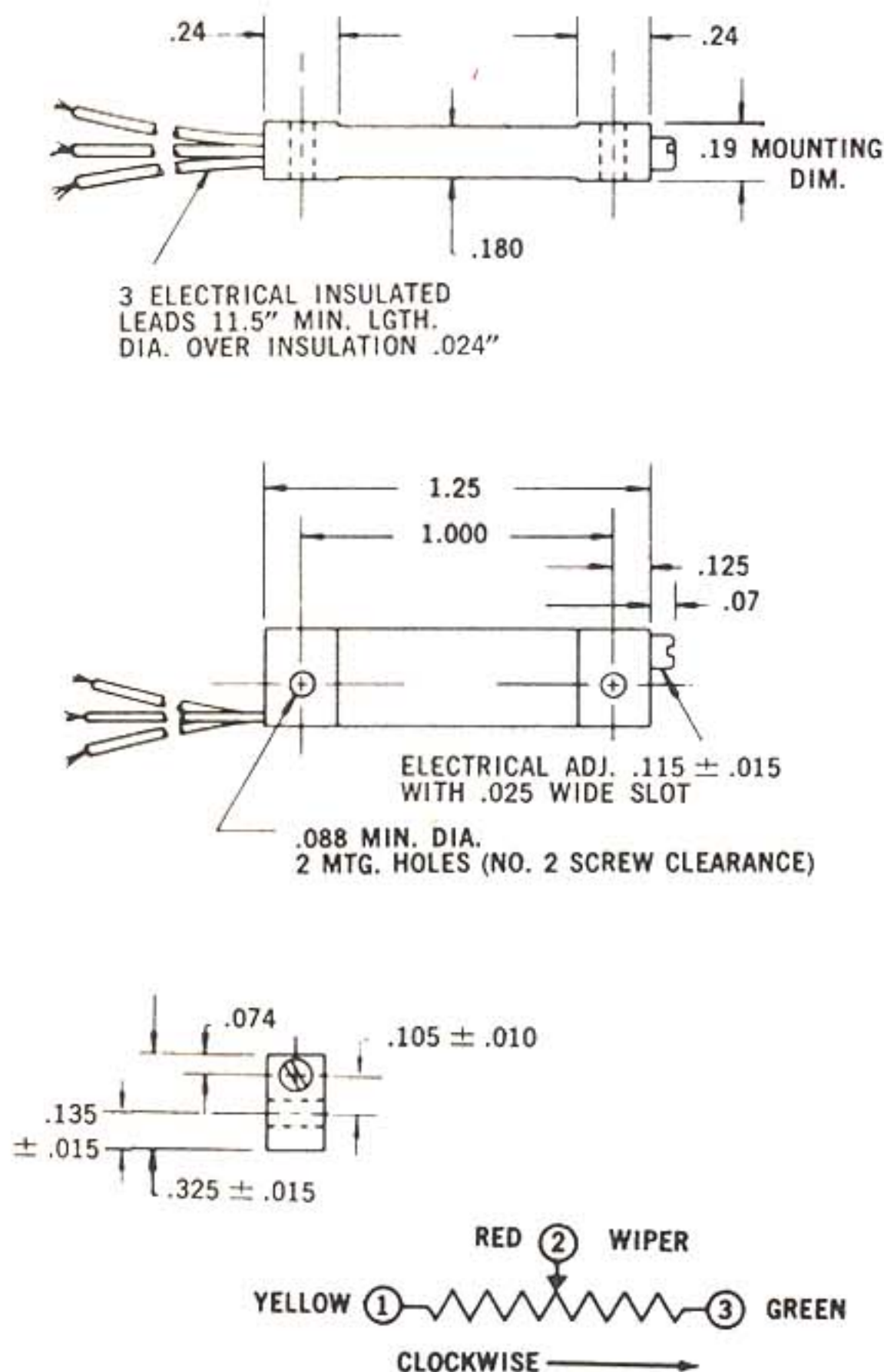
Immersion Leak Test	Per MIL-R-22097
Shaft Torque	5.0 oz.-in. maximum
Markings	Manufacturer's name, wiring diagram, date code, resistance and manufacturer's part number. (Customer's part number optional)
Appearance	Legible markings, no physical defects
Mechanical Adjustment	22 turns nominal
Mechanical Stops	Wiper assembly idles
Weight	Approximately 0.1 oz.

Terminals:

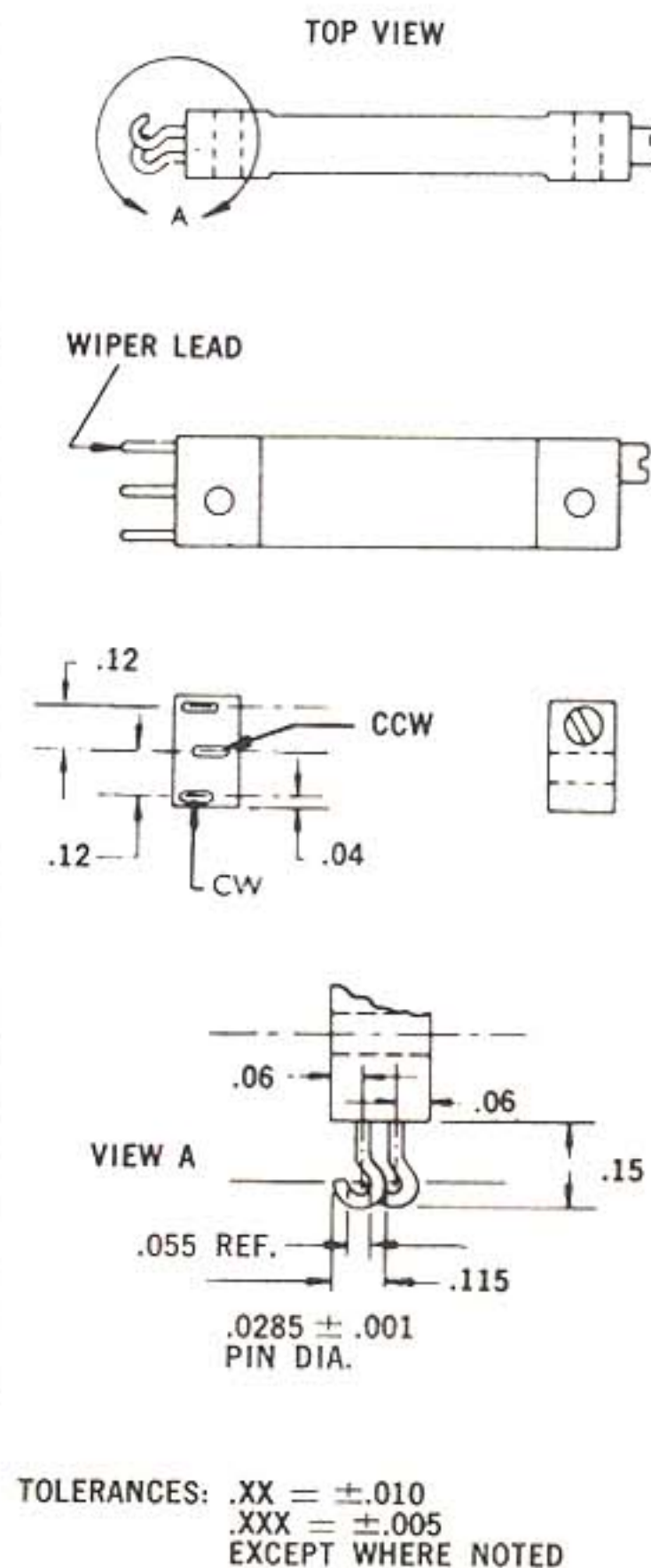
L	Teflon-insulated, stranded leads, 30 AWG (0.024 O.D.) 7 strands/38 AWG
S	Solderable solder lugs
P, Y	Solderable circuit pins

Specification Note: Closer performance tolerances can be supplied upon request. Specifications are subject to change without notice.

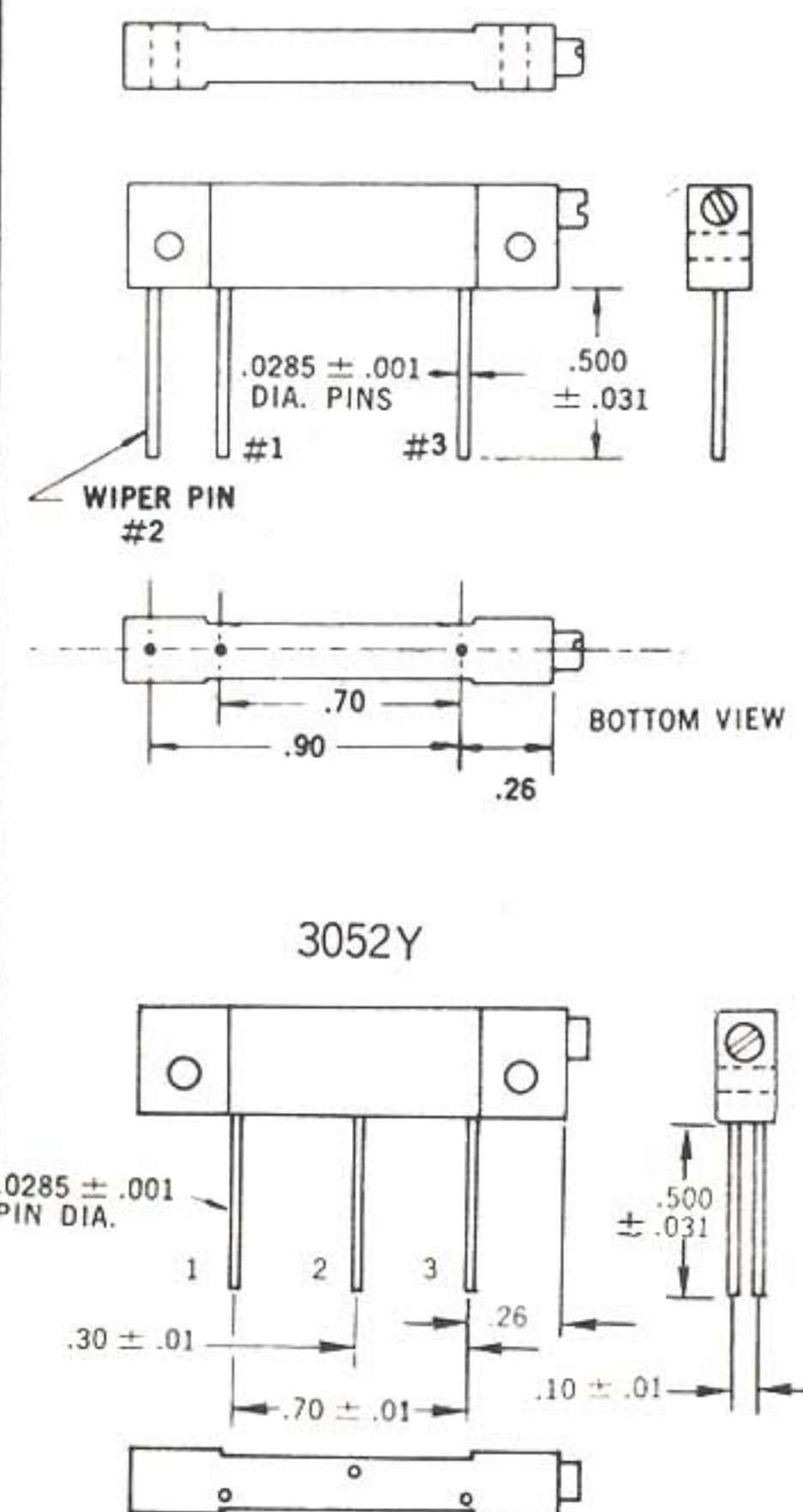
3052L



3052S



3052P



3052Y

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