



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

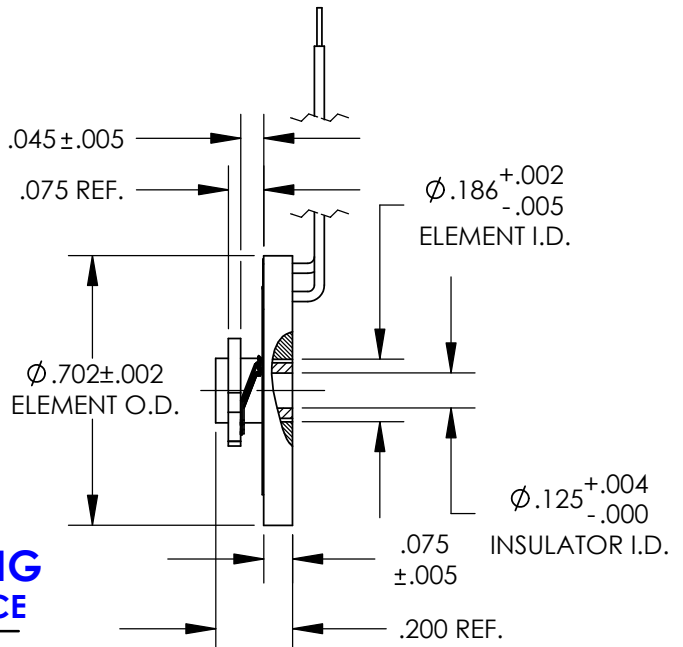
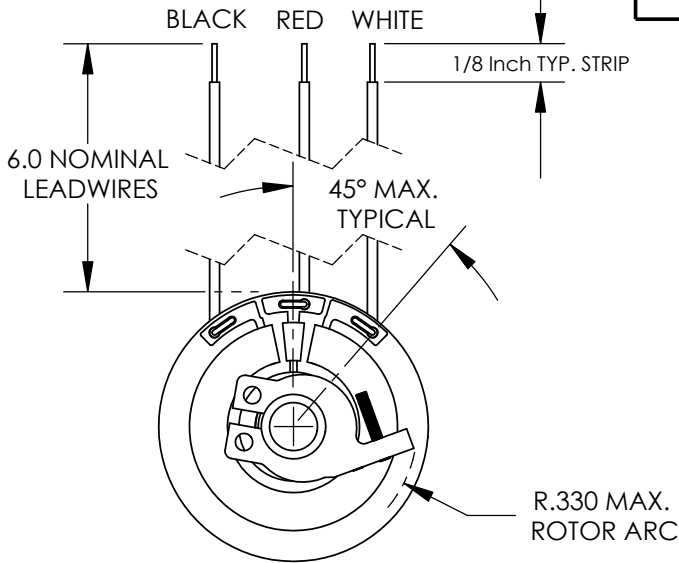
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





6909 Series

**7/8 In. Dia. POTENTIOMETER
ELEMENT ROTOR/WIPER KIT**



STANDARD PRODUCT OFFERING
SS&C PART NUMBER RESISTANCE

6909-1000-030	1KΩ ±10%
6909-1002-030	5KΩ ±10%
6909-1003-030	10KΩ ±10%

ELEMENT ONLY P/N 6909-1000-070
ELEMENT ONLY P/N 6909-1002-070
ELEMENT ONLY P/N 6909-1003-070

**STANDARD MODEL
ELECTRICAL CHARACTERISTICS**

RESISTANCE, 6909-1000-030:	1kΩ ±10%
6909-1002-030:	5kΩ ±10%
6909-1003-030:	10kΩ ±10%
ACTIVE ELECTRICAL ANGLE:	320°
ELECTRICAL CONTINUITY ANGLE:	330° MIN.
INDEPENDENT LINEARITY:	±0.5%
END VOLTAGE:	0.5% MAX.
VOLTAGE RESOLUTION:	VIRTUALLY INFINITE
OUTPUT SMOOTHNESS:	0.1% MAX.
RESISTANCE TEMP. COEFFICIENT:	400PPM/°C MAX.
POWER RATING @ 70°C:	1.0 WATT MAX.
WIPER CONTACT CURRENT:	10 MilliAmps MAX.

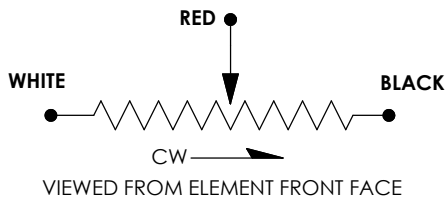
**STANDARD MODEL
MECHANICAL CHARACTERISTICS**

MECHANICAL ROTATION:	CONTINUOUS
TOTAL WEIGHT (ELEMENT ONLY):	0.75 Gm. MAX.
WIRE LEAD LENGTH:	6.0 Inches NOMINAL
ELEMENT OUTER DIAMETER:	0.702±.005 Inch
ELEMENT INNER DIAMETER:	0.186±.002/-0.005 Inch
ROTOR OPERATING RADIUS:	0.330 MAX.
STANDARD ROTOR PART No:	6909-0000-060
INSULATOR INSIDE DIAMETER:	0.127±.002 Inch
INSULATOR LENGTH:	0.200±.000/-0.005
STANDARD INSULATOR PART No:	7040-0005-015

**STANDARD
MATERIALS OF CONSTRUCTION**

RESISTANCE ELEMENT:	CO-MOLDED CONDUCTIVE PLASTIC
GRIP-RING ROTOR:	HEAT-TREATED BERYLLIUM COPPER
INSULATOR:	HIGH-TEMP. MOLDED PLASTIC
ELECTRICAL CONTACTS:	MULTI-FINGER PRECIOUS METAL DIRECTLY WELDED TO ROTOR
LEADWIRES:	#30 AWG TYPE ET STRANDED WIRE TEFLON INSULATED (250V)

SCHEMATIC DIAGRAM



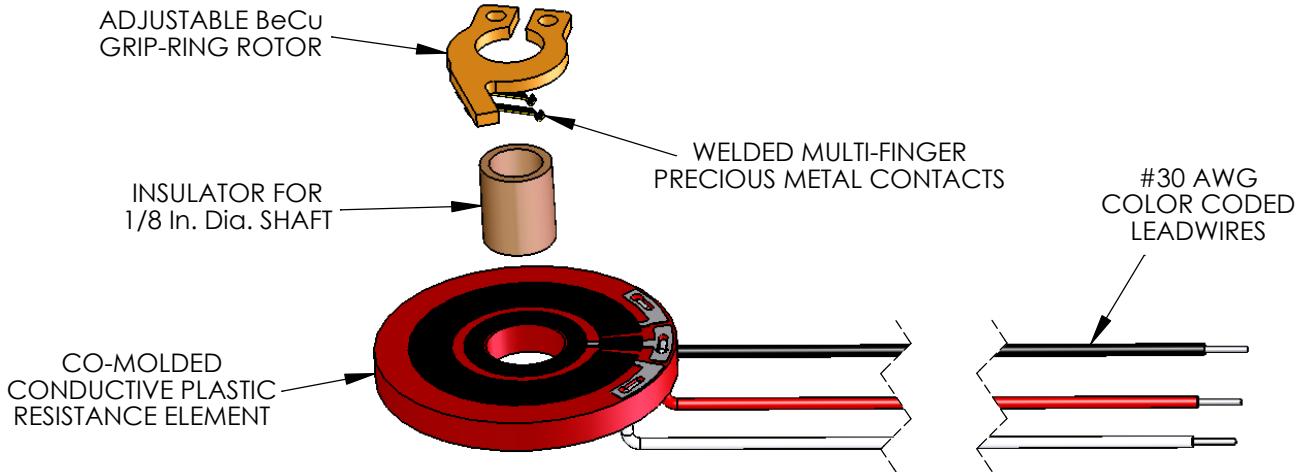
**STANDARD
ENVIRONMENTAL CHARACTERISTICS**

OPERATING TEMP. RANGE:	-65°C To +125°C
ROTATIONAL OPERATING LIFE:	100 x 10 ⁷ REVOLUTIONS MIN.

CONTACT:

SPECTRUM SENSORS & CONTROLS, INC.
 424 CROWN POINT CIRCLE, GRASS VALLEY, CA 95945
 (800) 880-7730 (530) 273-4608 FAX: (530) 273-0769
 E-MAIL: sales@specsensors.com

6909 Series
7/8 In. Dia. POTENTIOMETER
ELEMENT ROTOR/WIPER KIT

STANDARD ELECTRICAL CHARACTERISTICS

RESISTANCES ($\pm 10\%$):	1K Ω , 5K Ω , and 10k Ω
ACTIVE ELECTRICAL ANGLE:	320°
ELECTRICAL CONTINUITY ANGLE:	330° MIN.
INDEPENDENT LINEARITY:	$\pm 0.5\%$
END VOLTAGE:	0.5% MAX.
VOLTAGE RESOLUTION:	VIRTUALLY INFINITE
OUTPUT SMOOTHNESS:	0.1% MAX.
RESISTANCE TEMP. COEFFICIENT:	400PPM/°C MAX.
POWER RATING @ 70°C:	1.0 WATT MAX.
WIPER CONTACT CURRENT:	10 MilliAmps MAX.

STANDARD MECHANICAL CHARACTERISTICS

MECHANICAL ROTATION:	CONTINUOUS
TOTAL WEIGHT (ELEMENT):	0.75 Gm. MAX.
WIRE LEAD LENGTH:	6.0 Inches NOMINAL
ELEMENT OUTER DIAMETER:	0.702 \pm .005 Inch
ELEMENT INNER DIAMETER:	0.186 \pm .002/-0.005 Inch
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STANDARD ENVIRONMENTAL CHARACTERISTICS

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STANDARD MATERIALS OF CONSTRUCTION

RESISTANCE ELEMENT:	CO-MOLDED CONDUCTIVE PLASTIC
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AVAILABLE OPTIONS

- CUSTOM RESISTANCE VALUES (500 Ω TO 50k Ω) AND TOLERANCES AS LOW AS $\pm 5\%$
- SPECIAL LINEARITIES AS LOW AS 0.25%, ABSOLUTE (INDEXED) OR INDEPENDENT OVER SPECIFIED REGIONS.
- ADDITIONAL TAPS, CURRENT OR VOLTAGE
- SPECIAL ELECTRICAL ANGLES UP TO 350° MAX.
- SPECIAL WIRE LEADS OR CABLES
- SPECIAL TERMINATIONS OR CONNECTORS
- SPECIAL TRANSFER FUNCTIONS:
NON-LINEAR OUTPUTS
LOAD COMPENSATION
TRIG, LOG, AND EXPONENTIAL OUTPUTS
- SPECIAL ELEMENT DIMENSIONS OR FEATURES SUCH AS LOCATING NOTCHES, SCRIBE MARKS, CUSTOM SUBSTRATE SHAPES.
- CUSTOM ROTOR OR INSULATOR DIMENSIONS AND FEATURES.
- CUSTOM MARKING, IDENTIFICATION OR LOGO.
- SPECIAL ENVIRONMENTAL CAPABILITIES SUCH AS HIGH SHOCK AND VIBRATION.

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