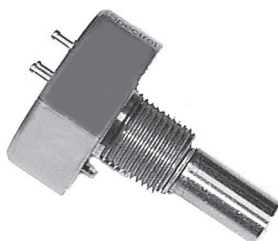


7/8" (19mm) Single Turn Wirewound, Cermet Precision Potentiometer



FEATURES

- Rugged, High-Quality, All Metal Housing
- Short Length Behind Panel (11/32")
- Choice of Two Elements for Broad Resistance Range- 5Ω to 2MΩ
- No Glued Joints
- Extra Taps AVAILABLE
- High Current Capacity, Parallel-Gap-Welded Terminations (152)

ELECTRICAL SPECIFICATIONS

PARAMETER		
Total Resistance (152) Standard Range	5Ω to 20KΩ Special to 40KΩ	
Tolerance	STANDARD	SPECIAL
50Ω and above:	± 3%	± 1%
Below 50Ω	± 5%	± 3%
159 Cermet Standard Range	500Ω to 2MΩ	
Tolerance	± 20%	± 5%
Linearity (Independent) (152) Total Resistance	STANDARD	BEST PRACTICAL
5Ω to 100Ω	± 1.0%	± 0.75%
100Ω to 500Ω	± 1.0%	± 0.50%
500Ω and above	± 0.5%	± 0.35%
(159) Standard	± 0.5%	± 0.25%
Noise	(152) 100Ω ENR	
Output Smoothness	(159) 0.1% maximum	
Power Rating (@ 40°C Ambient)	MODEL 152 2 watts Derated to zero at 125°C	MODEL 159 3.5 watts To zero at 150°C
Rotation	340° (152) ± 2° (159) ± 4°	
Insulation Resistance	1000MΩ minimum 500 VDC	
Dielectric Strength	1000V _{RMS} , 60Hz	
Absolute Minimum Resistance	Not to exceed linearity times total resistance or 0.5Ω whichever is greater (152 only)	
Minimum Voltage	0.5% max	
Temperature Coefficient of Resistance	MODEL 152 Refer to standard resistance element data	MODEL 159 ± 100 ppm/°C

ORDERING INFORMATION

The Models 152 and 159 can be ordered from this data sheet with a variety of alternate characteristics, as shown. For most rapid service on your order, please state:

152 or 159
MODEL

2
MOUNTING

1
NUMBER OF SECTIONS

XXX
RESISTANCE EIA CODE

1. Bushing
2. Servo

(Single Section Only)

Example: Model 152, Servo, 10K
Example - Model 159, Servo, 1MΩ

Example: **152, 159 - 2 - XXX**

Other characteristics will be standard as described on this data sheet. If special characteristics are required, such as: special linearity and resistance tolerance, special resistance tolerance, high torque, 1/8 shaft - 1/4 - 32 bushing, stops, non - linear functions, etc., state these on your order

Model 152, 159

Vishay Spectrol

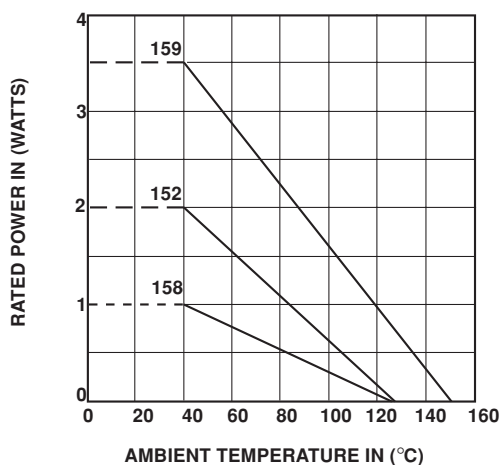
7/8" (19mm) Single Turn Wirewound,
Cermet Precision Potentiometer



MATERIAL SPECIFICATIONS	
Housing	Aluminum, anodized
Shaft	Stainless steel, non-magnetic non-passivated
Rear Lid	Molded glass filled phenolic
Terminals	Brass, plated for solderability
Bushing Mount Hardware Lockwasher Internal Tooth: Panel nut:	Steel, nickel plated Brass, nickel plated
MARKING	
Unit Identification	Units shall be marked with Spectrol name, model number, resistance and tolerance, linearity terminal identification and data code. Applicable test procedures: Model 152, MIL-R-12934; Model 159 MIL-R-39023

ENVIRONMENTAL SPECIFICATIONS	
Vibration	15g thru 2000Hz
Shock	50g
Salt Spray	96 hours
Rotational Life Shaft revolution:	Bushing Servo 152 1 million 2 million 159 2 million 5 million
Load Life	900 Hours
Operating Temperature Range	(152, 158) -55°C to +125°C (159) -55°C to +150°C

POWER RATING CHART



RESISTANCE ELEMENT DATA					
STANDARD RESISTANCE VALUES (Ω)	RESOLUTION (%)	OHMS PER TURN	MAXIMUM CURRENT AT 40°C AMBIENT (mA)	MAXIMUM VOLTAGE ACROSS COIL (V)	WIRE TEMP. COEF. (ppm/°C)
5	0.681	0.034	632	3.16	180
10	0.570	0.057	447	4.47	180
20	0.447	0.089	316	6.32	180
50	0.402	0.201	200	10.0	20
100	0.309	0.309	141	14.1	20
200	0.254	0.508	100	20.0	20
500	0.214	1.07	63.2	31.6	20
1K	0.210	2.10	44.7	44.7	20
2K	0.184	3.69	31.6	63.2	20
5K	0.130	6.50	20.0	100	20
10K	0.101	10.1	14.1	141	20
20K	0.081	16.2	10.0	200	20
30K	0.075	22.7	8.12	244	20
40K	0.063	25.2	7.07	283	20

This datasheet has been download from:

www.datasheetcatalog.com

Datasheets for electronics components.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Vishay:](#)

[152-0108](#)