

1 - 1/4" Rectangular Multi Turn Cermet



FEATURES

- Improved Wiper
- Unique "T" Slider Block Design Assure Excellent Setability and Stability
- CRV of 3% or 3Ω
- Tempco of 100 ppm/°C
- RT Tolerance ± 10% STD (± 5% Available)

ELECTRICAL SPECIFICATIONS	
PARAMETER	
Resistance Range	10Ω thru 2MΩ
Standard Resistance Tolerance	10% (para. 3.7.1)
End Resistance	2Ω maximum (para. 3.7.2)
Actual Effective Electrical Travel	20 turns nominal (para. 3.8)
Contact Resistance Variation	3% or 3Ω, whichever is greater (para. 3.9)
Dielectric Withstanding Voltage	1000 VAC at sea level, 350 VAC at 80,000 feet (para. 3.10) 24,400 meters
Insulation Resistance	1000MΩ (para. 3.11)
Power Rating	1.0 watt at 85°C derated linearly to zero watts at 150°C (para. 3.5) maximum voltage not to exceed 400 volts
Temperature coefficient of resistance	See table below ± 100 ppm/°C

MECHANICAL SPECIFICATIONS	
PARAMETER	
Stops	Wiper idles against stops (para. 3.4.7.1)
Operating Torque	5 oz-in (360 gm-cm) maximum (para. 3.12.1)
Rotational Life	200 cycles minimum with loaded circuit, maximum change in resistance 2%(para 3.23) or 500 cycles minimum without discontinuity unloaded
Weight	0.116 oz (3.3 grams) maximum

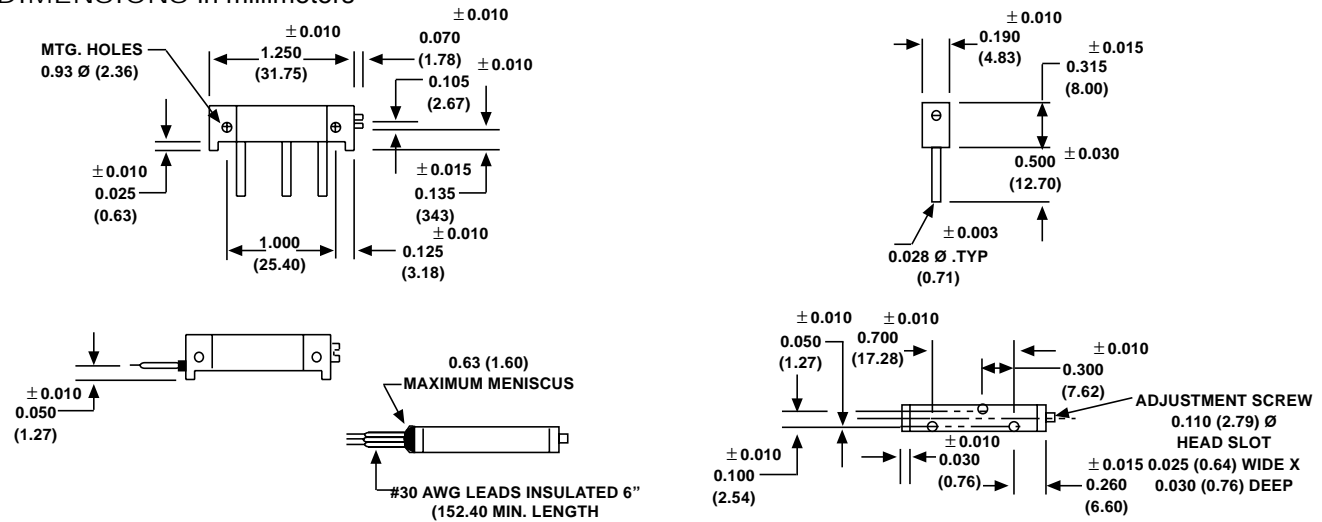
ORDERING INFORMATION			
The standard model number consists of three groups of digits. The first group is the Spectrol model number. The second group of one digit describes the type of electrical terminals. The third group is the standard EIA three digit resistance code. A fourth group is used if required to identify units that incorporate spec standard features.			
70 MODEL	L TERMINAL STYLE L = Leadwire Y = Printed circuit pins	103 EIA RESISTANCE CODE Number of zeros following second significant figure first significant figure	T000 SPECIFICATION T000 Standard per data sheet T601 Panel mount added to terminal style L T602 Solder hook pins (Style Y) T603 Panel mount added to solder hooks (Style Y) T634 Panel mount (10-32 thd.) cemented in place (Style L) T638 Panel mount (10-32 thd.) cemented in place added to solder hooks (Style Y)
Example: 70 - L - 103 - T000			

Model 70

Spectrol

1-1/4" Rectangular Multi Turn Cermet

DIMENSIONS in millimeters



ENVIRONMENTAL SPECIFICATIONS			
PARAMETER		MAXIMUM TOTAL RESISTANCE	CHANGE SETTING
Operating Temperature Range	- 55°C to + 150°C	-	-
Salt Spray	96 hours (para. 3.18)	-	-
Terminal Strength	2lbs (900gms) minimum push/pull (para. 3.24)	-	-
Sealed	All units sealed to permit cleaning in common solvents immersion	-	-
Thermal Shock	- 55°C to + 125°C (para. 3.13)	2%	1%
Shock	100gms 11ms (para 3.16)	1%	1%
Vibration	30gms 10 to 2000Hz (para. 3.17)	1%	1%
Load Life	1000 hours (para. 3.20)	3%	1%
Low Temperature Operation	- 55°C (para. 3.21)	2%	2%
High Temperature Exposure	+ 125°C (para. 3.22)	3%	2%
Resistance to Solder Heat	350°C for 3 seconds (para. 3.19)	1%	-

RESISTANCE AND TEMPCO VALUES	
RESISTANCE (Ω NOMINAL)	TEMPCO (%)
10	- 100 to + 200
20	- 100 to + 200
50	- 100 to + 200
100	± 100
200	± 100
500	± 100
1000	± 100
2000	± 100
5000	± 100
10000	± 100
20000	± 100
25000	± 100
50000	± 100
100000	± 100
200000	± 100
250000	± 100
500000	± 100
1 Meg	± 100
2 Meg	± 100

MARKING	
Unit Identification	Manufacturer's name and part number including EIA resistance code, date code, circuit diagram and military style designation as applicable