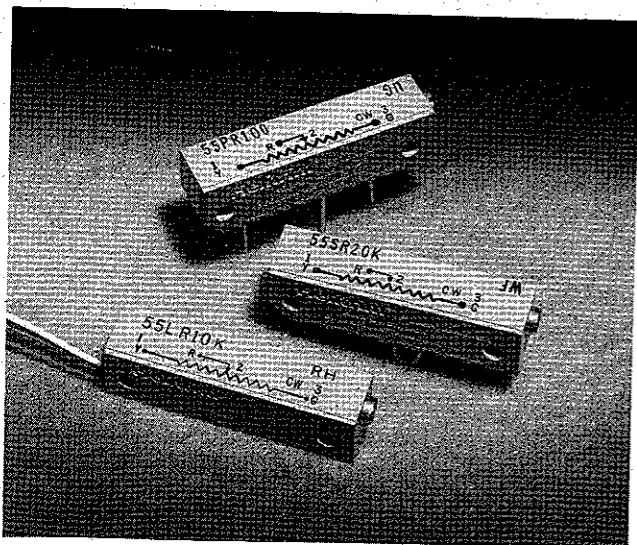


# Model 55 1-1/4" (31,750 mm) Rectangular 22-Turn Cermet

Available from: Distributor



Helitrim® Model 55 trimming potentiometers provide:

- Essentially infinite resolution.
- Voltage adjustability within 0.01%.
- Maximum operating temperature of 150°C.
- High performance and exceptional reliability.
- Rugged, cermet resistance element.
- One watt power rating at 85°C.
- 22 Adjustment turns.
- ±100 ppm/°C maximum unit tempco.

### SPECIFICATIONS

#### General

Ambient temperature range, °C	-65 to 150
Resistance element	cermet
Adjustment turns, nominal	22
Sealing	meets immersion test of MIL-R-22097
Tempco	±100 ppm/°C*
*Guaranteed maximum over the ambient temperature range of -65° to 150°C (100Ω to 2 megΩ)	

### Electrical

Range of std. resistance values, ohms	10 to 2M
Standard resistance tolerance	50Ω thru 2MΩ, ±10% other values, ±20%
Input voltage, maximum	400V DC/RMS but not to exceed power rating.
Slider current, maximum	100 mA or within power rating, whichever is less.
Power rating, watts	1.0 at 85°C, derating to 0 at 150°C
End resistance, maximum	1Ω
Actual electrical travel, turns	22 ±5
Dielectric strength	1,000V RMS
Insulation resistance	1,000MΩ
Resolution	essentially infinite
Contact resistance variation	3Ω or 3% of R <sub>i</sub> , whichever is greater.

### Mechanical

Stops	clutch action, both ends
Starting torque, maximum	8 oz-in. (0,056 N*m)
Weight, nominal	0.15 oz. (4,25 gm)
Terminal strength	2 lb. (0,91 kgm) pull & bend
Mounting screw torque, maximum	2 lb-in. (0,23 N*m)

### Standard Resistance Values, Ohms

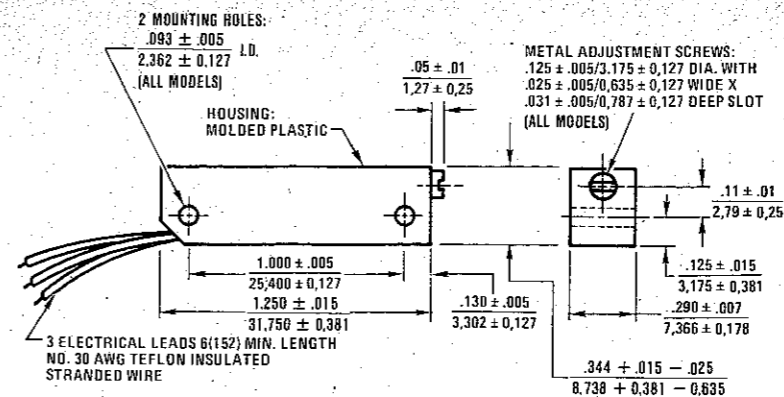
10	100	1K	10K	100K	1M
20	200	2K	20K	200K	2M
—	—	—	25K	250K	—
50	500	5K	50K	500K	—

### Environmental

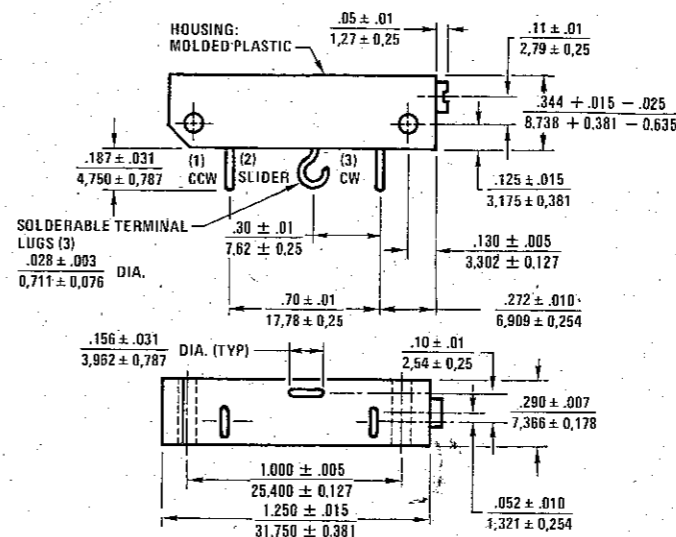
(Model 55 trimming potentiometers meet or exceed the following environmental requirements of MIL-R-22097.)

Environment (Para. No.)	Severity
Thermal shock (4.6.8)	-65° to 125°C
Moisture resistance (4.6.10)	10 days at 80-98% RH
Shock (4.6.11)	100 g's
Vibration (4.6.12)	20 g's; 10 to 2,000 Hz
Salt spray (4.6.13)	96 hrs.
Effects of soldering (4.6.14)	3 sec. at 350°C
Life, at 0.75 watt (4.6.15)	1,000 hrs. at 85°C
Low temp. operation (4.6.16)	-55°C
High temp. exposure (4.6.17)	250 hrs. at 150°C
Rotational life (4.6.18)	200 cycles
Solderability (4.6.20)	5 sec. at 230°C
Immersion (4.6.21)	85°C water
Dielectric strength (4.6.5.2)	70,000 ft. (21 336m); 350V

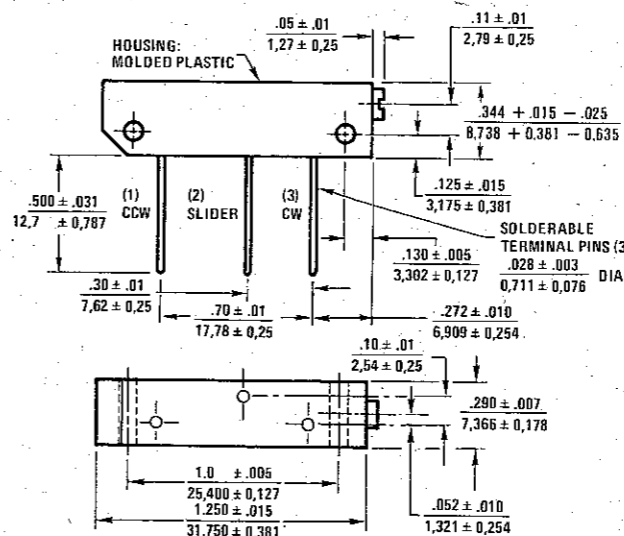
### MODEL 55L



### MODEL 55S



### MODEL 55P



FOR 56L, 58S  
PANEL MOUNT VERSIONS AVAILABLE  
SEE PAGE 5-45

### CIRCUIT DIAGRAM

