

Helitrim® Model 56 trimming potentiometers provide:

- Thin, 0.195" width housing.
- One watt power rating at 85°C.
- Voltage adjustability within 0.01%.
- Standard resistance values from 10 to 2 megohms.
- Sealing for protection under environmental stresses.
- Rugged cermet resistance element.
- ± 100 ppm/°C maximum unit tempco.
- 22 Adjustment turns.

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)		

Model 56 1-1/4" (31,750 mm) Rectangular 22-Turn Cermet

Electrical

Range of std. resistance values, ohms	.....	10 to 2M
Standard resistance tolerance	.....	50Ω thru 2MΩ, $\pm 10\%$ other values, $\pm 20\%$
Input voltage, maximum	.....	300V 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	.....	4Ω
Actual electrical travel, turns	.....	22 ± 5
Dielectric strength	.....	900V RMS
Insulation resistance	.....	1,000MΩ
Resolution	.....	essentially infinite
Contact resistance variation	.....	3Ω or 3% of R _t , whichever is greater.

Mechanical

Stops	.....	clutch action, both ends
Starting torque, maximum	.....	5 oz-in. (0,035 N*m)
Weight, nominal	.....	0.1 oz. (2,83 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

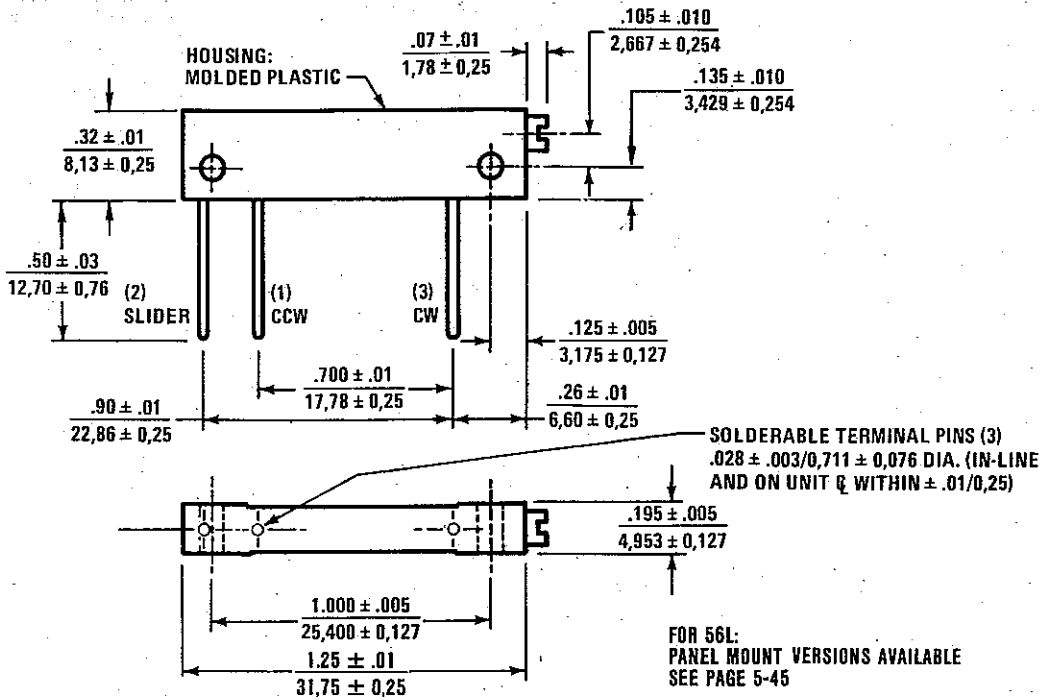
10	100	1K	10K	100K	1M
20	200	2K	20K	200K	2M
—	—	—	25K	250K	—
50	500	5K	50K	500K	—

Environmental

(Model 56 trimming potentiometers meet or exceed the following environmental requirements of MIL-R-22097.)

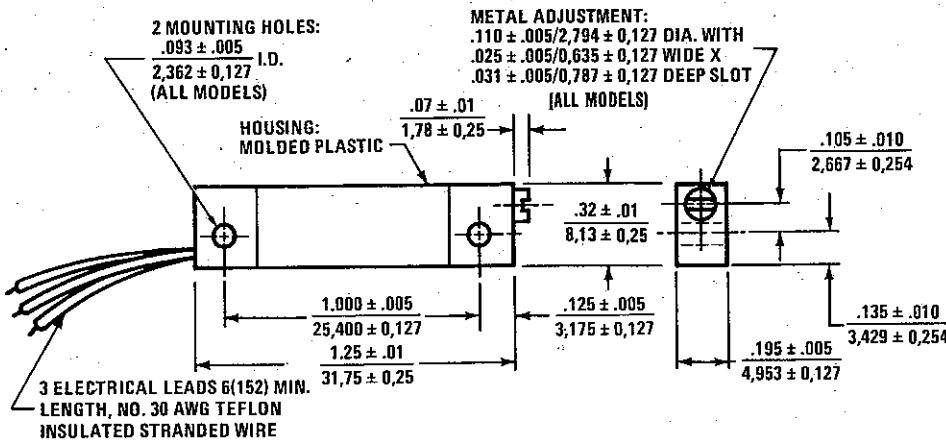
Environment (Para. No.)	Severity
Thermal shock (4.6.8)	..... -65° to 125°C
Moisture resistance (4.6.10)	..... 10 days at 80-98% RH
Shock (4.6.11)	..... 100 g's
Vibration (4.6.12)	..... 20 g's; 10 to 2,000 Hz
Salt spray (4.6.13)	..... 96 hrs.
Effects of soldering (4.6.14)	..... 3 sec. at 350°C
Life, at 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 56P

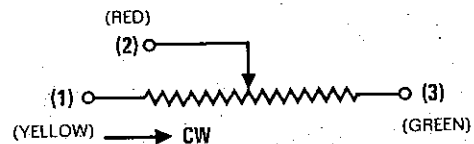


NOTE: TERMINALS ON Q WITHIN .01/0,25

MODEL 56L



CIRCUIT DIAGRAM



5 Trimmers