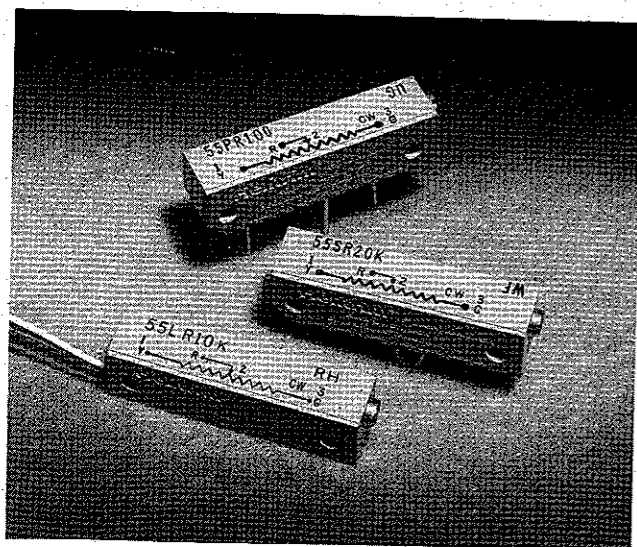


Model 55 1-1/4" (31,750 mm) Rectangular 22-Turn Cermet

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 _i , 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

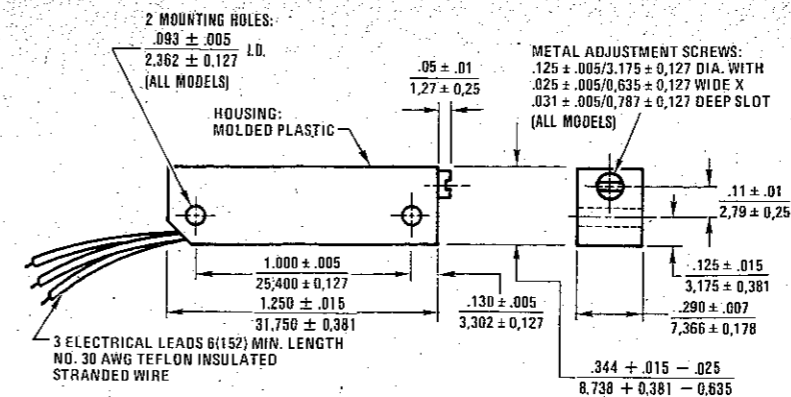
| | | | | | |
|----|-----|----|-----|------|----|
| 10 | 100 | 1K | 10K | 100K | 1M |
| 20 | 200 | 2K | 20K | 200K | 2M |
| — | — | — | 25K | 250K | — |
| 50 | 500 | 5K | 50K | 500K | — |

Environmental

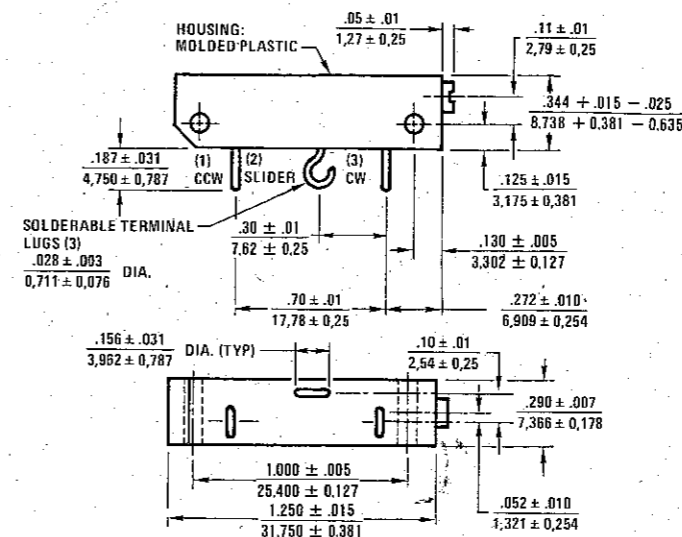
(Model 55 trimming potentiometers meet or exceed the following environmental requirements of MIL-R-22097.)

| 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 |

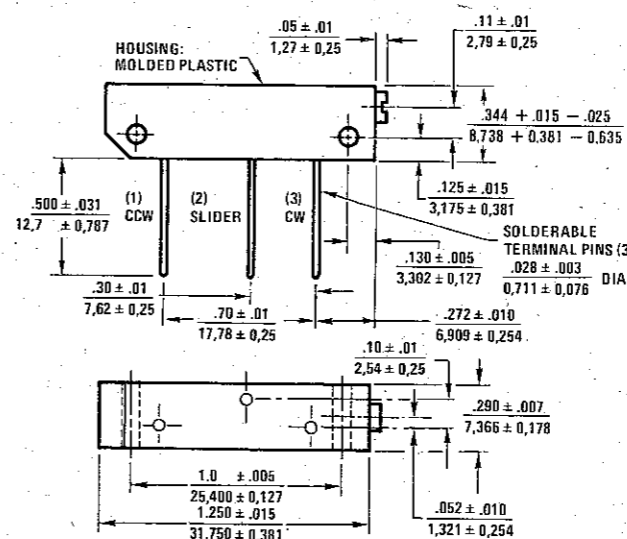
MODEL 55L



MODEL 55S



MODEL 55P



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

CIRCUIT DIAGRAM

