

6130 Series
7/8" Diameter - Low Profile
Single Turn, Conductive Plastic
Precision Potentiometer / Position Sensor



For more information about this product, visit our website at:
www.potentiometers.com



Model Styles

| | |
|---------------------------------------|--|
| 6137 | 1/4" Shaft, 3/8" Bushing |
| 6138 for heavy side load applications | 1/4" Shaft, 3/8" Bushing |
| 6130-XXX | Custom models are available; Contact Customer Service for special features or tolerances |

Electrical Specifications

| | |
|---|---|
| Resistance Range | 1K to 100K Ohms |
| Standard Resistance Tolerance | ±20% |
| Independent Linearity* | ±1% (±2% for values greater than 20K Ohms) |
| Minimum Practical Independent Linearity | ±0.5% |
| Input Voltage | 400 VDC maximum, not to exceed power rating |
| Power Rating | 1.0 Watt at 70°C, derating to 0 at 125°C |
| Dielectric Strength | 750 V rms |
| Insulation Resistance | 1,000 Megohms minimum |
| Output smoothness | 0.1% maximum |
| Actual Electrical Travel | 340° ±3° (300° ±3° with stop feature) |
| Electrical Continuity Travel | 350° ±3° (343° ±3° with stop feature) |
| End Voltage | maximum 0.5% of input voltage |
| Resolution | essentially infinite |
| Temperature Coefficient of Resistance | -400 ppm/°C typical |
| Temperature Coefficient of Output Voltage** | ±10 ppm/°C typical |

Specifications subject to change without notice.
 * Linearity is measured between 1% and 99% of input voltage.
 ** Measured with 10 VDC CW to CCW and slider at 50% of electrical travel

Mechanical Specifications

| | |
|-----------------------------|--|
| Total Mechanical Travel | 360° continuous (343° with stop feature) |
| Weight | 0.6 oz. typical |
| Backlash | 1° maximum |
| Static Stop Strength | 40 in.-oz. maximum |
| Start/Run Torque | 0.5 in.-oz. maximum |
| Panel Nut Tightening Torque | 25 in. lb. Max. |
| Construction | zinc die cast housing, stainless steel shaft, bronze bearing |
| Hazardous Materials | Pb free, E.U. RoHS compliant, no REACH SVHC's |

6130 Series

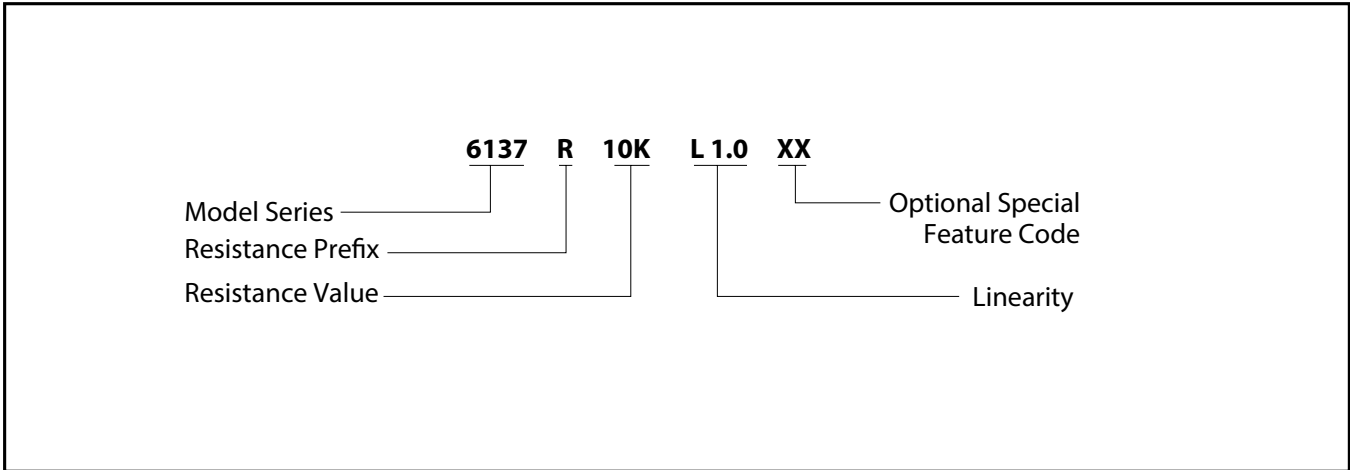
Environmental (MIL-R-39023)

| | |
|------------------------------|---|
| Operating Temperature Range | -25°C to +125°C |
| Temperature Cycling (static) | 5 cycles, -40°C to +125°C, maximum 15% ΔR |
| Shock | 6 ms sawtooth, 100 G's, 0.1 ms maximum discontinuity |
| Vibration | 10 G's, 10 to 500 Hz, maximum 5% ΔR, 0.1 ms maximum discontinuity |
| Moisture Resistance | five 24 hour cycles, maximum 25% ΔR |
| High Temperature Exposure | 1,000 hours at 125°C, maximum 0.5% ΔR |
| Rotational Life (model 6137) | 5 million shaft revolutions |
| Rotational Life (model 6138) | 10 million shaft revolutions |

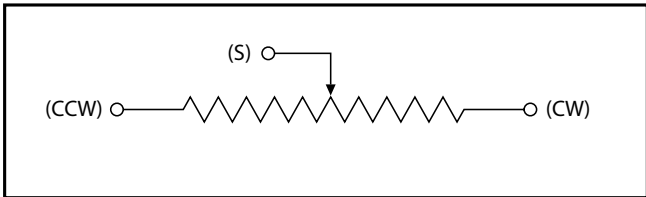
Special Features

| | |
|-------------------------------------|----|
| Center Tap | CT |
| Stop | ST |
| Flatted Shaft (slotted is standard) | FS |

Ordering Information



Circuit Diagram



Standard Resistance Values, Ohms

1K 2K 5K 10K 20K 50K 100K

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Outline Dimensions (Inch/mm)

