# CKR0050-1 Multi-turn Potentiometer

## Electrical Characteristics

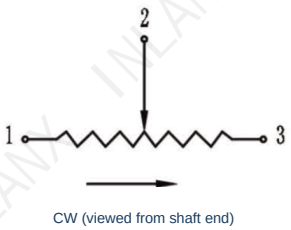
| Parameter | Specification |
|---|---|
| Nominal resistance | 5 kΩ (special resistance values available) |
| Resistance tolerance | ±1% |
| Effective electrical travel | 3600°±4° |
| Independent linearity | ≤±0.05% |
| Peak noise | <100 Ω |
| Resolution | ≤0.015% |
| Insulation resistance | ≥100 MΩ (500 VDC) |
| Dielectric withstand | 1000 VAC, 1 min |




## Physical Characteristics

| Parameter | Specification |
|---|---|
| Starting torque | ≤3 mN·m |
| Mechanical travel | 3600°±10° (with end stops) |
| Marking | Model, resistance, unique code, terminal identification |
| Axial play | ≤0.13 mm |
| Radial play | ≤0.03 mm |

## Circuit Diagram

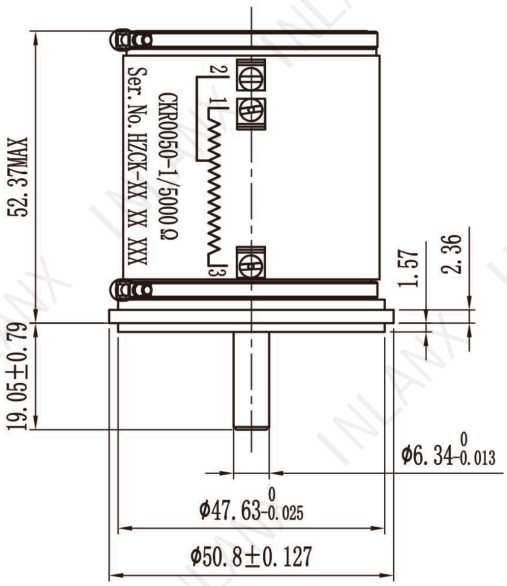



CW (viewed from shaft end)

## Environmental Characteristics

| Parameter | Specification |
|---|---|
| Temperature range | -55℃ to +125℃ |
| Rated power | 1 W @ 70℃ |
| Resistance-temperature characteristic | ≤20 ppm/℃ |
| Radiation resistance | 1.3 × 10^7 Gy (1.3 × 10^9 rad) |

Outline Dimensions · mm




## Applicable Standards

| Quality mark | Detail specification | Generic specification |
|---|---|---|
| QB | — | GJB 1523A-2018 |

## Main Inspection Items

| Item | Test Conditions and Requirements |
|---|---|
| Random vibration | GJB 360B-2009, Method 214, Test Condition II, Condition D; X, Y and Z axes, 5 min per axis; no mechanical damage or momentary electrical discontinuity longer than 0.1 ms. |
| Rotational load life | ≥300000 revolutions |

## Ordering Information

**CKR0050-1 - 5K±1% - ±0.05% - 3600 - S**

Model / Nominal resistance and tolerance / Independent linearity / Effective electrical travel / Mounting S (servo mounting)