CKR0046-1 Single-turn Redundant Potentiometer

Electrical Characteristics

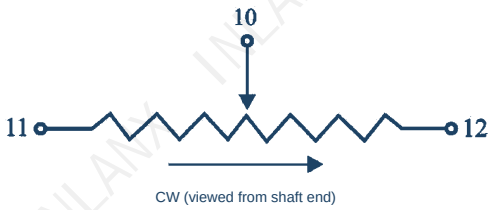
Parameter	Specification
Nominal resistance	2.5 kΩ (special resistance values available)
Resistance tolerance	±5%
Effective electrical travel	357.5°±0.5°
Independent linearity	≤±0.12%
Peak noise	<100 Ω
Resolution	≥4.8 turns/°
Insulation resistance	≥50 MΩ (500 VDC)
Dielectric withstand	1000 VAC, 1 min



Physical Characteristics

Parameter	Specification
Starting torque	≤3 mN·m
Mechanical travel	360° (without end stops)
Marking	Model, resistance, unique code, terminal identification
Axial play	≤0.13 mm
Radial play	≤0.03 mm

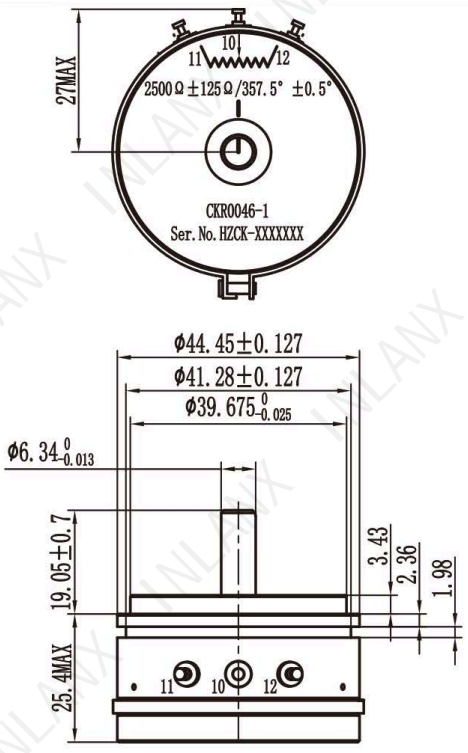
Circuit Diagram



Environmental Characteristics

Parameter	Specification
Temperature range	-55℃ to +125℃
Rated power	0.5 W
Resistance-temperature characteristic	≤40 ppm/℃
Radiation resistance	2.2 × 10^6 Gy (2.2 × 10^8 rad)

Outline Dimensions • mm



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	≥500000 revolutions

Ordering Information

CKR0046-1 - 2K5±5% - ±0.12% - 357.5 - S

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