WD2102-JK Precision Conductive Plastic Potentiometer

Electrical Characteristics

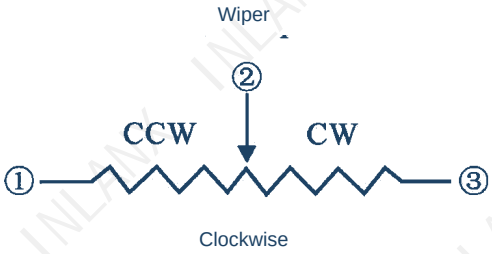
Parameter	Specification
Nominal resistance	5 kΩ, 20 kΩ (special resistance values available)
Resistance tolerance	±10%
Insulation resistance	≥1 GΩ (500 VDC)
Dielectric withstand	640 VAC, 1 min
Effective electrical travel	240°±5°
Independent linearity	≤±3%
Output smoothness	≤0.5%



Physical Characteristics

Parameter	Specification
Starting torque	20±5 mN·m
Mounting torque	170 to 200 N·cm
Mechanical travel	270°±5°
Marking	Model, nominal resistance and tolerance, independent linearity, product code

Circuit Diagram



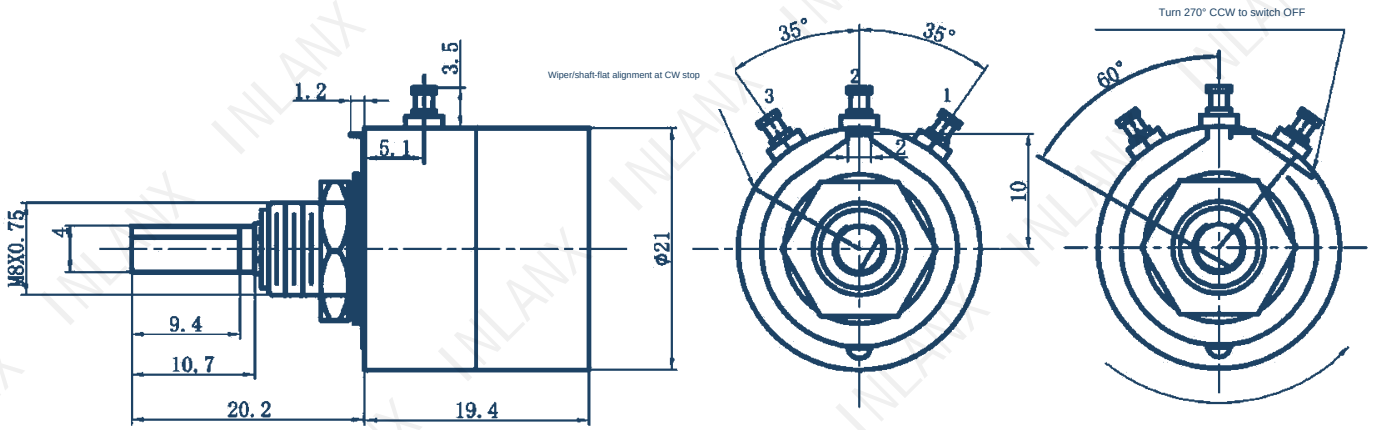
Environmental Characteristics

Parameter	Specification
Rated power	1 W @ 70℃; 0 W @ 125℃
Temperature range	-55℃ to +125℃

Applicable Standards

Quality mark	Detail specification	Generic specification
J	—	GJB 1865A-2015

Outline Dimensions • mm



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Main Inspection Items

Item	Test Conditions and Requirements
Moisture resistance	GJB 360B-2009, Method 103, Condition B; insulation resistance ≥10 MΩ or ≥100R (500 VDC).
Thermal shock	-55℃ to +125℃, 5 cycles; ΔR≤±10%R.
Vibration	Axial, 2 vibration runs, 10 Hz to 2000 Hz, 15 g; no momentary electrical discontinuity longer than 0.1 ms or mechanical damage; ΔR≤±5%R.
Load life	1000 h @ 70℃; ΔR≤±5%R.
Rotational load life	100000 operations; ΔR≤±10%R; linearity ≤±5%.
Resistance-temperature characteristic	-55℃ to +125℃; ΔR≤±10%R.

Ordering Information

WD2102-JK - 5K±10% - ±3% - 240 - S

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