3296K Established Reliability Cermet Trimmer Potentiometer

Electrical Characteristics

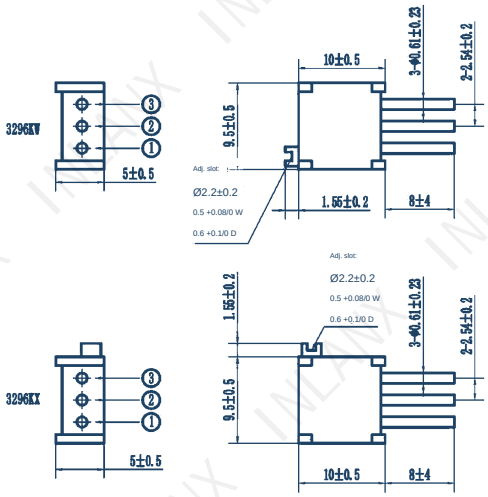
Parameter	Specification
Nominal resistance	10 Ω to 1 MΩ
Resistance tolerance	±10%
Terminal resistance	≤2%R or 2 Ω, whichever is greater
Contact resistance variation	≤3%R or 20 Ω, whichever is greater
Insulation resistance	≥1 GΩ (500 VDC)
Dielectric withstand	900 VAC
Effective electrical travel	≥15 turns



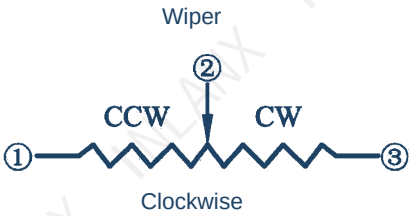
Physical Characteristics

Parameter	Specification
Starting torque	2 mN·m to 10 mN·m
Marking	Model, resistance, tolerance, circuit diagram

Outline Dimensions • mm



Circuit Diagram



Nominal Resistance • Ω

Ω	Ω	Ω	Ω
10	500	20k	500k
20	1k	25k	1M
50	2k	50k	
100	5k	100k	
200	10k	250k	

Environmental Characteristics

Parameter	Specification
Rated power	0.5 W @ 70℃; 0 W @ 125℃
Temperature range	-65℃ to +125℃
Temperature coefficient	≤±250 × 10^-6/K

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Main Inspection Items

Item	Test Conditions and Requirements
Thermal shock	GJB 360A-1996, Method 107, Condition B; ΔR≤±3%R; Δ(Uab/Uac)≤±1%.
Moisture resistance	GJB 3015-1997, 4.7.15; ΔR≤±5%R; insulation resistance ≥100 MΩ.
Shock	GJB 3015-1997, 4.7.17; 100 g, 6 ms; ΔR≤±2%R; Δ(Uab/Uac)≤±1%.
High-frequency vibration	10 Hz to 2000 Hz; amplitude 0.75 mm or acceleration 200 m/s²; 12 h total, 4 h in each of three axes; ΔR≤±1%R; Δ(Uab/Uac)≤±1%.
Low-temperature operation	-55℃; ΔR≤±2%R; Δ(Uab/Uac)≤±2%.
Starting torque	GJB 3015-1997, 4.7.10.1; 2 mN·m to 10 mN·m.
Immersion	GJB 3015-1997, 4.7.6; 70℃, 120 s; no continuous air bubbles from any point.
Life	GJB 3015-1997, 4.7.25; ΔR≤±5%R.
Load conditioning	GJB 3015-1997, 4.7.2; 25℃ to 35℃; DC or RMS continuous AC voltage at 1.5 times rated voltage, ≥50 h; ΔR≤±5%R; no mechanical damage.
High-temperature exposure	GJB 3015-1997, 4.7.22; 125℃, (1000±8) h; ΔR≤±5%R; Δ(Uab/Uac)≤±2%; insulation resistance ≥1 GΩ.

Applicable Standards

Quality grade	Detail specification	Generic specification
Triangle J mark	Q/U 23015.1-2002	GJB 3015-1997
CAST	CASTPS 01/026-2006	GJB 3015-1997
LMS	Q/RU 23015.4-2007	GJB 3015-1997

For CAST and LMS products, refer to the corresponding procurement specifications.

Ordering Information

3296K - W - 10K - K

Model / Terminal style (W, X: see drawing) / Nominal resistance / Tolerance (K: ±10%)