# TD083 Lead-screw Actuated Wirewound Trimmer Potentiometer

## Electrical Characteristics

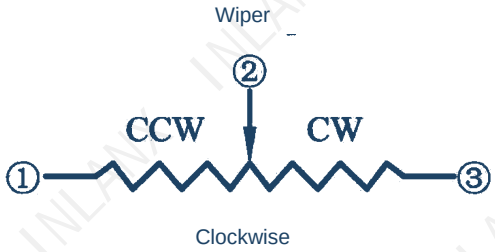
| Parameter | Specification |
|---|---|
| Nominal resistance | 10 Ω to 20 kΩ |
| Resistance tolerance | ±5% |
| Insulation resistance | ≥1000 MΩ |
| Dielectric withstand | 900 VAC at normal atmospheric pressure |
| Terminal resistance | ≤±2%R or 1 Ω, whichever is greater |
| Peak noise | ≤100 Ω |
| Effective electrical travel | ≥15 turns |




## Physical Characteristics

| Parameter | Specification |
|---|---|
| Starting torque | ≤35 mN·m |
| Clutch torque | 25 idle turns at the end stop; electrical continuity during reverse adjustment |
| Marking | Trademark, model, nominal resistance, date code |
| Mass | ≤1.3 g |

## Circuit Diagram




## Nominal Resistance / Resolution

| Ω | % | Ω | % | Ω | % |
|---|---|---|---|---|---|
| 10 | 1.3 | 200 | 0.55 | 5k | 0.25 |
| 20 | 1.1 | 500 | 0.51 | 10k | 0.19 |
| 50 | 0.77 | 1k | 0.37 | 20k | 0.18 |
| 100 | 0.62 | 2k | 0.30 | | |

## Environmental Characteristics

| Parameter | Specification |
|---|---|
| Rated power | 0.75 W @ 70℃; 0 W @ 125℃ |
| Temperature range | -55℃ to +125℃ |
| Resistance-temperature characteristic | ≤±100 × 10^-6/K |

## Applicable Standards

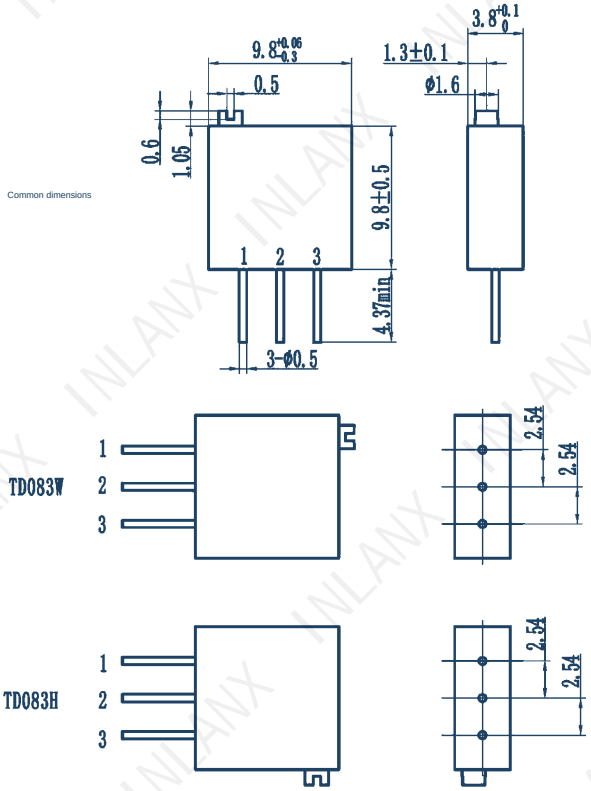
| Quality mark | Detail specification | Generic specification |
|---|---|---|
| Inverted triangle G mark | Q/RU 803-2004; QZJ 84061 | GJB 917-1990 |
| J | Q/RU 803-2004 | GJB 917-1990 |

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## Main Inspection Items

| Item | Test Conditions and Requirements |
|---|---|
| Moisture resistance | GJB 360A-1996, Method 106; 72 h; ΔR≤±5%R; ENR≤100 Ω. |
| Shock | GJB 360A-1996, Method 213; Δ(Uab/Uac)≤±5%; ΔR≤±5%R. |
| High-frequency vibration | GJB 360A-1996, Method 204, Condition C; Δ(Uab/Uac)≤±5%; ENR≤100 Ω; ΔR≤±5%R. |
| High-temperature life | 70℃, 0.75 W; 1.5 h on, 0.5 h off, 1000 h; ΔR≤±5%R; Δ(Uab/Uac)≤±5%. |
| Low-temperature operation | -55℃, 0.75 W, 45 min; no electrical or mechanical damage; ENR≤100 Ω; Δ(Uab/Uac)≤±5%; ΔR≤±5%R. |
| High-temperature storage | 125℃, 250 h; ENR≤100 Ω; Δ(Uab/Uac)≤±5%; ΔR≤±5%R; insulation resistance ≥1 GΩ. |
| Rotational life | 200 revolutions, with voltage corresponding to rated power applied; ΔR≤±5%R; ENR≤100 Ω; no apparent damage or electrical discontinuity; insulation resistance ≥1 GΩ. |

## Outline Dimensions • mm




## Ordering Information

### TD083W - 10K - J

Model TD083 / Terminal style W (see outline drawing) / Nominal resistance / Tolerance J (±5%)