

4mm Surface Mount, Single-Turn, Sealed Cermet Trimmers



Features

- 4mm square SMD, single-turn, sealed cermet trimmers
- Available in J-hook and gull-wing terminal configurations
- Top, side and bottom adjustment in single-slot or automatic adjust cross-slot design
- Tape and reel packaging
- High setting accuracy, zero backlash
- Meets EIA, EIAJ, IPC, VECL standard SMD trimmer designs
- Designed for flow, reflow or infrared reflow soldering
- Sealed to withstand immersion cleaning processes

Specifications

Electrical

Standard Resistance Range	50Ω to 2MΩ (standard 1, 2 & 5 sequence)
Resistance Tolerance	±20% standard ±10% optional for 100Ω to 1MΩ
End Resistance	1% or 3Ω, whichever is greater
Resistance Taper	Linear
Peak Noise (C.R.V.)	2% or 3Ω, whichever is greater
Power Rating	0.25 watt at +70°C; 0 watt at +125°C
Maximum Input Voltage	200VDC or power rating, whichever is smaller
Temperature Coefficient	±100ppm/°C, 200Ω to 1MΩ ±250ppm/°C, other values
Insulation Resistance	100MΩ minimum at 500VDC
Dielectric Strength	500VAC, 1 minute
Adjustment Travel	200° ±10°

Mechanical

Mechanical Travel	240° ±10°
Shaft Torque	150 gf•cm (2.08 oz•in) max.
Stop Strength	300 gf•cm (4.16 oz•in) min.
Flammability of Plastic Materials	Meets UL 94V-0
Nominal Weight	0.14g (A, B, D, E) 0.16g (BF); 0.24g (S)
Marking	Resistance value or code, date code

Environmental

Temperature Range	-55°C to +125°C
Low Temperature Operation	-55°C, 0.25 watt, 45 minutes ΔT/R ≤ ±2%, S.S. ≤ ±2%
High Temperature Exposure	+125°C, 250 hours ΔT/R ≤ ±2%, S.S. ≤ ±2%
Load Life	+70°C, 0.25 watt, 1,000 hours ΔT/R ≤ ±3%, S.S. ≤ ±2%
Thermal Shock	-55°C, +125°C, 30 minutes each, 5 cycles ΔT/R ≤ ±2%, S.S. ≤ ±1%
Shock	100G, 6ms, 6 directions, 3 times each ΔT/R ≤ ±1%, S.S. ≤ ±1%
Vibration	10-2,000Hz, 1.5mm amplitude, 20G, 12 hours ΔT/R ≤ ±1%, S.S. ≤ ±1%
Humidity	+40°C, 90-95%RH, 0.25 watt, 500 hours ΔT/R ≤ ±3%, S.S. ≤ ±2%
Moisture Resistance	-10°C to +65°C, 80-98%RH, 0.25 watt, 10 cycles, 240 hours ΔT/R ≤ ±3%
Soldering Heat Resistance	260°C, 10 seconds ΔT/R ≤ ±1%
Seal Test	+85°C, hot water for 1 minute
Rotational Life	100 cycles without discontinuity, no load ΔT/R ≤ ±5%

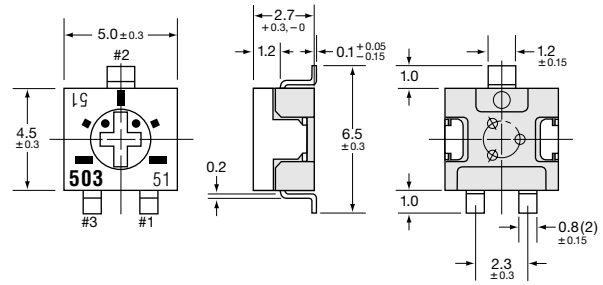
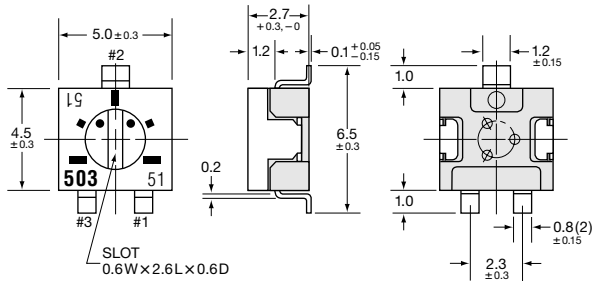
ΔT/R = Total Resistance Change; S.S. = Setting Stability (voltage ratio)

For through-hole models of the G4 series,
refer to the G4C Series on page 33.

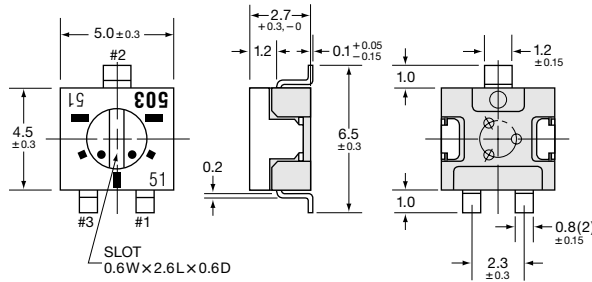
G4B Gull-Wing, Single-Slot, Top Adjust

G41B Gull-Wing, Cross-Slot, Top Adjust

Unit: mm

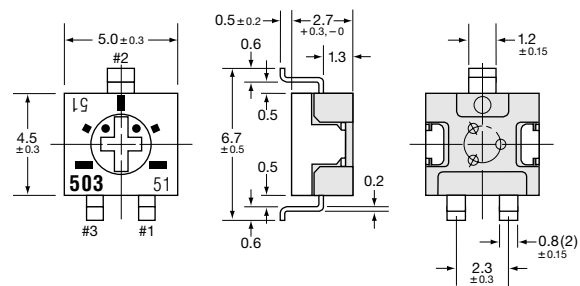
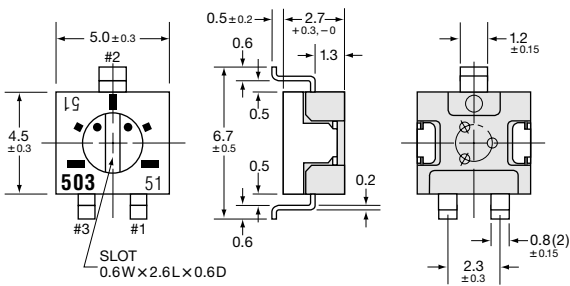


G4E Reverse Markings, Gull-Wing, Single-Slot, Top Adjust



G4BF Gull-Wing, Single-Slot, Bottom Adjust

G41BF Gull-Wing, Cross-Slot, Bottom Adjust

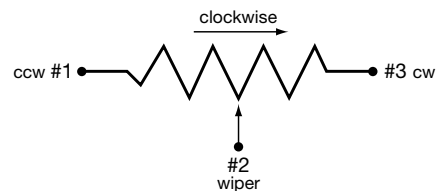
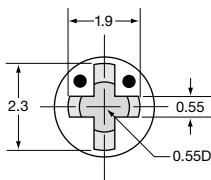


Cross-Slot Dimensions

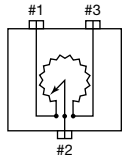
Electrical Schematic

All G41 Models

Unit: mm

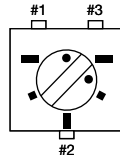


All A, B, D & E Models
Position of Rotor Inside



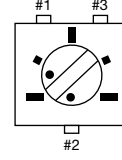
Position of the rotor inside is the same for both types of markings.

Standard Markings
Outside Positions



G4A & G4B

Reverse Markings
Outside Positions

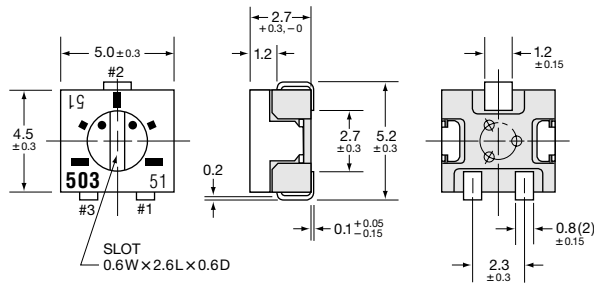


G4D & G4E

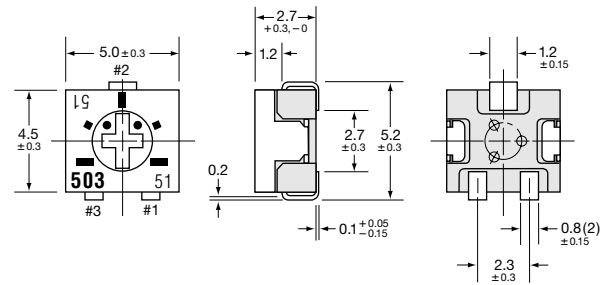
The D and E reverse markings models have the same parts and are constructed the same as the A and B models respectively. The only difference is the outside markings.

Dimensions

G4A J-Hook, Single-Slot, Top Adjust

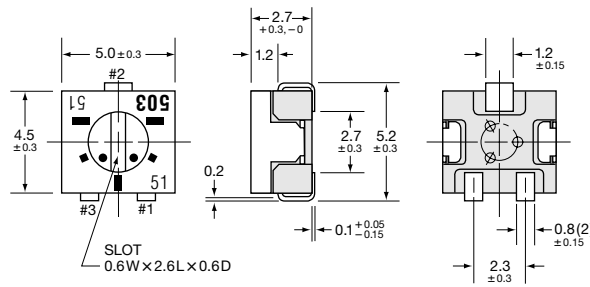


G41A J-Hook, Cross-Slot, Top Adjust

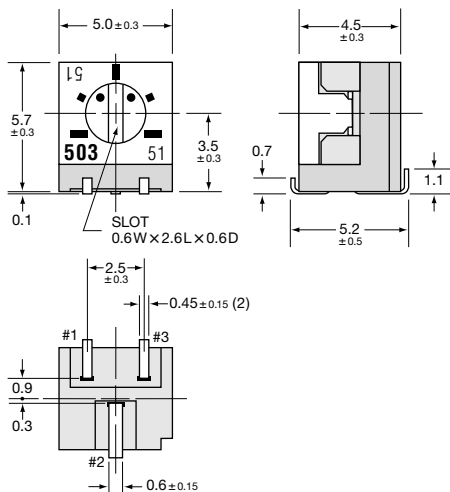


Unit: mm

G4D Reverse Markings, J-Hook, Single-Slot, Top Adjust



G4S J-Hook, Single-Slot, Side Adjust



G41S J-Hook, Cross-Slot, Side Adjust

