

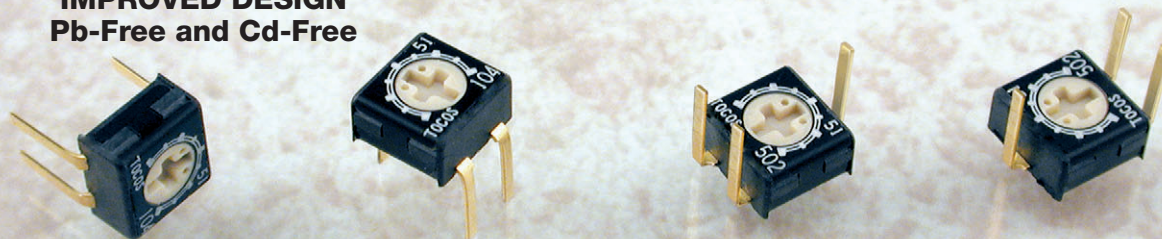
G43C Series

TOCOS[®]

POTENTIOMETERS

4mm Square, Single-Turn, Through-Hole, Sealed Cermet Trimmers

**RoHS Compliant
IMPROVED DESIGN
Pb-Free and Cd-Free**



Features

- 4mm square, single-turn, through-hole, sealed cermet trimmers
- Top and bottom cross-slot adjustment
- Space-saving G43 series SMD-sized units with through-hole terminals
- High setting accuracy, zero backlash
- Meets EIA, EIAJ, IPC, VECC standard SMD trimmer designs
- Pb-free and Cd-free construction
- RoHS compliant
- Gold-plated leads provide high conductivity, low contact resistance, high corrosion resistance and good solderability

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	B = 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	0.16g
Marking	Resistance value or code, date code

**For surface mount models of the G43C series,
refer to the G43 Series.**

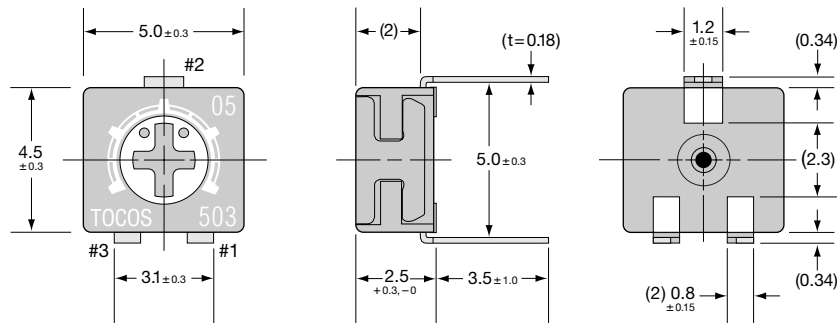
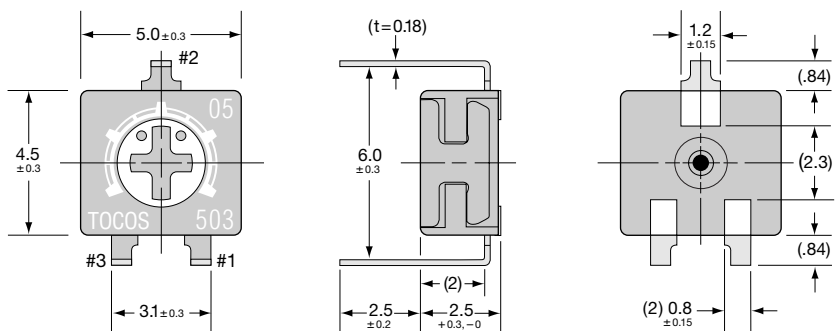
Environmental

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

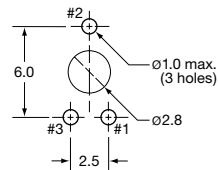
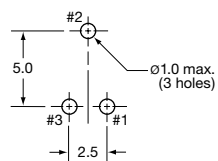
$\Delta T/R$ = Total Resistance Change; S.S. = Setting Stability (voltage ratio)

G43C Series**Dimensions****G43C Through-Hole, C Terminal Style, Top Adjust**

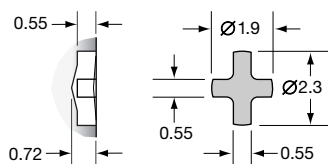
Unit: mm

**G43CF Through-Hole, CF Terminal Style, Bottom Adjust****Recommended PCB Layouts****C Pin-Out****CF Pin-Out**

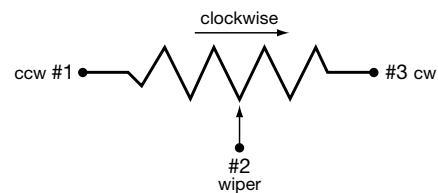
Unit: mm

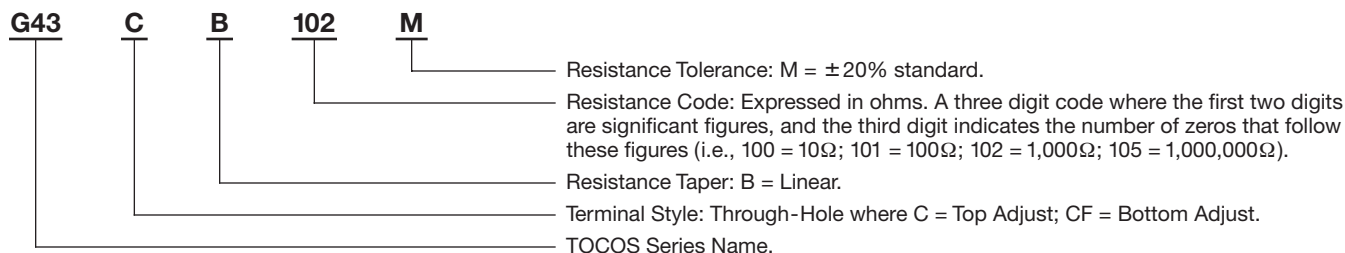
**Cross-Slot Dimensions****Electrical Schematic****G43C & G43CF**

Unit: mm



**Cross-Slot accepts both
Philips and single blade
adjustment tools.**

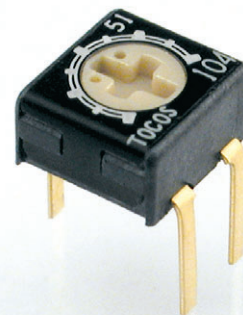


G43C Series**Part Numbering System****Part Numbers**

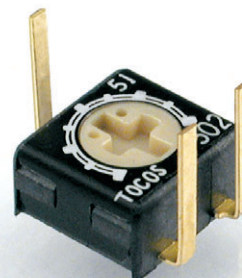
Nominal Resistance		Resistance Tolerance $\pm 20\%$	Potentiometer Styles
Value (Ω)	Code	Catalog No. Bulk	

G43C Through-Hole, C Terminal Style, Cross-Slot, Top Adjust

10	100	G43C B 100 M
20	200	G43C B 200 M
50	500	G43C B 500 M
100	101	G43C B 101 M
200	201	G43C B 201 M
500	501	G43C B 501 M
1,000	102	G43C B 102 M
2,000	202	G43C B 202 M
5,000	502	G43C B 502 M
10,000	103	G43C B 103 M
20,000	203	G43C B 203 M
50,000	503	G43C B 503 M
100,000	104	G43C B 104 M
200,000	204	G43C B 204 M
500,000	504	G43C B 504 M
1,000,000	105	G43C B 105 M
2,000,000	205	G43C B 205 M

**G43C****G43CF Through-Hole, CF Terminal Style, Cross-Slot, Bottom Adjust**

10	100	G43CF B 100 M
20	200	G43CF B 200 M
50	500	G43CF B 500 M
100	101	G43CF B 101 M
200	201	G43CF B 201 M
500	501	G43CF B 501 M
1,000	102	G43CF B 102 M
2,000	202	G43CF B 202 M
5,000	502	G43CF B 502 M
10,000	103	G43CF B 103 M
20,000	203	G43CF B 203 M
50,000	503	G43CF B 503 M
100,000	104	G43CF B 104 M
200,000	204	G43CF B 204 M
500,000	504	G43CF B 504 M
1,000,000	105	G43CF B 105 M
2,000,000	205	G43CF B 205 M

**G43CF****Packaging****Standard:****Bulk Packaging****Quantity**

100 pieces per vinyl bag. 1,000 pieces per box.

Soldering and Cleaning Guidelines

The G43C trimmers are designed to withstand the same flow or reflow soldering methods as the SMD G43 series. Refer to the SMD G43 series for soldering profiles. For cleaning and other information, refer to Guidelines and Precautions for Using Potentiometers.

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