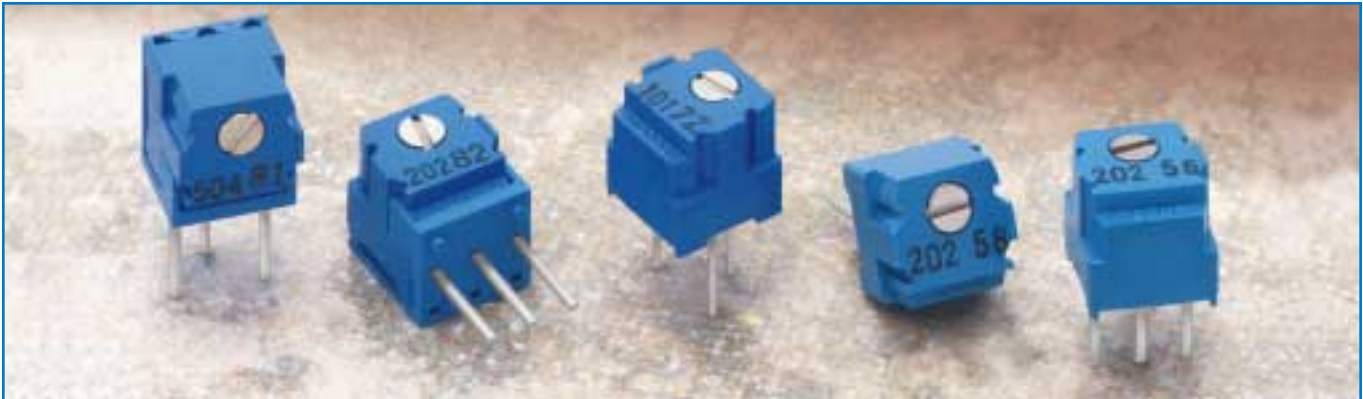


1/4" Square, Multi-Turn, Through-Hole Sealed Cermet Trimmers



Features

- 1/4" square, multi-turn, through-hole, sealed cermet trimmers
- Top and side adjust styles available
- 2-turn adjustment travel for quick setting
- Space-saving, low profile design
- Excellent stability and low noise
- Wide temperature range of -55°C to $+125^{\circ}\text{C}$
- Meets UL 94V-0 flammability requirements
- Sealed to withstand wave soldering and immersion cleaning
- Taping available, reel or ammo packaging

Specifications

Electrical

Standard Resistance Range	10 Ω to 1M Ω (standard 1, 2 & 5 sequence)
Resistance Tolerance	$\pm 10\%$ and $\pm 20\%$
End Resistance	1% or 3 Ω , whichever is greater
Resistance Taper	Linear
Peak Noise (C.R.V.)	1% or 1 Ω , whichever is greater
Power Rating	0.5 watt at $+70^{\circ}\text{C}$, 0 watt at $+125^{\circ}\text{C}$
Maximum Input Voltage	250VDC or power rating, whichever is smaller
Temperature Coefficient	± 100 ppm/ $^{\circ}\text{C}$, 200 Ω to 1M Ω ± 250 ppm/ $^{\circ}\text{C}$, other values
Insulation Resistance	100M Ω minimum at 500VDC
Dielectric Strength	500VAC, 1 minute
Adjustment Travel	2 turns ($735^{\circ} \pm 10^{\circ}$)

Mechanical

Mechanical Travel	2 turns ($735^{\circ} \pm 10^{\circ}$)
Shaft Torque	200 gf \cdot cm (2.77 oz \cdot in) max.
Stop Strength	300 gf \cdot cm (4.16 oz \cdot in) min.
Flammability of Plastic Materials	Meets UL 94V-0
Nominal Weight	0.5g (P, U); 0.6g (S, V)
Marking	Resistance code, date code

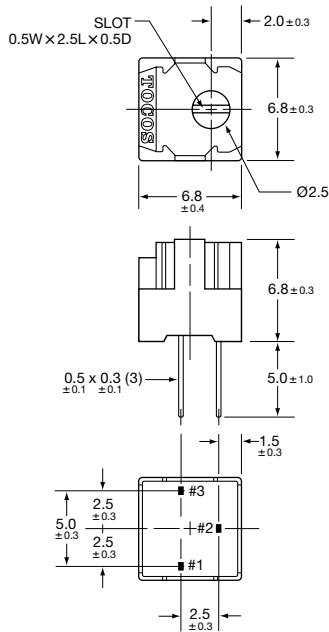
Environmental

Temperature Range	-55°C to $+125^{\circ}\text{C}$
Low Temperature Operation	-55°C , 0.5 watt, 1 hour $\Delta\text{T/R} \leq \pm 2\%$
High Temperature Exposure	$+125^{\circ}\text{C}$, 250 hours $\Delta\text{T/R} \leq \pm 2\%$, S.S. $\leq \pm 1\%$
Load Life	$+70^{\circ}\text{C}$, 0.5 watt, 1,000 hours $\Delta\text{T/R} \leq \pm 3\%$, S.S. $\leq \pm 1\%$
Thermal Shock	-55°C , $+125^{\circ}\text{C}$, 30 minutes each, 5 cycles $\Delta\text{T/R} \leq \pm 1\%$, S.S. $\leq \pm 1\%$
Shock	100G, 6ms, 6 directions, 3 times each $\Delta\text{T/R} \leq \pm 2\%$, S.S. $\leq \pm 1\%$
Vibration	10-2,000Hz, 1.5mm amplitude, 20G, 12 hours $\Delta\text{T/R} \leq \pm 1\%$, S.S. $\leq \pm 1\%$
Humidity	$+40^{\circ}\text{C}$, 90-95% RH, 0.5 watt, 500 hours $\Delta\text{T/R} \leq \pm 3\%$, S.S. $\leq \pm 1\%$
Moisture Resistance	-10°C to $+65^{\circ}\text{C}$, 80-98% RH, 0.5 watt, 10 cycles, 240 hours $\Delta\text{T/R} \leq \pm 3\%$
Soldering Heat Resistance	350°C , 3 seconds $\Delta\text{T/R} \leq \pm 1\%$
Seal Test	$+85^{\circ}\text{C}$, hot water for 1 minute
Rotational Life	200 cycles without discontinuity $\Delta\text{T/R} \leq \pm 5\%$

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

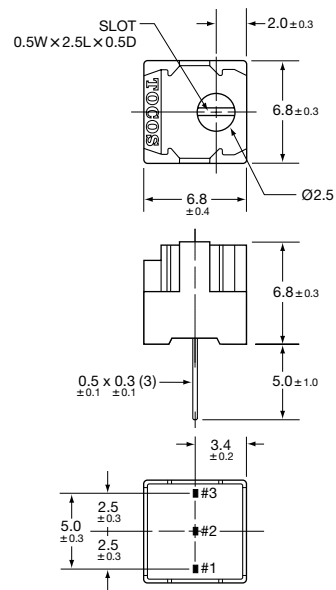
GV6P

P Terminal Style, Single-Slot, Top Adjust



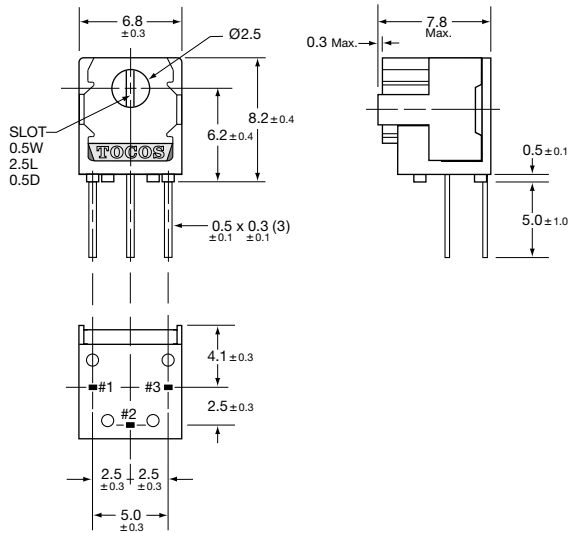
GV6U

U Terminal Style, Single-Slot, Top Adjust



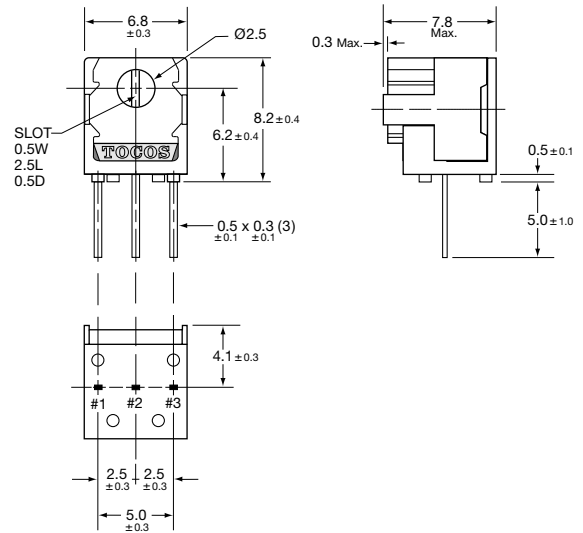
GV6S

S Terminal Style, Single-Slot, Side Adjust



GV6V

V Terminal Style, Single-Slot, Side Adjust



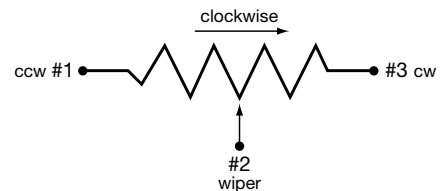
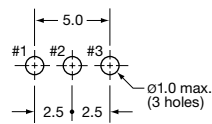
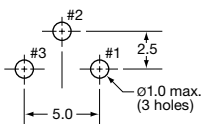
Recommended PCB Layout

Electrical Schematic

P & S Pin-Out

U & V Pin-Out

Unit: mm

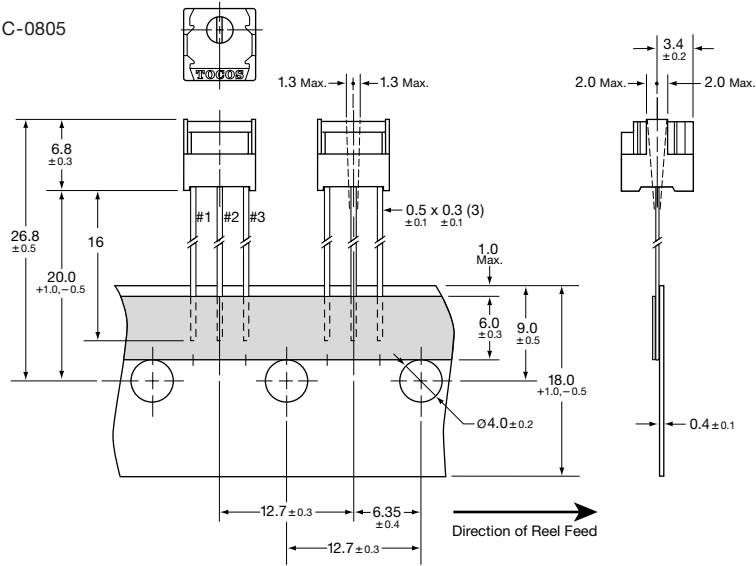


Unit: mm

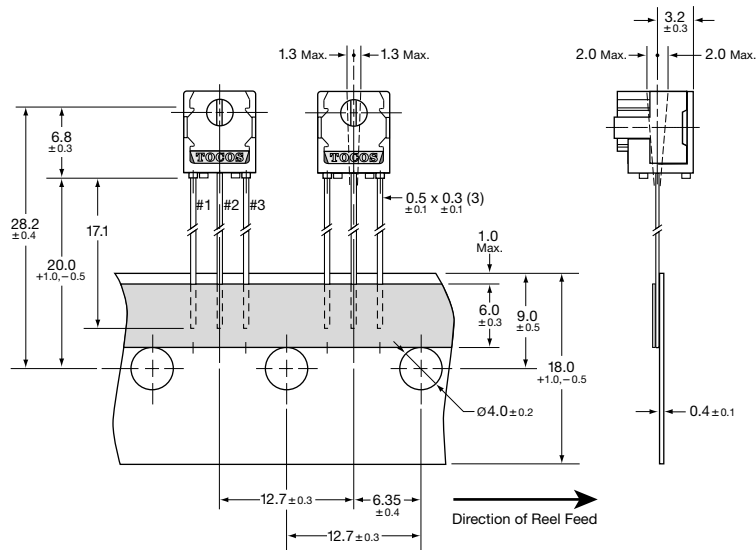
Tape Dimensions

Conforms to EIA-468-B and JIS-C-0805

GV6UT & GV6UT2



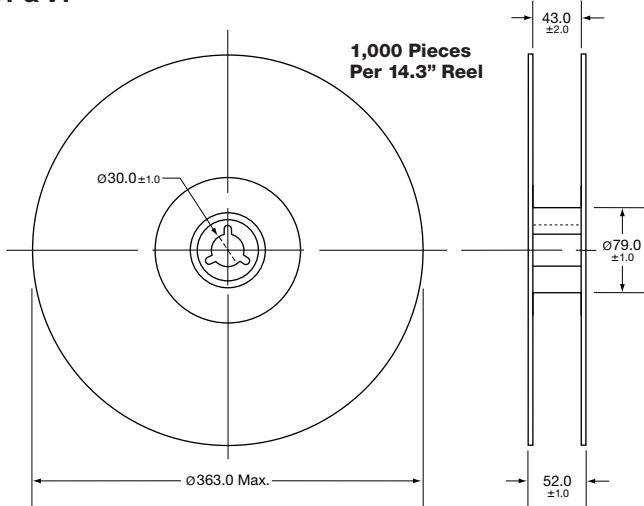
GV6VT & GV6VT2



Reel Dimensions

Conforms to EIA-468-B and JIS-C-0805

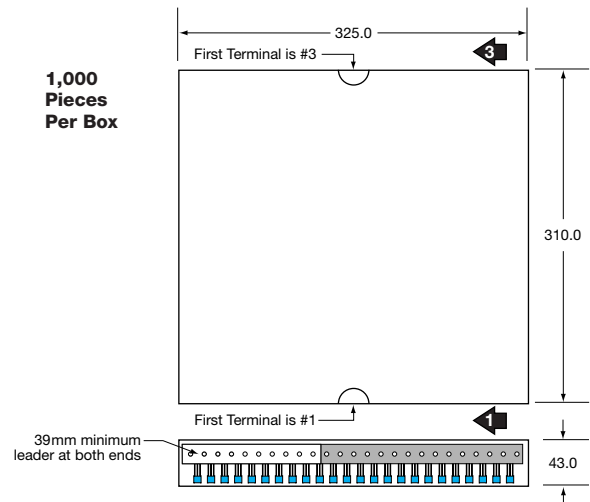
UT & VT

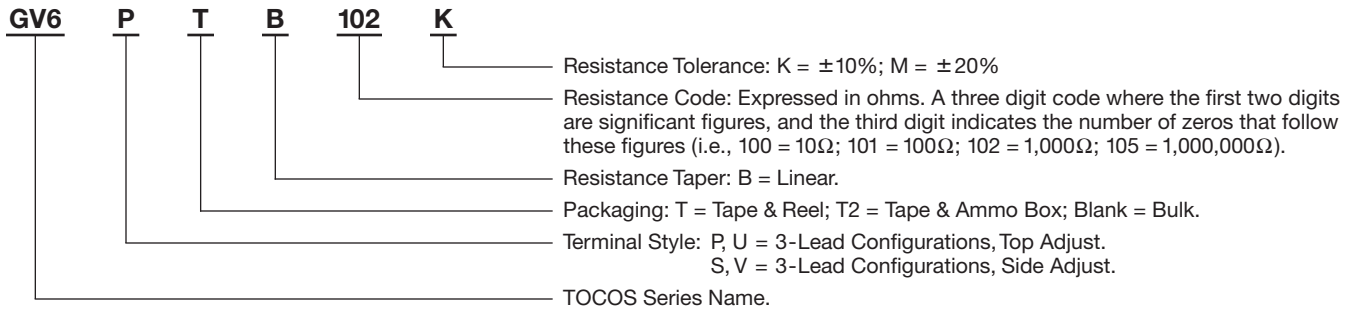


Ammo Box Dimensions

Conforms to EIA-468-B and JIS-C-0805

UT2 & VT2





Part Numbers

Nominal Resistance		Resistance Tolerance: K = $\pm 10\%$ (see footnote for M = $\pm 20\%$)			Potentiometer Styles
Value (Ω)	Code	Catalog No.* Tape & Reel	Catalog No.* Tape & Ammo Box	Catalog No.* Bulk	

GV6P Through-Hole, P Terminal Style, Single-Slot, Top Adjust


10	100	—	—	GV6P B 100 K
20	200	—	—	GV6P B 200 K
50	500	—	—	GV6P B 500 K
100	101	—	—	GV6P B 101 K
200	201	—	—	GV6P B 201 K
500	501	—	—	GV6P B 501 K
1,000	102	—	—	GV6P B 102 K
2,000	202	—	—	GV6P B 202 K
5,000	502	—	—	GV6P B 502 K
10,000	103	—	—	GV6P B 103 K
20,000	203	—	—	GV6P B 203 K
50,000	503	—	—	GV6P B 503 K
100,000	104	—	—	GV6P B 104 K
200,000	204	—	—	GV6P B 204 K
500,000	504	—	—	GV6P B 504 K
1,000,000	105	—	—	GV6P B 105 K



GV6P

GV6U Through-Hole, U Terminal Style, Single-Slot, Top Adjust

10	100	GV6UT B 100 K	GV6UT2 B 100 K	GV6U B 100 K
20	200	GV6UT B 200 K	GV6UT2 B 200 K	GV6U B 200 K
50	500	GV6UT B 500 K	GV6UT2 B 500 K	GV6U B 500 K
100	101	GV6UT B 101 K	GV6UT2 B 101 K	GV6U B 101 K
200	201	GV6UT B 201 K	GV6UT2 B 201 K	GV6U B 201 K
500	501	GV6UT B 501 K	GV6UT2 B 501 K	GV6U B 501 K
1,000	102	GV6UT B 102 K	GV6UT2 B 102 K	GV6U B 102 K
2,000	202	GV6UT B 202 K	GV6UT2 B 202 K	GV6U B 202 K
5,000	502	GV6UT B 502 K	GV6UT2 B 502 K	GV6U B 502 K
10,000	103	GV6UT B 103 K	GV6UT2 B 103 K	GV6U B 103 K
20,000	203	GV6UT B 203 K	GV6UT2 B 203 K	GV6U B 203 K
50,000	503	GV6UT B 503 K	GV6UT2 B 503 K	GV6U B 503 K
100,000	104	GV6UT B 104 K	GV6UT2 B 104 K	GV6U B 104 K
200,000	204	GV6UT B 204 K	GV6UT2 B 204 K	GV6U B 204 K
500,000	504	GV6UT B 504 K	GV6UT2 B 504 K	GV6U B 504 K
1,000,000	105	GV6UT B 105 K	GV6UT2 B 105 K	GV6U B 105 K



GV6U

*Substitute code letter M in place of K at end of catalog part number for $\pm 20\%$ resistance tolerance.

Nominal Resistance		Resistance Tolerance: K = $\pm 10\%$ (see footnote for M = $\pm 20\%$)			Potentiometer Styles
Value (Ω)	Code	Catalog No.* Tape & Reel	Catalog No.* Tape & Ammo Box	Catalog No.* Bulk	

GV6S Through-Hole, S Terminal Style, Single-Slot, Side Adjust

10	100	—	—	GV6S B 100 K
20	200	—	—	GV6S B 200 K
50	500	—	—	GV6S B 500 K
100	101	—	—	GV6S B 101 K
200	201	—	—	GV6S B 201 K
500	501	—	—	GV6S B 501 K
1,000	102	—	—	GV6S B 102 K
2,000	202	—	—	GV6S B 202 K
5,000	502	—	—	GV6S B 502 K
10,000	103	—	—	GV6S B 103 K
20,000	203	—	—	GV6S B 203 K
50,000	503	—	—	GV6S B 503 K
100,000	104	—	—	GV6S B 104 K
200,000	204	—	—	GV6S B 204 K
500,000	504	—	—	GV6S B 504 K
1,000,000	105	—	—	GV6S B 105 K



GV6S

GV6V Through-Hole, V Terminal Style, Single-Slot, Side Adjust

10	100	GV6VT B 100 K	GV6VT2 B 100 K	GV6V B 100 K
20	200	GV6VT B 200 K	GV6VT2 B 200 K	GV6V B 200 K
50	500	GV6VT B 500 K	GV6VT2 B 500 K	GV6V B 500 K
100	101	GV6VT B 101 K	GV6VT2 B 101 K	GV6V B 101 K
200	201	GV6VT B 201 K	GV6VT2 B 201 K	GV6V B 201 K
500	501	GV6VT B 501 K	GV6VT2 B 501 K	GV6V B 501 K
1,000	102	GV6VT B 102 K	GV6VT2 B 102 K	GV6V B 102 K
2,000	202	GV6VT B 202 K	GV6VT2 B 202 K	GV6V B 202 K
5,000	502	GV6VT B 502 K	GV6VT2 B 502 K	GV6V B 502 K
10,000	103	GV6VT B 103 K	GV6VT2 B 103 K	GV6V B 103 K
20,000	203	GV6VT B 203 K	GV6VT2 B 203 K	GV6V B 203 K
50,000	503	GV6VT B 503 K	GV6VT2 B 503 K	GV6V B 503 K
100,000	104	GV6VT B 104 K	GV6VT2 B 104 K	GV6V B 104 K
200,000	204	GV6VT B 204 K	GV6VT2 B 204 K	GV6V B 204 K
500,000	504	GV6VT B 504 K	GV6VT2 B 504 K	GV6V B 504 K
1,000,000	105	GV6VT B 105 K	GV6VT2 B 105 K	GV6V B 105 K



GV6V

*Substitute code letter M in place of K at end of catalog part number for $\pm 20\%$ resistance tolerance.

Packaging**Standard:****Tape & Reel Packaging****UT & VT**

1,000 pieces per 14.3" reel.

Tape & Ammo Packaging**UT2 & VT2**

1,000 pieces per ammo box.

Bulk Packaging**All GV6 Models**

50 pieces per vinyl bag.

500 pieces per box.

Soldering and Cleaning Guidelines

For soldering, cleaning and other information, refer to Guidelines and Precautions for Using Potentiometers.