

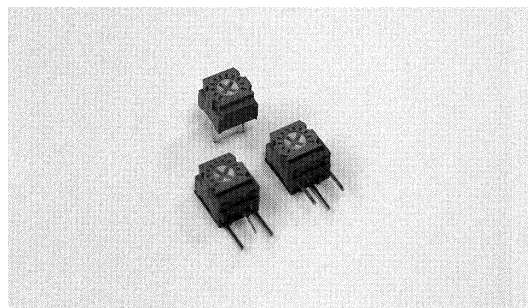
単回転型 サーマットリマ SINGLE TURN CERMET TRIMMERS

GF063シリーズ

■特徴

FEATURES

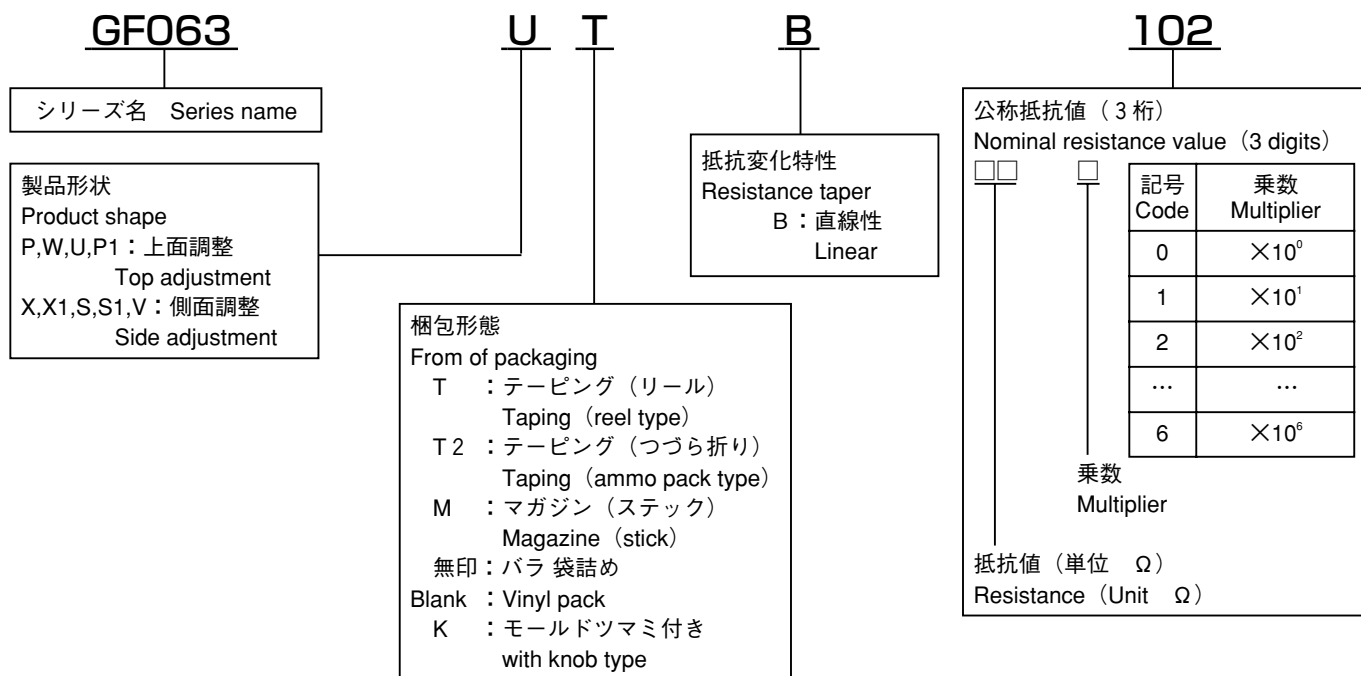
- 種類が豊富
- 高性能、高信頼性（貴金属合金マルチ接点ワイパーの採用）
- 自動調整対応タイプつき、調整用ドライバーの挿入が容易
- 密封構造につき、各種洗浄液による洗浄が可能
- シャフト径が大きく、市販の調整ドライバー使用可
- Wide variety of models available.
- Excellent performance and high reliability with precious metal, multi-contact wiper design.
- Cross slot design allows automatic machine adjustment.
- Sealed to withstand immersion cleaning processes with various cleaning agent.
- Large dia. shaft helps to use commercially available adjustment drivers.



RoHS 指令対応 RoHS compliant

■品名構成

PART NUMBER COMPOSITION



《標準公称抵抗値》

(Nominal resistance value)

公称抵抗値 Nominal resistance value	記号 Code	公称抵抗値 Nominal resistance value	記号 Code	公称抵抗値 Nominal resistance value	記号 Code
10 Ω	100	20 Ω	200	50 Ω	500
100 Ω	101	200 Ω	201	500 Ω	501
1 k Ω	102	2 k Ω	202	5 k Ω	502
10 k Ω	103	20 k Ω	203	50 k Ω	503
100 k Ω	104	200 k Ω	204	500 k Ω	504
1M Ω	105	2M Ω	205	—	—

Fig-1

■電気的特性

ELECTRICAL CHARACTERISTICS

全抵抗値範囲 Total resistance range	10Ω～2MΩ
全抵抗値許容差 Total resistance tolerance	±20% (±10%)
残留抵抗値 End resistance	1%又は1Ωの大なる方以下 1% or 1Ω, whichever is greater
抵抗変化特性 Resistance taper	B (直線型) (Linear)
接触抵抗変化 Contact resistance variation	1%又は1Ωの大なる方以下 1% or 1Ω, whichever is greater
定格電力 Power rating	0.5w/70℃ 0W/125℃
最高使用電圧 Max. input voltage	250V DC又は定格電力のいずれか小さい方 250V DC or power rating, whichever is smaller
抵抗温度係数 Temp. coefficient	±100ppm/℃
絶縁抵抗 Insulation resistance	1,000MΩ以上 (500V DC) 1,000MΩ min. (500V DC)
耐電圧 Dielectric strength	900V AC 1分間 900V AC 1 minute
電気的回転角度 Electrical angle	210°±10°

■機械的特性

MECHANICAL CHARACTERISTICS

機械的回転角度 Mechanical angle	250°±10°
回転トルク Shaft torque	0.98～19.6mN・m (10～200gf・cm)
ストップ強度 Stop strength	49.0mN・m min. (500gf・cm min.)
使用温度範囲 Operating temp. range	-55℃～+125℃
端子強度 Terminal strength	9.8N min. (1kgf) (引っ張り) (tensile strength) 3 time min. (90℃曲げ) (bend 90°)
シャフト強度 Shaft strength	9.8N min. (1kgf) (押し強度) (push strength)
重量 weight	0.5g max. : P1,P,W,U 0.6g max. : X,X1,S,S1,V

■環境特性

ENVIRONMENTAL CHARACTERISTICS

試験項目 Test item	試験条件 Test condition	規格 Standard
はんだ耐熱性 Soldering heat	350℃ 3 sec.	$\Delta R/R \leq \pm 1\%$
回転寿命 Rotation life	100サイクル 100 cycles	$\Delta R/R \leq \pm (2\Omega + 3\%)$
負荷寿命 Load life	70℃ 0.5W 1000 hours	$\Delta R/R \leq \pm 3\%$ S.S. $\leq \pm 2\%$
熱衝撃 Thermal shock	-55℃, +125℃ (30 minutes) 5 cycles	$\Delta R/R \leq 1\%$ S.S. $\leq \pm 1\%$
高周波振動 Vibration	10～2 kHz 振幅(amplitude) 1.5 mm(20G) 12 hours	$\Delta R/R \leq 1\%$ S.S. $\leq \pm 1\%$
衝撃 Shock	100G 6 msec. 6 directions for 3 times each	$\Delta R/R \leq \pm 1\%$ S.S. $\leq \pm 1\%$
低温動作 Low temperature exposure	-55℃, 0.5W 2 hours	$\Delta R/R \leq \pm 2\%$ S.S. $\leq \pm 2\%$
高温露出 High temperature exposure	+125℃, 250 hours	$\Delta R/R \leq \pm 2\%$ S.S. $\leq \pm 2\%$
耐湿負荷寿命 Moisture and load life	+40℃, 90～95%RH 0.5 W 500 hours	$\Delta R/R \leq \pm 3\%$ S.S. $\leq \pm 2\%$
耐湿性 Moisture resistance	-10℃～+65℃ (90～95%RH) 0.5W 240 hours	$\Delta R/R \leq \pm 2\%$
温水浸漬 Seal test	+85℃ hot water 1 minute	3 bubbles max.
耐溶剤性 Solvent	クロロセン、アルコール等 Trichloroethane, alcohol etc.	洗浄可能 Possible for washing

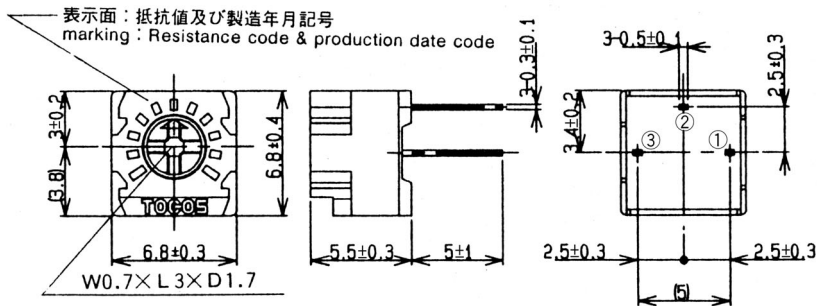
$\Delta R/R$: 全抵抗値変化 Change in total resistance
S.S. : 設定安定度 Setting stability

外形寸法図

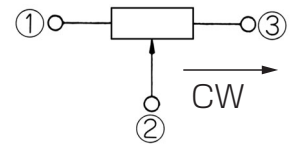
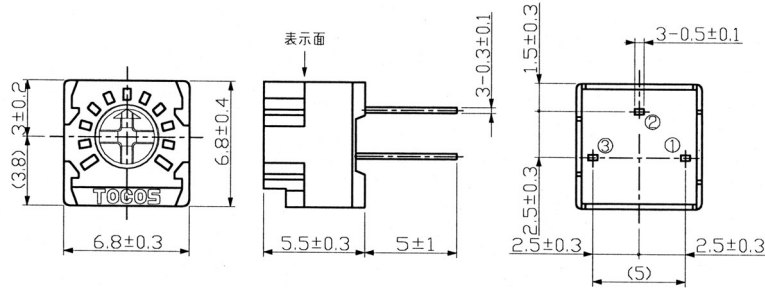
(Unit : mm)

OUTLINE DIMENSIONS

● GF063P1

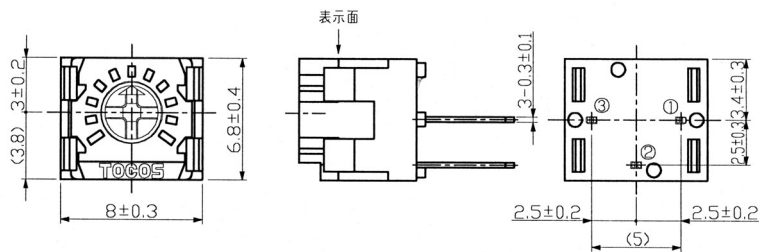


● GF063P

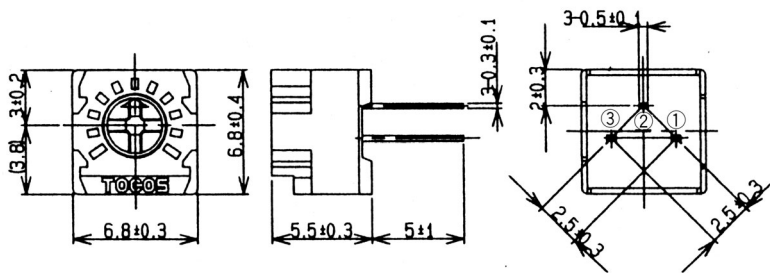


端子位置にご注意下さい
note the terminal position

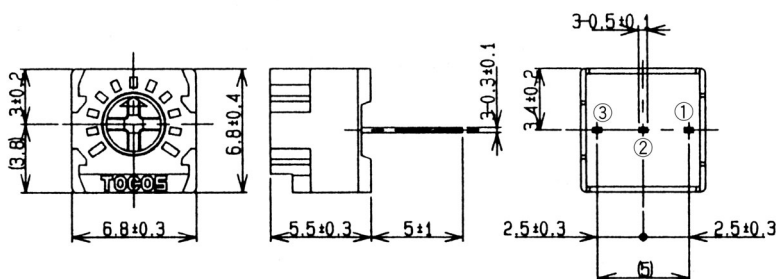
● GF063P2



● GF063W

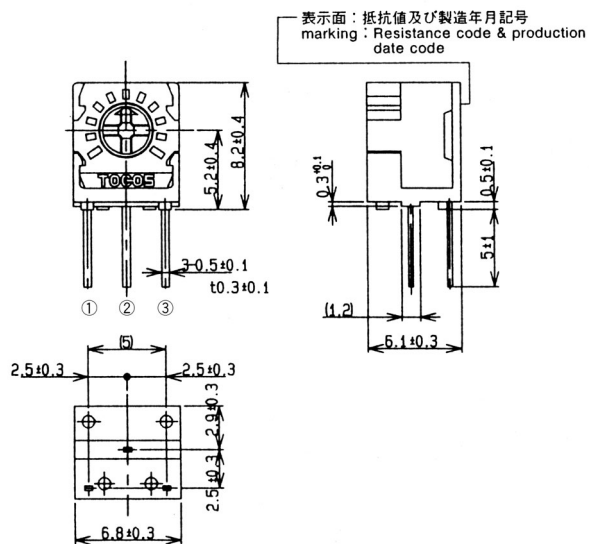


● GF063U

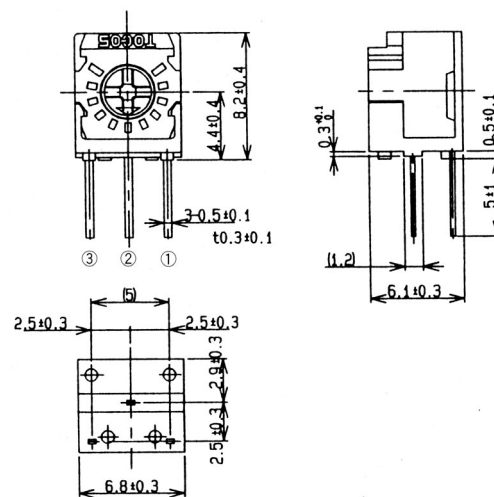


(Unit : mm)

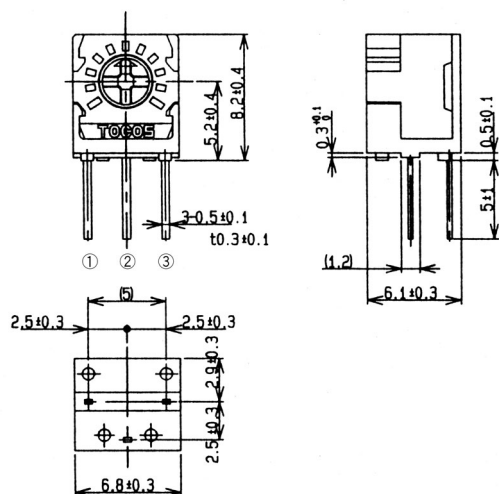
● GF063X



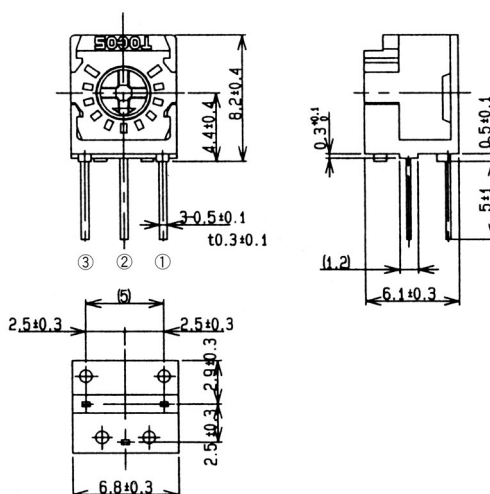
● GF063X1



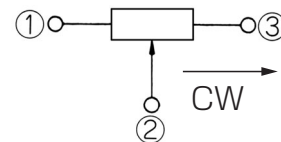
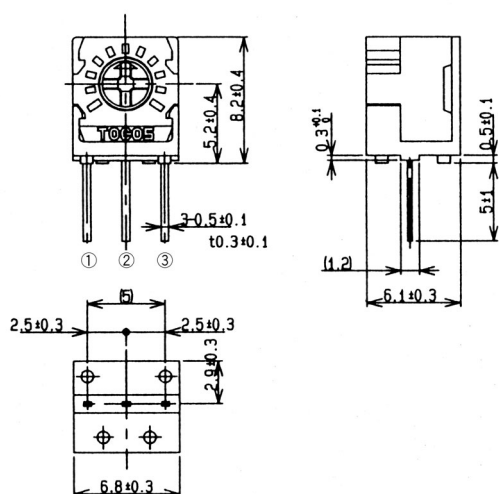
● GF063S



● GF063S1

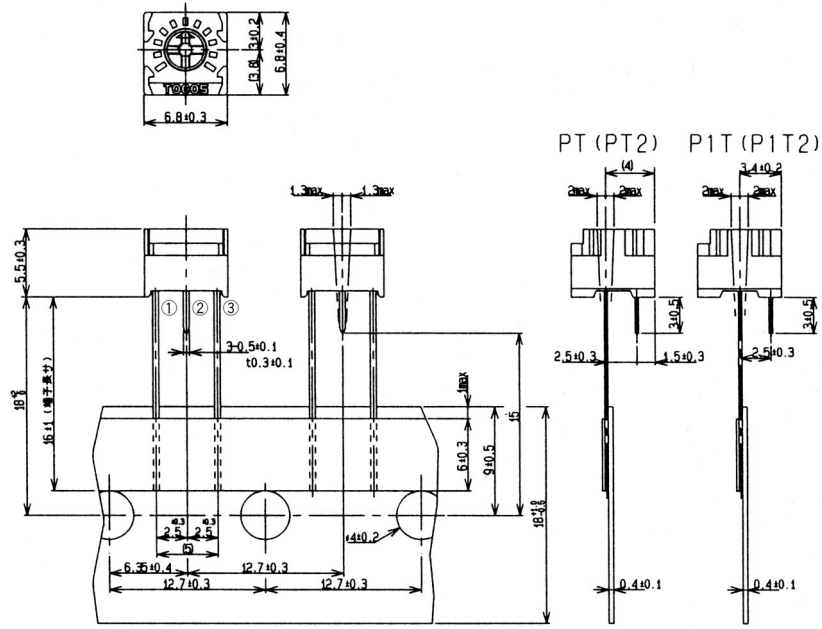


● GF063V

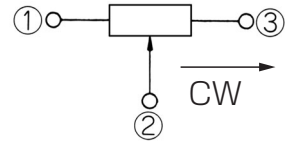
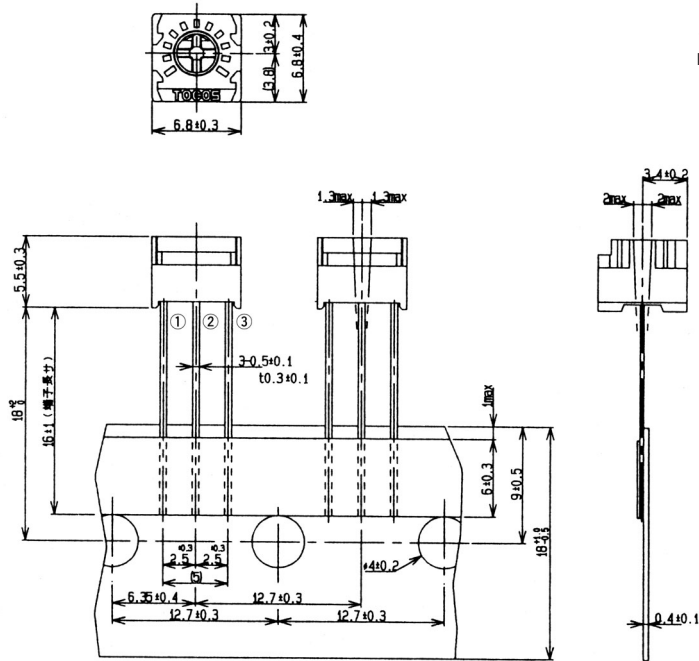


端子位置にご注意下さい
note the terminal position

- GF063P1T
- GF063P1T2



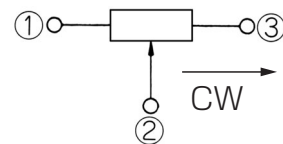
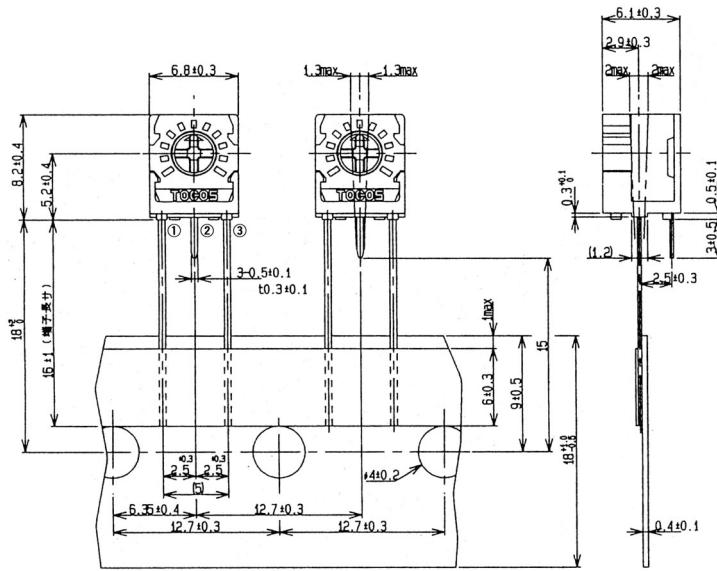
- GF063UT
- GF063UT2



端子位置にご注意下さい
note the terminal position

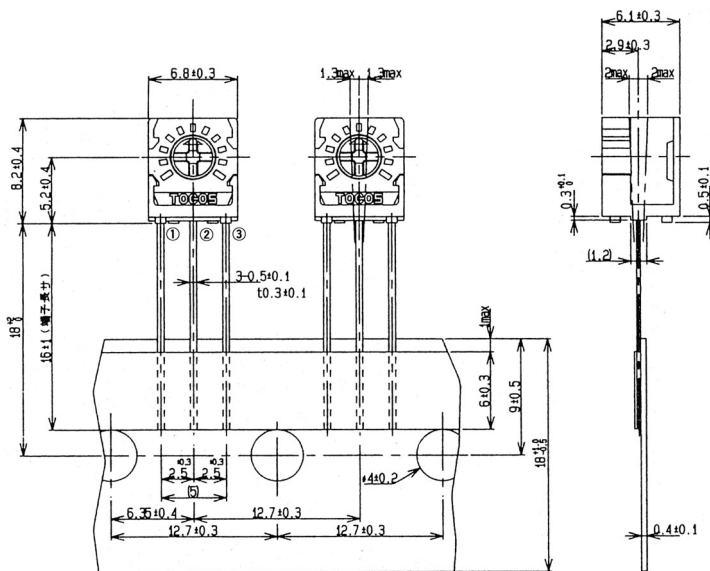
(Unit : mm)

- GF063ST
- GF063ST2

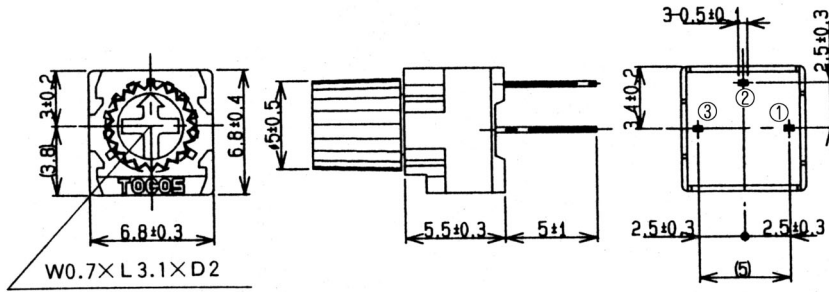


端子位置にご注意下さい
note the terminal position

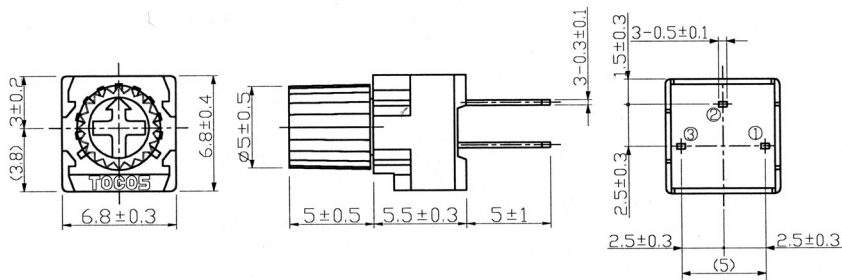
- GF063VT
- GF063VT2



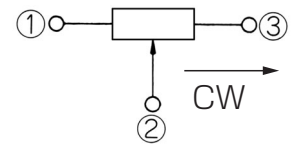
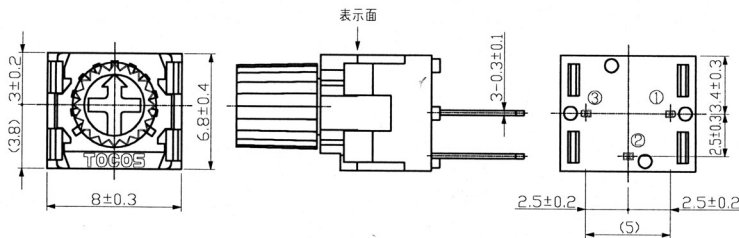
● GF063P1K



● GF063PK

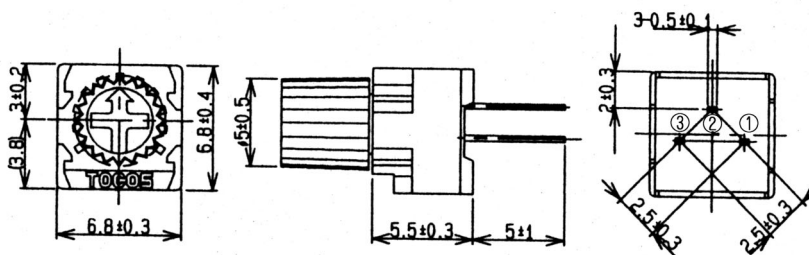


● GF063P2K

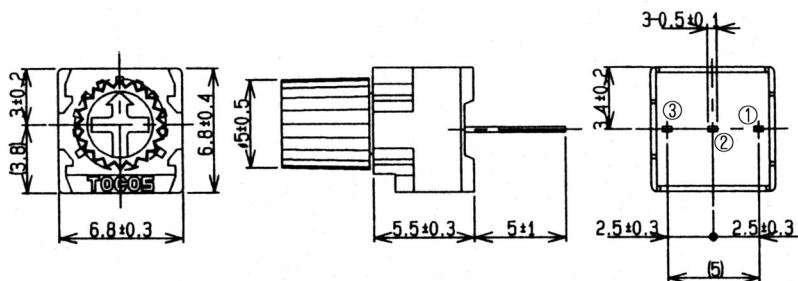


端子位置にご注意下さい
note the terminal position

● GF063WK

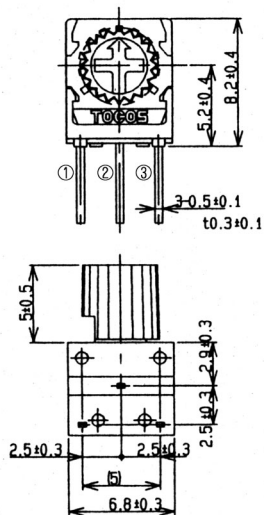


● GF063UK

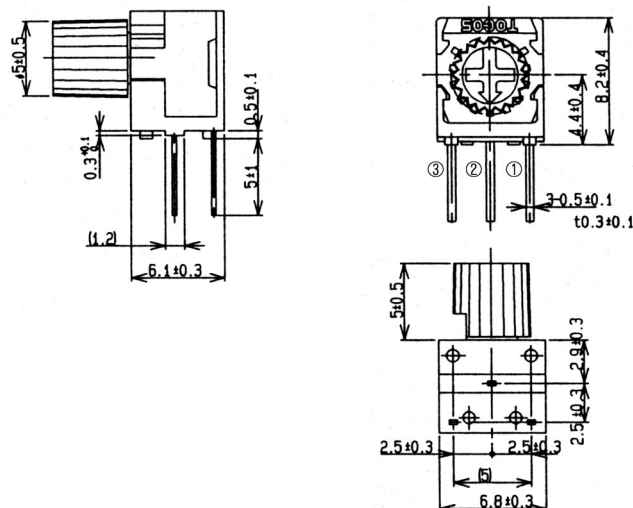


(Unit : mm)

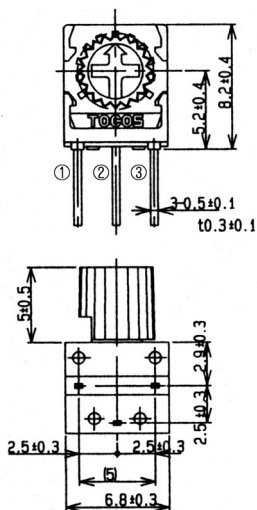
● GF063XK



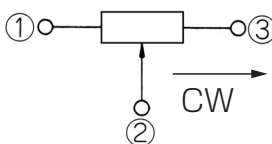
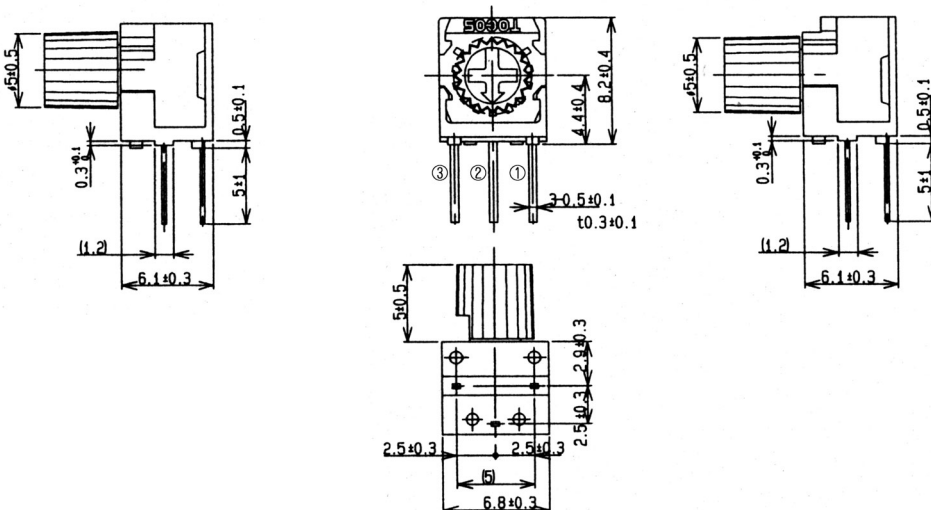
● GF063X1K



● GF063SK

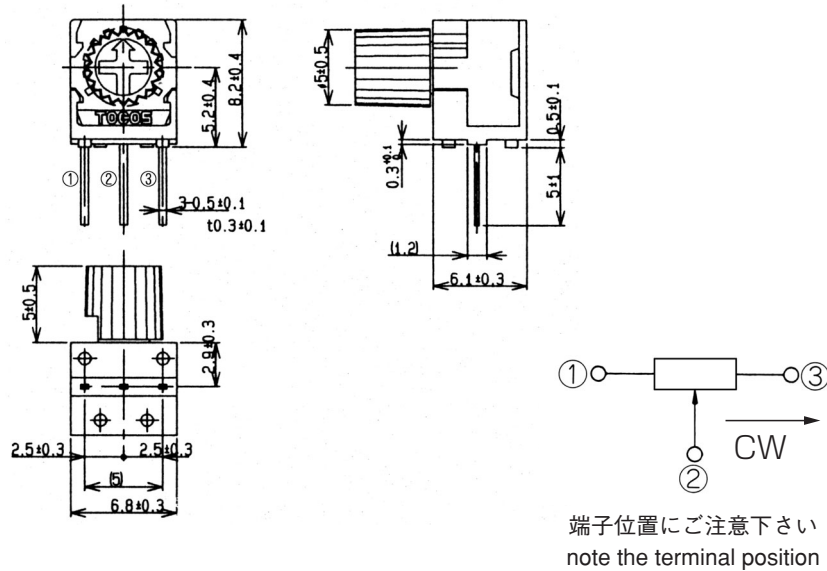


● GF063S1K



端子位置にご注意下さい
note the terminal position

● GF063VK



梱包仕様 PACKAGING SPECIFICATIONS

[テーピングの梱包仕様]

- テーピングは1,000個/テーピング単位の梱包になりますので、1,000個単位（1,000個 2,000個 3,000個…）でのご注文をお願い致します。
- テーピングの箱詰めは、『つづら折り (T2)』、『リール (T)』ともに1リールごとに化粧箱に梱包致します。

[マガジンの梱包仕様]

- マガジンは70個/スタック単位の梱包になりますので、70個単位（140個 210個…）でのご注文をお願い致します。

[ビニール袋の梱包仕様]

- ビニール袋での最小梱包は、50個/袋となりますので、50個単位（50個 100個 150個…）でのご注文をお願い致します。
- ビニール袋の箱詰めは、50個以上すべて化粧箱に梱包致します。

[Packaging Specification with Taping]

- The taping specification products have packed in unit of 1,000 pcs./reel. You are requested to place orders in the minimum unit of 1,000 pcs. at least (1,000, 2,000, 3,000 pcs.).
- The taping specification products have been packed into fancy boxes reel both for “Reeled Products (T1)” and “Ammo pack (T2)”

[Magazine Packing Specification]

- The magazine specification products have been packed in the unit of 70 pcs./stick. YOU are requested to place your orders in the units of 70 pcs. (70 pcs, 140 pcs, 210 pcs, …).

[Vinyl Bag Specification Packing]

- The minimum packing of vinyl bag is 50 pcs./bag. You are requested to place your orders in the units.
- All the products of vinyl bag specification are packed into fancy boxes if their amount is 50 pcs. at least.

※ご注文に際しては、《公称全抵抗値》Fig-1について上記すべての組み合わせが可能です。

※ご注文に際しては、前記の品名構成をご確認下さい。

※テーピング仕様及び、マガジン仕様は切り売り致しませんので、テーピングまたはスタック単位でご注文をお願い致します。

※You are kindly requested to place your order in reel units since our products of taping specification cannot be sold piecemeal.