

## 12mm Square, Single-Turn, Through-Hole Sealed Cermet Trimmers



### Features

- 12mm square, single-turn, through-hole, sealed cermet trimmers
- Stable, infinite resolution cermet element
- Unique 5,000 cycle rotational life
- Meets UL 94V-0 flammability requirements
- Top and side adjust models
- 4 standard styles, single-slot flush rotor, 5mm or 10mm single-slot metal shaft, or 8.2mm knurled plastic shaft
- Sealed to withstand wave soldering and immersion cleaning
- Optional 15, 20, 22, 25 or 30mm metal shafts available

### Specifications

#### Electrical

<b>Standard Resistance Range</b>	10Ω to 1MΩ (standard 1, 2 & 5 sequence)
<b>Resistance Tolerance</b>	±10% and ±20%
<b>End Resistance</b>	1% or 3Ω, whichever is greater
<b>Resistance Taper</b>	Linear
<b>Peak Noise (C.R.V.)</b>	2% or 3Ω, whichever is greater
<b>Power Rating</b>	0.75 watt at +70°C, 0 watt at +125°C
<b>Maximum Input Voltage</b>	300VDC or power rating, whichever is smaller
<b>Temperature Coefficient</b>	±100ppm/°C, 200Ω to 500kΩ ±250ppm/°C, other values
<b>Insulation Resistance</b>	100MΩ minimum at 500VDC
<b>Dielectric Strength</b>	900VAC, 1 minute
<b>Adjustment Travel</b>	270° ±10°

#### Mechanical

<b>Mechanical Travel</b>	300° ±10°
<b>Shaft Torque</b>	300 gf·cm (4.16 oz·in) max.
<b>Stop Strength</b>	1 kgf·cm (12.86 oz·in) min.
<b>Flammability of Plastic Materials</b>	Meets UL 94V-0
<b>Nominal Weight</b>	1.4g (P); 1.8g (S, X, R) no shaft 1.8g (P); 2.2g (S, X, R) 5mm metal shaft 2.1g (P); 2.5g (S, X, R) 10mm metal shaft 1.7g (P); 2.1g (S, X, R) with knurled plastic shaft
<b>Marking</b>	Resistance code, date code, model type

#### Environmental

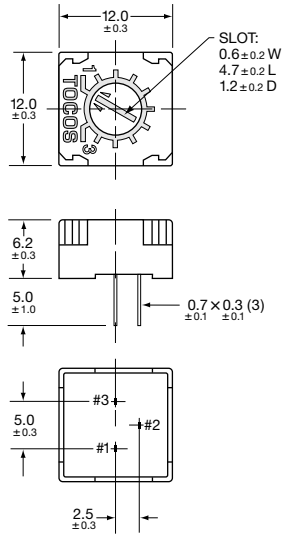
<b>Temperature Range</b>	-55°C to +125°C
<b>High Temperature Exposure</b>	+125°C, 250 hours ΔT/R ≤ ±3%, S.S. ≤ ±1%
<b>Load Life</b>	+70°C, 0.75 watt, 1,000 hours ΔT/R ≤ ±3%, S.S. ≤ ±1%
<b>Thermal Shock</b>	-55°C, +125°C, 30 minutes each, 5 cycles ΔT/R ≤ ±2%, S.S. ≤ ±1%
<b>Shock</b>	50G, 6ms, 6 directions, 3 times each ΔT/R ≤ ±1%, S.S. ≤ ±1%
<b>Vibration</b>	10-2,000Hz, 1.5mm amplitude, 20G, 12 hours ΔT/R ≤ ±1%, S.S. ≤ ±1%
<b>Humidity</b>	+40°C, 90-95% RH, 0.75 watt, 500 hours ΔT/R ≤ ±3%, S.S. ≤ ±1%
<b>Moisture Resistance</b>	-10°C to +65°C, 80-98% RH, 0.75 watt, 10 cycles, 240 hours ΔT/R ≤ ±3%
<b>Soldering Heat Resistance</b>	350°C, 3 seconds ΔT/R ≤ ±1%
<b>Seal Test</b>	+85°C, hot water for 1 minute
<b>Rotational Life</b>	5,000 cycles without discontinuity ΔT/R ≤ ±5%

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

Unit: mm

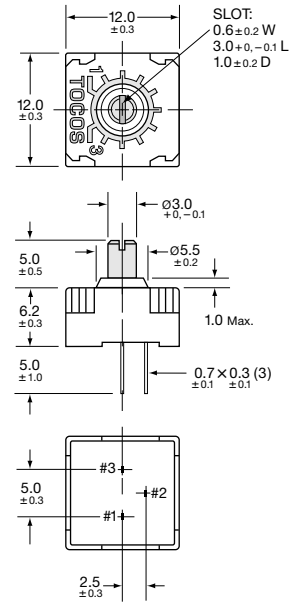
**GF12P0S**

No Shaft, Flush Single-Slot, Top Adjust  
P Terminal Style



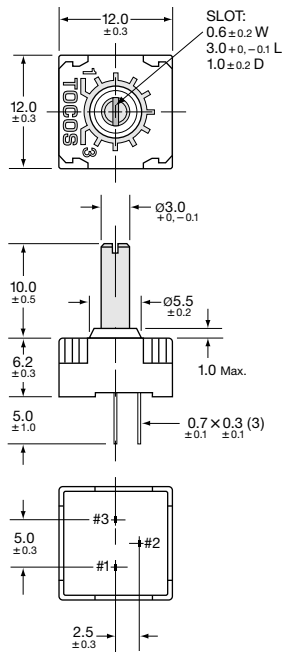
**GF12P5S**

5mm Metal Shaft, Single-Slot, Top Adjust  
P Terminal Style



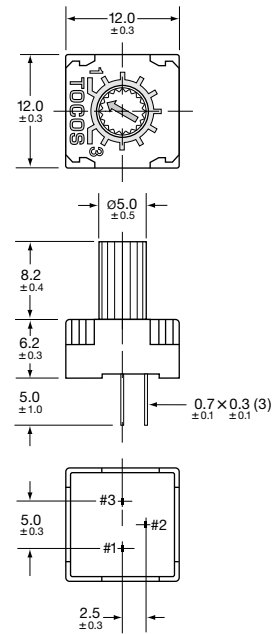
**GF12P10S**

10mm Metal Shaft, Single-Slot, Top Adjust  
P Terminal Style



**GF12P8.2SK**

8.2mm Knurled Plastic Shaft, Top Adjust  
P Terminal Style

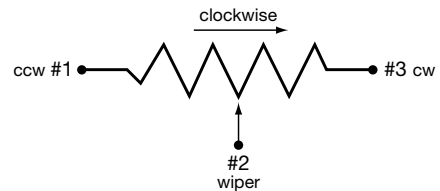
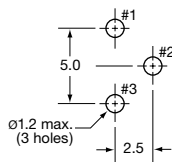


Recommended PCB Layout

Electrical Schematic for P Models

**P Pin-Out**

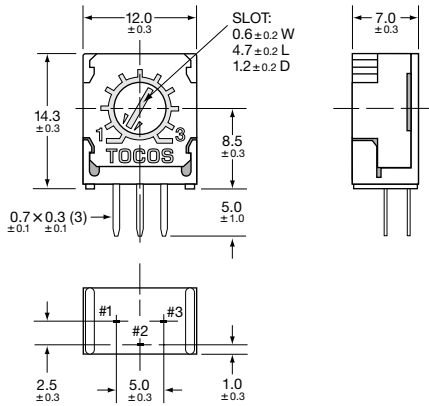
Unit: mm



Unit: mm

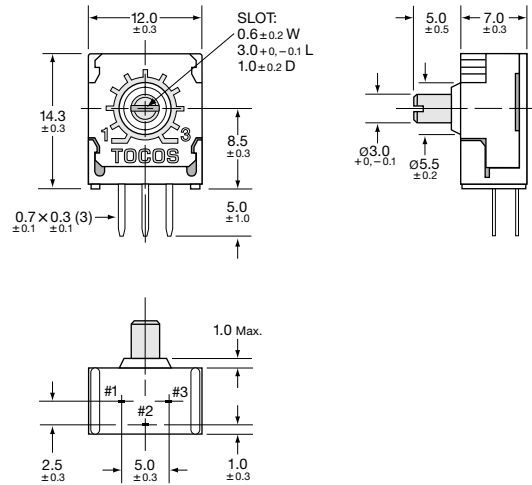
**GF12S0S**

No Shaft, Flush Single-Slot, Side Adjust  
S Terminal Style



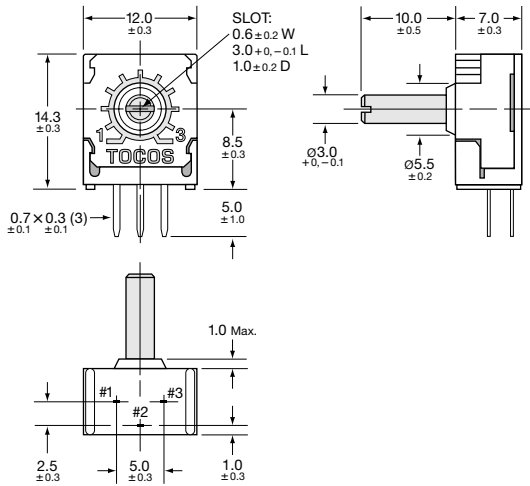
**GF12S5S**

5mm Metal Shaft, Single-Slot, Side Adjust  
S Terminal Style



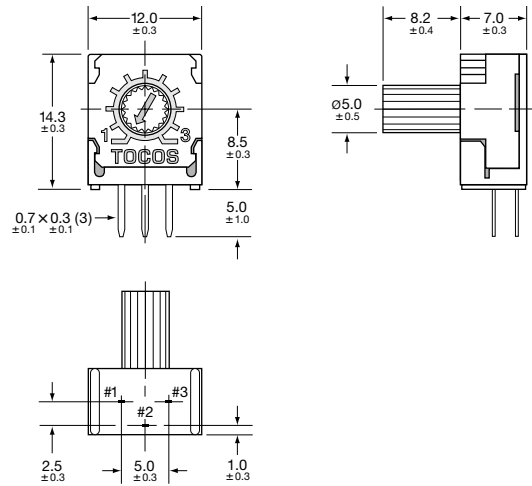
**GF12S10S**

10mm Metal Shaft, Single-Slot, Side Adjust  
S Terminal Style



**GF12S8.2SK**

8.2mm Knurled Plastic Shaft, Side Adjust  
S Terminal Style

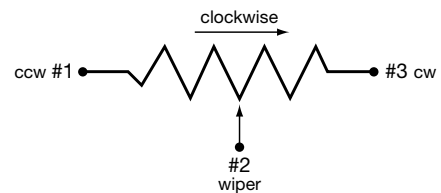
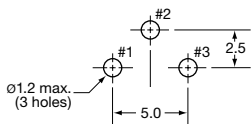


Recommended PCB Layout

Electrical Schematic for S Models

S Pin-Out

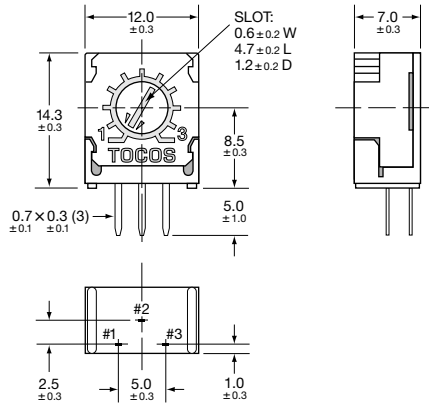
Unit: mm



Unit: mm

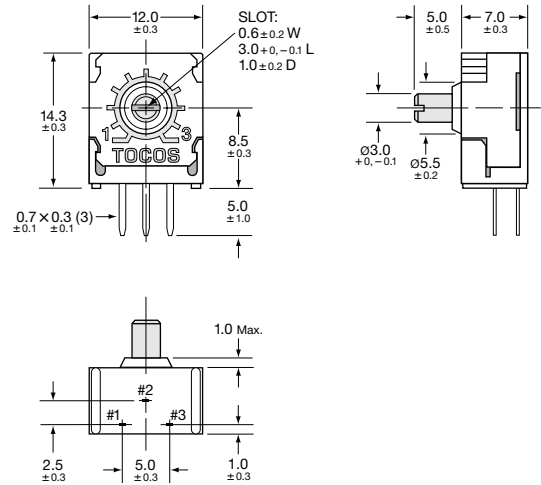
**GF12X0S**

**No Shaft, Flush Single-Slot, Side Adjust  
X Terminal Style**



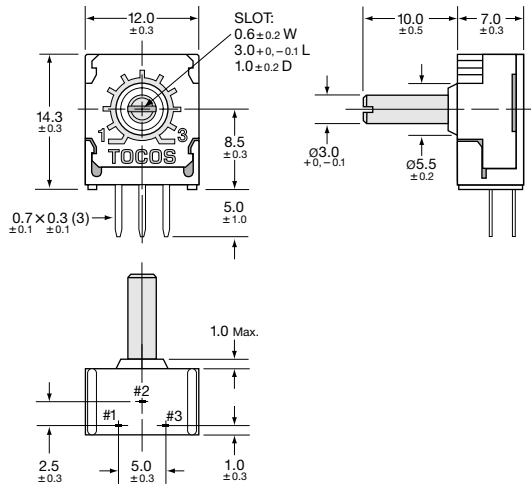
**GF12X5S**

**5mm Metal Shaft, Single-Slot, Side Adjust  
X Terminal Style**



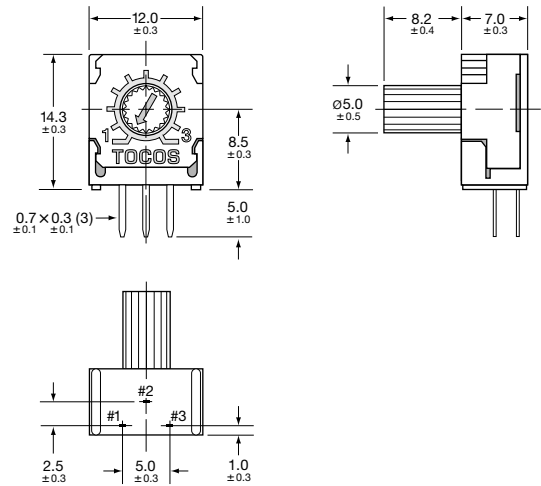
**GF12X10S**

**10mm Metal Shaft, Single-Slot, Side Adjust  
X Terminal Style**



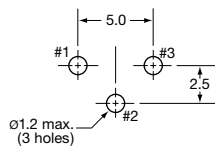
**GF12X8.2SK**

**8.2mm Knurled Plastic Shaft, Side Adjust  
X Terminal Style**



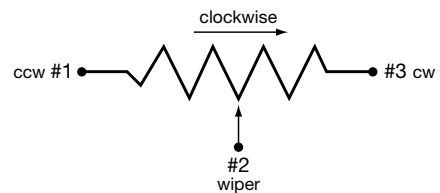
**Recommended PCB Layout**

**X Pin-Out**



Unit: mm

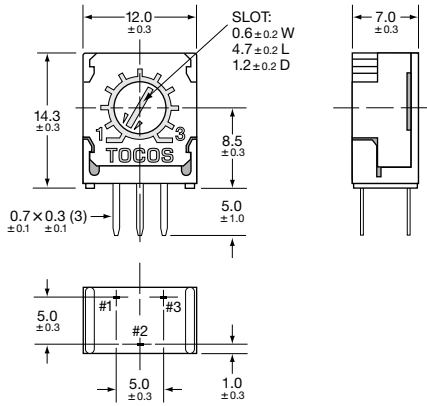
**Electrical Schematic for X Models**



Unit: mm

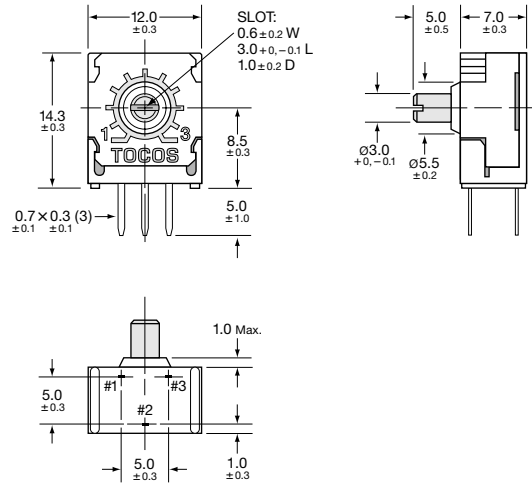
**GF12R0S**

**No Shaft, Flush Single-Slot, Side Adjust  
R Terminal Style**



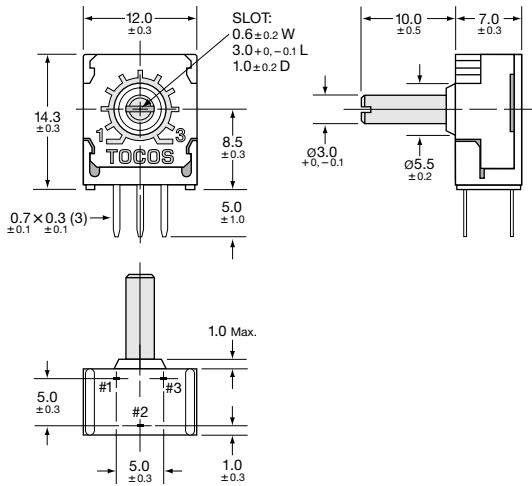
**GF12R5S**

**5mm Metal Shaft, Single-Slot, Side Adjust  
R Terminal Style**



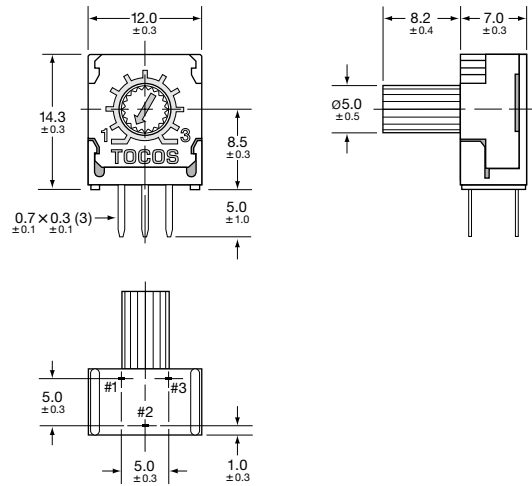
**GF12R10S**

**10mm Metal Shaft, Single-Slot, Side Adjust  
R Terminal Style**



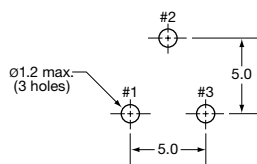
**GF12R8.2SK**

**8.2mm Knurled Plastic Shaft, Side Adjust  
R Terminal Style**



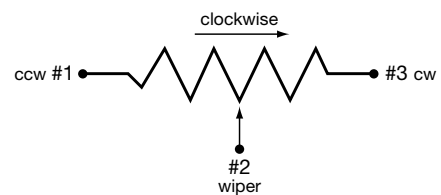
**Recommended PCB Layout**

**R Pin-Out**



Unit: mm

**Electrical Schematic for R Models**



**GF12 P 0 S K B 102 K**

- Resistance Tolerance: K =  $\pm 10\%$ ; M =  $\pm 20\%$
- Resistance Code: Expressed in ohms. A three digit code where the first two digits are significant figures, and the third digit indicates the number of zeros that follow these figures (i.e., 100 = 10 $\Omega$ ; 101 = 100 $\Omega$ ; 102 = 1,000 $\Omega$ ; 105 = 1,000,000 $\Omega$ ).
- Resistance Taper: B = Linear.
- Adjustment: K = Knurled Plastic Shaft.  
Blank = Flush Rotor or Metal Shafts.
- Shaft Style: S = Single-Slot.  
F = Flat (available upon request for metal shafts only).
- Shaft Length: 0 = No Shaft, Rotor Flush with Housing.  
5 = 5mm Metal Shaft.  
10 = 10mm Metal Shaft.  
8.2 = 8.2mm Knurled Plastic Shaft.  
*Note: 15, 20, 22, 25 or 30mm metal shafts available upon request.*
- Terminal Style: P = 3-Lead Configuration, Top Adjust.  
S, X, R = 3-Lead Configurations, Side Adjust.
- TOCOS Series Name.

**Part Numbers**

Nominal Resistance		Catalog No. Bulk		Potentiometer Styles
Value ( $\Omega$ )	Code	Resistance Tolerance $\pm 10\%$	Resistance Tolerance $\pm 20\%$	

**GF12P 0S Through-Hole, P Terminal Style, No Shaft, Flush Single-Slot, Top Adjust**

10	100	GF12P 0S B 100 K	GF12P 0S B 100 M
20	200	GF12P 0S B 200 K	GF12P 0S B 200 M
50	500	GF12P 0S B 500 K	GF12P 0S B 500 M
100	101	GF12P 0S B 101 K	GF12P 0S B 101 M
200	201	GF12P 0S B 201 K	GF12P 0S B 201 M
500	501	GF12P 0S B 501 K	GF12P 0S B 501 M
1,000	102	GF12P 0S B 102 K	GF12P 0S B 102 M
2,000	202	GF12P 0S B 202 K	GF12P 0S B 202 M
5,000	502	GF12P 0S B 502 K	GF12P 0S B 502 M
10,000	103	GF12P 0S B 103 K	GF12P 0S B 103 M
20,000	203	GF12P 0S B 203 K	GF12P 0S B 203 M
50,000	503	GF12P 0S B 503 K	GF12P 0S B 503 M
100,000	104	GF12P 0S B 104 K	GF12P 0S B 104 M
200,000	204	GF12P 0S B 204 K	GF12P 0S B 204 M
500,000	504	GF12P 0S B 504 K	GF12P 0S B 504 M
1,000,000	105	GF12P 0S B 105 K	GF12P 0S B 105 M



**GF12P 0S**

**GF12P 5S Through-Hole, P Terminal Style, 5mm Metal Shaft, Single-Slot, Top Adjust**

10	100	GF12P 5S B 100 K	GF12P 5S B 100 M
20	200	GF12P 5S B 200 K	GF12P 5S B 200 M
50	500	GF12P 5S B 500 K	GF12P 5S B 500 M
100	101	GF12P 5S B 101 K	GF12P 5S B 101 M
200	201	GF12P 5S B 201 K	GF12P 5S B 201 M
500	501	GF12P 5S B 501 K	GF12P 5S B 501 M
1,000	102	GF12P 5S B 102 K	GF12P 5S B 102 M
2,000	202	GF12P 5S B 202 K	GF12P 5S B 202 M
5,000	502	GF12P 5S B 502 K	GF12P 5S B 502 M
10,000	103	GF12P 5S B 103 K	GF12P 5S B 103 M
20,000	203	GF12P 5S B 203 K	GF12P 5S B 203 M
50,000	503	GF12P 5S B 503 K	GF12P 5S B 503 M
100,000	104	GF12P 5S B 104 K	GF12P 5S B 104 M
200,000	204	GF12P 5S B 204 K	GF12P 5S B 204 M
500,000	504	GF12P 5S B 504 K	GF12P 5S B 504 M
1,000,000	105	GF12P 5S B 105 K	GF12P 5S B 105 M



**GF12P 5S**

Nominal Resistance		Catalog No. Bulk		Potentiometer Styles
Value ( $\Omega$ )	Code	Resistance Tolerance $\pm 10\%$	Resistance Tolerance $\pm 20\%$	

**GF12P 10S Through-Hole, P Terminal Style, 10mm Metal Shaft, Single-Slot, Top Adjust**

10	100	GF12P 10S B 100 K	GF12P 10S B 100 M
20	200	GF12P 10S B 200 K	GF12P 10S B 200 M
50	500	GF12P 10S B 500 K	GF12P 10S B 500 M
100	101	GF12P 10S B 101 K	GF12P 10S B 101 M
200	201	GF12P 10S B 201 K	GF12P 10S B 201 M
500	501	GF12P 10S B 501 K	GF12P 10S B 501 M
1,000	102	GF12P 10S B 102 K	GF12P 10S B 102 M
2,000	202	GF12P 10S B 202 K	GF12P 10S B 202 M
5,000	502	GF12P 10S B 502 K	GF12P 10S B 502 M
10,000	103	GF12P 10S B 103 K	GF12P 10S B 103 M
20,000	203	GF12P 10S B 203 K	GF12P 10S B 203 M
50,000	503	GF12P 10S B 503 K	GF12P 10S B 503 M
100,000	104	GF12P 10S B 104 K	GF12P 10S B 104 M
200,000	204	GF12P 10S B 204 K	GF12P 10S B 204 M
500,000	504	GF12P 10S B 504 K	GF12P 10S B 504 M
1,000,000	105	GF12P 10S B 105 K	GF12P 10S B 105 M



**GF12P 10S**

**GF12P 8.2SK Through-Hole, P Terminal Style, 8.2mm Knurled Plastic Shaft, Top Adjust**

10	100	GF12P 8.2SK B 100 K	GF12P 8.2SK B 100 M
20	200	GF12P 8.2SK B 200 K	GF12P 8.2SK B 200 M
50	500	GF12P 8.2SK B 500 K	GF12P 8.2SK B 500 M
100	101	GF12P 8.2SK B 101 K	GF12P 8.2SK B 101 M
200	201	GF12P 8.2SK B 201 K	GF12P 8.2SK B 201 M
500	501	GF12P 8.2SK B 501 K	GF12P 8.2SK B 501 M
1,000	102	GF12P 8.2SK B 102 K	GF12P 8.2SK B 102 M
2,000	202	GF12P 8.2SK B 202 K	GF12P 8.2SK B 202 M
5,000	502	GF12P 8.2SK B 502 K	GF12P 8.2SK B 502 M
10,000	103	GF12P 8.2SK B 103 K	GF12P 8.2SK B 103 M
20,000	203	GF12P 8.2SK B 203 K	GF12P 8.2SK B 203 M
50,000	503	GF12P 8.2SK B 503 K	GF12P 8.2SK B 503 M
100,000	104	GF12P 8.2SK B 104 K	GF12P 8.2SK B 104 M
200,000	204	GF12P 8.2SK B 204 K	GF12P 8.2SK B 204 M
500,000	504	GF12P 8.2SK B 504 K	GF12P 8.2SK B 504 M
1,000,000	105	GF12P 8.2SK B 105 K	GF12P 8.2SK B 105 M



**GF12P 8.2SK**

**GF12S 0S Through-Hole, S Terminal Style, No Shaft, Flush Single-Slot, Side Adjust**

10	100	GF12S 0S B 100 K	GF12S 0S B 100 M
20	200	GF12S 0S B 200 K	GF12S 0S B 200 M
50	500	GF12S 0S B 500 K	GF12S 0S B 500 M
100	101	GF12S 0S B 101 K	GF12S 0S B 101 M
200	201	GF12S 0S B 201 K	GF12S 0S B 201 M
500	501	GF12S 0S B 501 K	GF12S 0S B 501 M
1,000	102	GF12S 0S B 102 K	GF12S 0S B 102 M
2,000	202	GF12S 0S B 202 K	GF12S 0S B 202 M
5,000	502	GF12S 0S B 502 K	GF12S 0S B 502 M
10,000	103	GF12S 0S B 103 K	GF12S 0S B 103 M
20,000	203	GF12S 0S B 203 K	GF12S 0S B 203 M
50,000	503	GF12S 0S B 503 K	GF12S 0S B 503 M
100,000	104	GF12S 0S B 104 K	GF12S 0S B 104 M
200,000	204	GF12S 0S B 204 K	GF12S 0S B 204 M
500,000	504	GF12S 0S B 504 K	GF12S 0S B 504 M
1,000,000	105	GF12S 0S B 105 K	GF12S 0S B 105 M



**GF12S 0S**

Nominal Resistance		Catalog No. Bulk		Potentiometer Styles
Value ( $\Omega$ )	Code	Resistance Tolerance $\pm 10\%$	Resistance Tolerance $\pm 20\%$	

**GF12S 5S Through-Hole, S Terminal Style, 5mm Metal Shaft, Single-Slot, Side Adjust**

10	100	GF12S 5S B 100 K	GF12S 5S B 100 M
20	200	GF12S 5S B 200 K	GF12S 5S B 200 M
50	500	GF12S 5S B 500 K	GF12S 5S B 500 M
100	101	GF12S 5S B 101 K	GF12S 5S B 101 M
200	201	GF12S 5S B 201 K	GF12S 5S B 201 M
500	501	GF12S 5S B 501 K	GF12S 5S B 501 M
1,000	102	GF12S 5S B 102 K	GF12S 5S B 102 M
2,000	202	GF12S 5S B 202 K	GF12S 5S B 202 M
5,000	502	GF12S 5S B 502 K	GF12S 5S B 502 M
10,000	103	GF12S 5S B 103 K	GF12S 5S B 103 M
20,000	203	GF12S 5S B 203 K	GF12S 5S B 203 M
50,000	503	GF12S 5S B 503 K	GF12S 5S B 503 M
100,000	104	GF12S 5S B 104 K	GF12S 5S B 104 M
200,000	204	GF12S 5S B 204 K	GF12S 5S B 204 M
500,000	504	GF12S 5S B 504 K	GF12S 5S B 504 M
1,000,000	105	GF12S 5S B 105 K	GF12S 5S B 105 M



**GF12S 5S**

**GF12S 10S Through-Hole, S Terminal Style, 10mm Metal Shaft, Single-Slot, Side Adjust**

10	100	GF12S 10S B 100 K	GF12S 10S B 100 M
20	200	GF12S 10S B 200 K	GF12S 10S B 200 M
50	500	GF12S 10S B 500 K	GF12S 10S B 500 M
100	101	GF12S 10S B 101 K	GF12S 10S B 101 M
200	201	GF12S 10S B 201 K	GF12S 10S B 201 M
500	501	GF12S 10S B 501 K	GF12S 10S B 501 M
1,000	102	GF12S 10S B 102 K	GF12S 10S B 102 M
2,000	202	GF12S 10S B 202 K	GF12S 10S B 202 M
5,000	502	GF12S 10S B 502 K	GF12S 10S B 502 M
10,000	103	GF12S 10S B 103 K	GF12S 10S B 103 M
20,000	203	GF12S 10S B 203 K	GF12S 10S B 203 M
50,000	503	GF12S 10S B 503 K	GF12S 10S B 503 M
100,000	104	GF12S 10S B 104 K	GF12S 10S B 104 M
200,000	204	GF12S 10S B 204 K	GF12S 10S B 204 M
500,000	504	GF12S 10S B 504 K	GF12S 10S B 504 M
1,000,000	105	GF12S 10S B 105 K	GF12S 10S B 105 M



**GF12S 10S**

**GF12S 8.2SK Through-Hole, S Terminal Style, 8.2mm Knurled Plastic Shaft, Side Adjust**

10	100	GF12S 8.2SK B 100 K	GF12S 8.2SK B 100 M
20	200	GF12S 8.2SK B 200 K	GF12S 8.2SK B 200 M
50	500	GF12S 8.2SK B 500 K	GF12S 8.2SK B 500 M
100	101	GF12S 8.2SK B 101 K	GF12S 8.2SK B 101 M
200	201	GF12S 8.2SK B 201 K	GF12S 8.2SK B 201 M
500	501	GF12S 8.2SK B 501 K	GF12S 8.2SK B 501 M
1,000	102	GF12S 8.2SK B 102 K	GF12S 8.2SK B 102 M
2,000	202	GF12S 8.2SK B 202 K	GF12S 8.2SK B 202 M
5,000	502	GF12S 8.2SK B 502 K	GF12S 8.2SK B 502 M
10,000	103	GF12S 8.2SK B 103 K	GF12S 8.2SK B 103 M
20,000	203	GF12S 8.2SK B 203 K	GF12S 8.2SK B 203 M
50,000	503	GF12S 8.2SK B 503 K	GF12S 8.2SK B 503 M
100,000	104	GF12S 8.2SK B 104 K	GF12S 8.2SK B 104 M
200,000	204	GF12S 8.2SK B 204 K	GF12S 8.2SK B 204 M
500,000	504	GF12S 8.2SK B 504 K	GF12S 8.2SK B 504 M
1,000,000	105	GF12S 8.2SK B 105 K	GF12S 8.2SK B 105 M



**GF12S 8.2SK**



Nominal Resistance		Catalog No. Bulk		Potentiometer Styles
Value ( $\Omega$ )	Code	Resistance Tolerance $\pm 10\%$	Resistance Tolerance $\pm 20\%$	

**GF12X 0S Through-Hole, X Terminal Style, No Shaft, Flush Single-Slot, Side Adjust**

10	100	GF12X 0S B 100 K	GF12X 0S B 100 M
20	200	GF12X 0S B 200 K	GF12X 0S B 200 M
50	500	GF12X 0S B 500 K	GF12X 0S B 500 M
100	101	GF12X 0S B 101 K	GF12X 0S B 101 M
200	201	GF12X 0S B 201 K	GF12X 0S B 201 M
500	501	GF12X 0S B 501 K	GF12X 0S B 501 M
1,000	102	GF12X 0S B 102 K	GF12X 0S B 102 M
2,000	202	GF12X 0S B 202 K	GF12X 0S B 202 M
5,000	502	GF12X 0S B 502 K	GF12X 0S B 502 M
10,000	103	GF12X 0S B 103 K	GF12X 0S B 103 M
20,000	203	GF12X 0S B 203 K	GF12X 0S B 203 M
50,000	503	GF12X 0S B 503 K	GF12X 0S B 503 M
100,000	104	GF12X 0S B 104 K	GF12X 0S B 104 M
200,000	204	GF12X 0S B 204 K	GF12X 0S B 204 M
500,000	504	GF12X 0S B 504 K	GF12X 0S B 504 M
1,000,000	105	GF12X 0S B 105 K	GF12X 0S B 105 M



**GF12X 0S**

**GF12X 5S Through-Hole, X Terminal Style, 5mm Metal Shaft, Single-Slot, Side Adjust**

10	100	GF12X 5S B 100 K	GF12X 5S B 100 M
20	200	GF12X 5S B 200 K	GF12X 5S B 200 M
50	500	GF12X 5S B 500 K	GF12X 5S B 500 M
100	101	GF12X 5S B 101 K	GF12X 5S B 101 M
200	201	GF12X 5S B 201 K	GF12X 5S B 201 M
500	501	GF12X 5S B 501 K	GF12X 5S B 501 M
1,000	102	GF12X 5S B 102 K	GF12X 5S B 102 M
2,000	202	GF12X 5S B 202 K	GF12X 5S B 202 M
5,000	502	GF12X 5S B 502 K	GF12X 5S B 502 M
10,000	103	GF12X 5S B 103 K	GF12X 5S B 103 M
20,000	203	GF12X 5S B 203 K	GF12X 5S B 203 M
50,000	503	GF12X 5S B 503 K	GF12X 5S B 503 M
100,000	104	GF12X 5S B 104 K	GF12X 5S B 104 M
200,000	204	GF12X 5S B 204 K	GF12X 5S B 204 M
500,000	504	GF12X 5S B 504 K	GF12X 5S B 504 M
1,000,000	105	GF12X 5S B 105 K	GF12X 5S B 105 M



**GF12X 5S**

**GF12X 10S Through-Hole, X Terminal Style, 10mm Metal Shaft, Single-Slot, Side Adjust**

10	100	GF12X 10S B 100 K	GF12X 10S B 100 M
20	200	GF12X 10S B 200 K	GF12X 10S B 200 M
50	500	GF12X 10S B 500 K	GF12X 10S B 500 M
100	101	GF12X 10S B 101 K	GF12X 10S B 101 M
200	201	GF12X 10S B 201 K	GF12X 10S B 201 M
500	501	GF12X 10S B 501 K	GF12X 10S B 501 M
1,000	102	GF12X 10S B 102 K	GF12X 10S B 102 M
2,000	202	GF12X 10S B 202 K	GF12X 10S B 202 M
5,000	502	GF12X 10S B 502 K	GF12X 10S B 502 M
10,000	103	GF12X 10S B 103 K	GF12X 10S B 103 M
20,000	203	GF12X 10S B 203 K	GF12X 10S B 203 M
50,000	503	GF12X 10S B 503 K	GF12X 10S B 503 M
100,000	104	GF12X 10S B 104 K	GF12X 10S B 104 M
200,000	204	GF12X 10S B 204 K	GF12X 10S B 204 M
500,000	504	GF12X 10S B 504 K	GF12X 10S B 504 M
1,000,000	105	GF12X 10S B 105 K	GF12X 10S B 105 M



**GF12X 10S**

Nominal Resistance		Catalog No. Bulk		Potentiometer Styles
Value ( $\Omega$ )	Code	Resistance Tolerance $\pm 10\%$	Resistance Tolerance $\pm 20\%$	

**GF12X 8.2SK Through-Hole, X Terminal Style, 8.2mm Knurled Plastic Shaft, Side Adjust**

10	100	GF12X 8.2SK B 100 K	GF12X 8.2SK B 100M
20	200	GF12X 8.2SK B 200 K	GF12X 8.2SK B 200M
50	500	GF12X 8.2SK B 500 K	GF12X 8.2SK B 500M
100	101	GF12X 8.2SK B 101 K	GF12X 8.2SK B 101M
200	201	GF12X 8.2SK B 201 K	GF12X 8.2SK B 201M
500	501	GF12X 8.2SK B 501 K	GF12X 8.2SK B 501M
1,000	102	GF12X 8.2SK B 102 K	GF12X 8.2SK B 102M
2,000	202	GF12X 8.2SK B 202 K	GF12X 8.2SK B 202M
5,000	502	GF12X 8.2SK B 502 K	GF12X 8.2SK B 502M
10,000	103	GF12X 8.2SK B 103 K	GF12X 8.2SK B 103M
20,000	203	GF12X 8.2SK B 203 K	GF12X 8.2SK B 203M
50,000	503	GF12X 8.2SK B 503 K	GF12X 8.2SK B 503M
100,000	104	GF12X 8.2SK B 104 K	GF12X 8.2SK B 104M
200,000	204	GF12X 8.2SK B 204 K	GF12X 8.2SK B 204M
500,000	504	GF12X 8.2SK B 504 K	GF12X 8.2SK B 504M
1,000,000	105	GF12X 8.2SK B 105 K	GF12X 8.2SK B 105M



**GF12X 8.2SK**

**GF12R 0S Through-Hole, R Terminal Style, No Shaft, Flush Single-Slot, Side Adjust**

10	100	GF12R 0S B 100 K	GF12R 0S B 100 M
20	200	GF12R 0S B 200 K	GF12R 0S B 200 M
50	500	GF12R 0S B 500 K	GF12R 0S B 500 M
100	101	GF12R 0S B 101 K	GF12R 0S B 101 M
200	201	GF12R 0S B 201 K	GF12R 0S B 201 M
500	501	GF12R 0S B 501 K	GF12R 0S B 501 M
1,000	102	GF12R 0S B 102 K	GF12R 0S B 102 M
2,000	202	GF12R 0S B 202 K	GF12R 0S B 202 M
5,000	502	GF12R 0S B 502 K	GF12R 0S B 502 M
10,000	103	GF12R 0S B 103 K	GF12R 0S B 103 M
20,000	203	GF12R 0S B 203 K	GF12R 0S B 203 M
50,000	503	GF12R 0S B 503 K	GF12R 0S B 503 M
100,000	104	GF12R 0S B 104 K	GF12R 0S B 104 M
200,000	204	GF12R 0S B 204 K	GF12R 0S B 204 M
500,000	504	GF12R 0S B 504 K	GF12R 0S B 504 M
1,000,000	105	GF12R 0S B 105 K	GF12R 0S B 105 M



**GF12R 0S**

**GF12R 5S Through-Hole, R Terminal Style, 5mm Metal Shaft, Single-Slot, Side Adjust**

10	100	GF12R 5S B 100 K	GF12R 5S B 100 M
20	200	GF12R 5S B 200 K	GF12R 5S B 200 M
50	500	GF12R 5S B 500 K	GF12R 5S B 500 M
100	101	GF12R 5S B 101 K	GF12R 5S B 101 M
200	201	GF12R 5S B 201 K	GF12R 5S B 201 M
500	501	GF12R 5S B 501 K	GF12R 5S B 501 M
1,000	102	GF12R 5S B 102 K	GF12R 5S B 102 M
2,000	202	GF12R 5S B 202 K	GF12R 5S B 202 M
5,000	502	GF12R 5S B 502 K	GF12R 5S B 502 M
10,000	103	GF12R 5S B 103 K	GF12R 5S B 103 M
20,000	203	GF12R 5S B 203 K	GF12R 5S B 203 M
50,000	503	GF12R 5S B 503 K	GF12R 5S B 503 M
100,000	104	GF12R 5S B 104 K	GF12R 5S B 104 M
200,000	204	GF12R 5S B 204 K	GF12R 5S B 204 M
500,000	504	GF12R 5S B 504 K	GF12R 5S B 504 M
1,000,000	105	GF12R 5S B 105 K	GF12R 5S B 105 M



**GF12R 5S**

## GF12 Series

## Part Numbers

Nominal Resistance		Catalog No. Bulk		Potentiometer Styles
Value ( $\Omega$ )	Code	Resistance Tolerance $\pm 10\%$	Resistance Tolerance $\pm 20\%$	

### GF12R 10S Through-Hole, R Terminal Style, 10mm Metal Shaft, Single-Slot, Side Adjust

10	100	GF12R 10S B 100 K	GF12R 10S B 100 M
20	200	GF12R 10S B 200 K	GF12R 10S B 200 M
50	500	GF12R 10S B 500 K	GF12R 10S B 500 M
100	101	GF12R 10S B 101 K	GF12R 10S B 101 M
200	201	GF12R 10S B 201 K	GF12R 10S B 201 M
500	501	GF12R 10S B 501 K	GF12R 10S B 501 M
1,000	102	GF12R 10S B 102 K	GF12R 10S B 102 M
2,000	202	GF12R 10S B 202 K	GF12R 10S B 202 M
5,000	502	GF12R 10S B 502 K	GF12R 10S B 502 M
10,000	103	GF12R 10S B 103 K	GF12R 10S B 103 M
20,000	203	GF12R 10S B 203 K	GF12R 10S B 203 M
50,000	503	GF12R 10S B 503 K	GF12R 10S B 503 M
100,000	104	GF12R 10S B 104 K	GF12R 10S B 104 M
200,000	204	GF12R 10S B 204 K	GF12R 10S B 204 M
500,000	504	GF12R 10S B 504 K	GF12R 10S B 504 M
1,000,000	105	GF12R 10S B 105 K	GF12R 10S B 105 M



GF12R 10S

### GF12R 8.2SK Through-Hole, R Terminal Style, 8.2mm Knurled Plastic Shaft, Side Adjust

10	100	GF12R 8.2SK B 100 K	GF12R 8.2SK B 100 M
20	200	GF12R 8.2SK B 200 K	GF12R 8.2SK B 200 M
50	500	GF12R 8.2SK B 500 K	GF12R 8.2SK B 500 M
100	101	GF12R 8.2SK B 101 K	GF12R 8.2SK B 101 M
200	201	GF12R 8.2SK B 201 K	GF12R 8.2SK B 201 M
500	501	GF12R 8.2SK B 501 K	GF12R 8.2SK B 501 M
1,000	102	GF12R 8.2SK B 102 K	GF12R 8.2SK B 102 M
2,000	202	GF12R 8.2SK B 202 K	GF12R 8.2SK B 202 M
5,000	502	GF12R 8.2SK B 502 K	GF12R 8.2SK B 502 M
10,000	103	GF12R 8.2SK B 103 K	GF12R 8.2SK B 103 M
20,000	203	GF12R 8.2SK B 203 K	GF12R 8.2SK B 203 M
50,000	503	GF12R 8.2SK B 503 K	GF12R 8.2SK B 503 M
100,000	104	GF12R 8.2SK B 104 K	GF12R 8.2SK B 104 M
200,000	204	GF12R 8.2SK B 204 K	GF12R 8.2SK B 204 M
500,000	504	GF12R 8.2SK B 504 K	GF12R 8.2SK B 504 M
1,000,000	105	GF12R 8.2SK B 105 K	GF12R 8.2SK B 105 M



GF12R 8.2SK

## Packaging

Standard:

Bulk Packaging

Quantity

50 pieces per vinyl bag.  
200 pieces per box.

## Soldering and Cleaning Guidelines

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