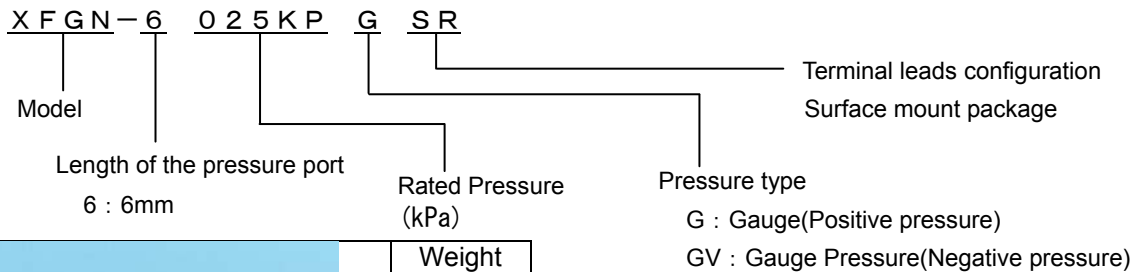


■Features

- On-chip amplification and temperature compensations
- Pre-calibration of offset voltage and span
- Surface mount package

■Ordering Information



RoHS compliance

Measurable pressure range(kPa)	Part number
0 to -24.5	XFGN-603PGVSR
0 to -100	XFGN-6100KPGVSR
0 to 25	XFGN-6025KPGSR
0 to 50	XFGN-6050KPGSR
0 to 100	XFGN-6100KPGSR
0 to 200	XFGN-6200KPGSR

■Specifications

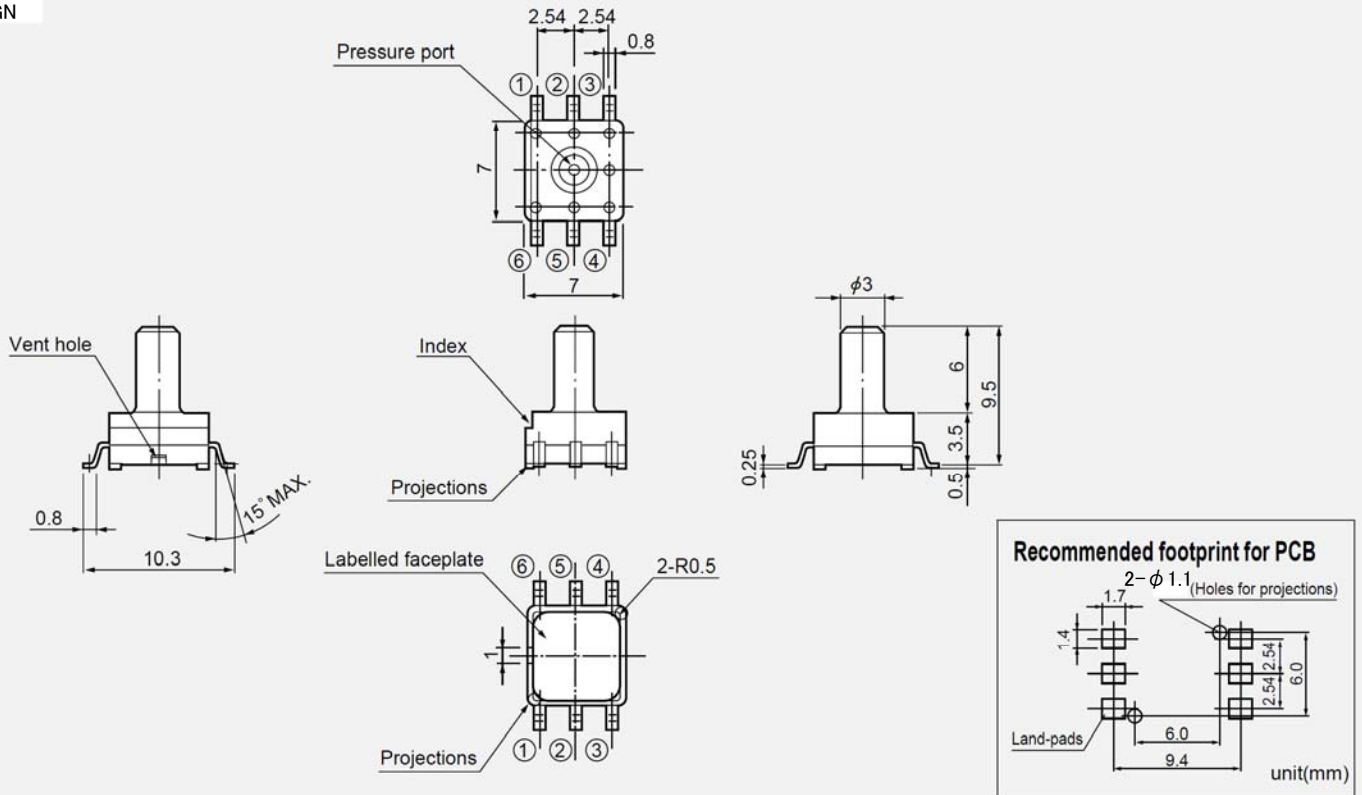
Model	603PGV	6100KPGV	6025KPG	6050KPG	6100KPG	6200KPG	Unit
Recommended operating conditions							
Pressure type	Gauge pressure						-
Rated pressure	-24.5	-100	25	50	100	200	kPa
Measurable pressure range	0 to -24.5	0 to -100	0 to 25	0 to 50	0 to 100	0 to 200	kPa
Temperature range	0 to 50						deg.C
Pressure media	Non-corrosive gases only (No liquid)						-
Excitation current (Constant)	5+/-0.25						VDC
Absolute maximum rating							
Maximum load pressure	Twice of rated pressure						-
Maximum excitation voltage	8						VDC
Operating temperature	-10 to 80						deg.C
Storage temperature	-20 to 100						deg.C
Operating humidity	30 to 80 (Non dew condition)						%RH
Electrical characteristics (Excitation voltage Vcc=5.0V constant ,ambient temperature Ta=25deg.C)							
Power consumption	10mA max.						mA
Output impedance	10Ω max.						Ω
Source current	0.2mA max.						mA
Sink current	2mA max.						mA
Response time	2 (for the reference)						msec.
Output span voltage	4.0						V
Offset voltage *	0.5V(at 0kPa) +/-0.1V(25deg.C) , +/-0.2V(0 to 50deg.C)						V
Output voltage at full scale *	4.5V(at rated pressure) +/-0.1V(25deg.C) , +/-0.2V(0 to 50deg.C)						V
Accuracy *	+/-5.0						%FS/0-50deg.C

* Excluding input voltage error.

■Outline dimensions■

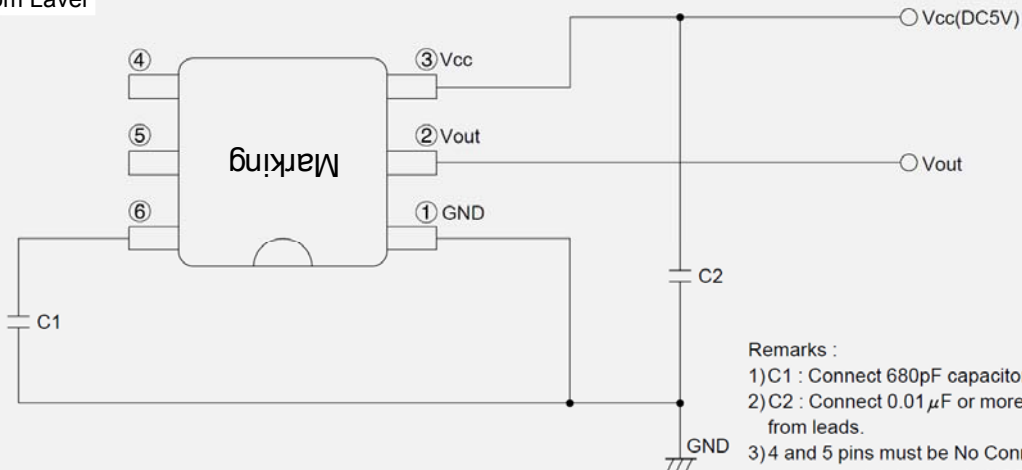
unit(mm)

XFGN



■Connection diagram■

View from Level



Remarks :

- 1) C1 : Connect 680pF capacitor within 2cm distance from leads.
- 2) C2 : Connect 0.01 μF or more capacitor within 2cm distance from leads.
- 3) 4 and 5 pins must be No Connection. Open them as floating ones completely, and do NOT connect to other line or each other.

■Transfer Function■

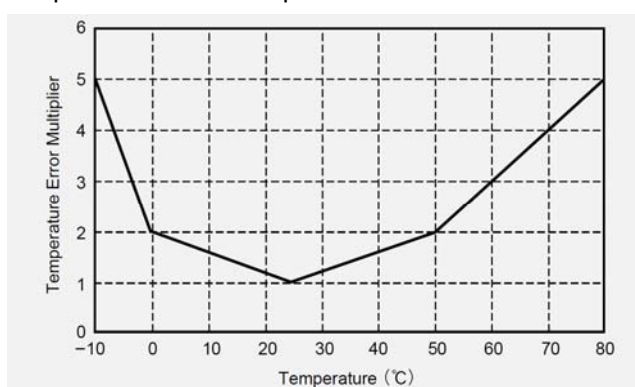
$$V_{out} = V_s \times (P \times \alpha + \beta) \pm (\text{Pressure Error} \times \text{Temperature Error Multiplier} \times \alpha \times V_s)$$

$$V_s = V_{cc} = 5.0V$$

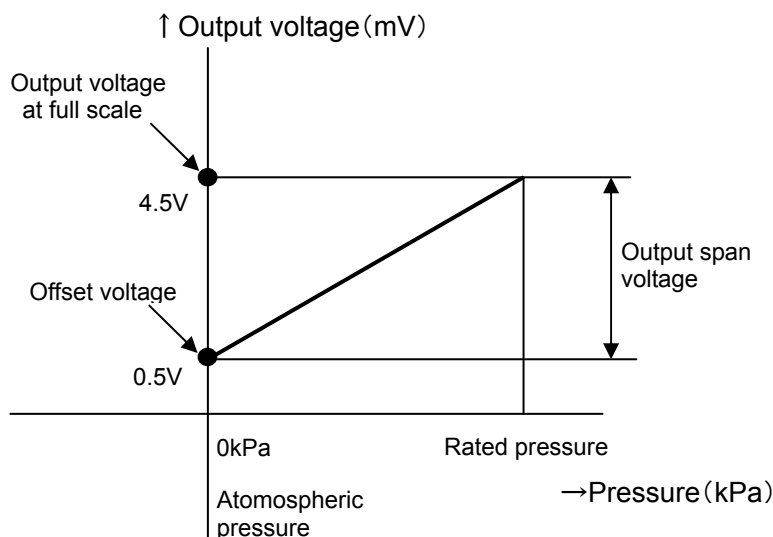
$$P = \text{Input pressure (kPa)}$$

Model	Measurable pressure range (kPa)	α	β	Pressure Error (kPa)
XFGN-603PGVSR	0 to -24.5	-0.03266	0.1	0.612
XFGN-6100KPGVSR	0 to -100	-0.008	0.1	2.5
XFGN-6025KPGSR	0 to 25	0.032	0.1	0.625
XFGN-6050KPGSR	0 to 50	0.016	0.1	1.25
XFGN-6100KPGSR	0 to 100	0.008	0.1	2.5
XFGN-6200KPGSR	0 to 200	0.004	0.1	5

Temperature Error Multiplier



■Output characteristics■

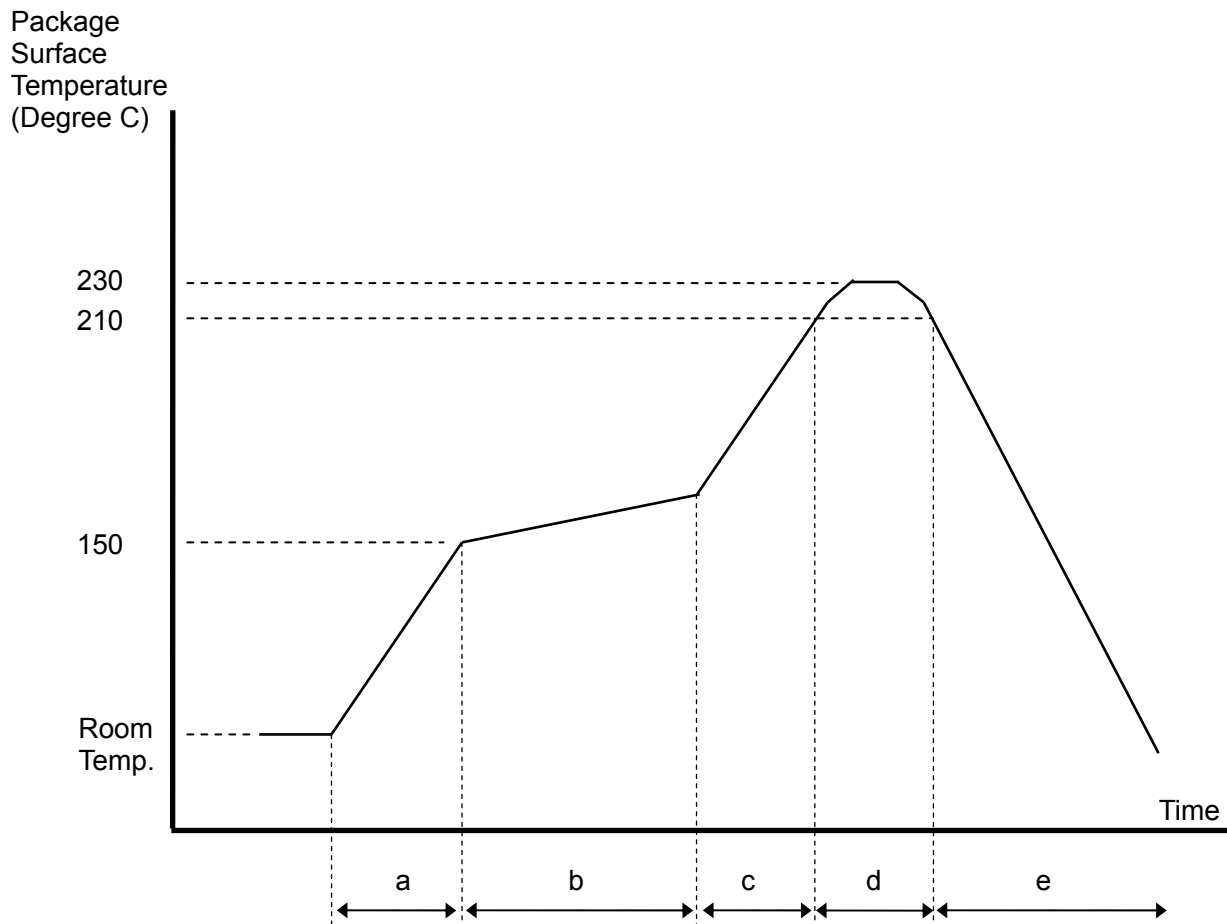


Note ; Please read instruction "Notes" before using the sensor.
Fujikura reserves the right to change specifications without notice.

Please keep the sensors sealed using static shielding bags on storage. The pins of the sensor are plated by Ag. If the sensors expose to an atmosphere, the pins will be black by sulfuration.

Please set Zero-calibration function up your products. The offset voltage may be shifted some mechanical stress such as mounting, installation and etc. over longtime using.

Reflow Soldering process recommendation profile



- | | |
|-------------------|------------------------------------------------------|
| a: Ramp up rate | 1 or 2 deg.C/sec. |
| b: Pre-heating | 150 to 180 deg.C, within 60 to 120sec. |
| c: Ramp up rate | 1 to 2 deg.C/sec. |
| d: Heating | max. 230 deg.C, max. 10sec. 210 deg.C, within 30sec. |
| e: Ramp down rate | 1 or 2 deg.C/sec. |

- Note ;
- 1) Temperature means Surface temperature of the sensor package.
 - 2) Reflow process max. 2 times.
 - 3) Do not wash the sensor.
 - 4) Do not put the solder and flux on the sensor package.

If you have any questions regarding technical issues or specifications, please contact us.
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