

## ■ Features

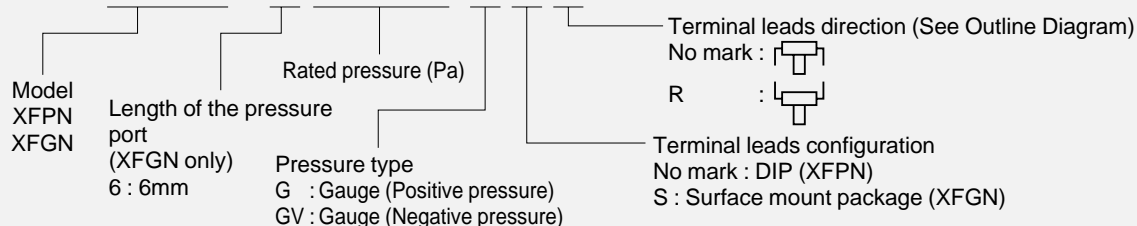
- Volt level output
- On-chip amplification and temperature compensations
- Pre-calibration of offset voltage and span
- Surface mount package (XFGN)

## ■ Applications

- Non-Invasive Blood Pressure(NIBP)monitor for home health care
- Vacuum cleaner
- Washing machine

## ■ Part number for ordering

### XFGN - 6 025KP G S R



Pressure type	Gauge pressure	
	XFPN	XFGN-6
Model		
Package configuration	Dual-In-line-Package (DIP)	Surface mount package, 6mm pressure port

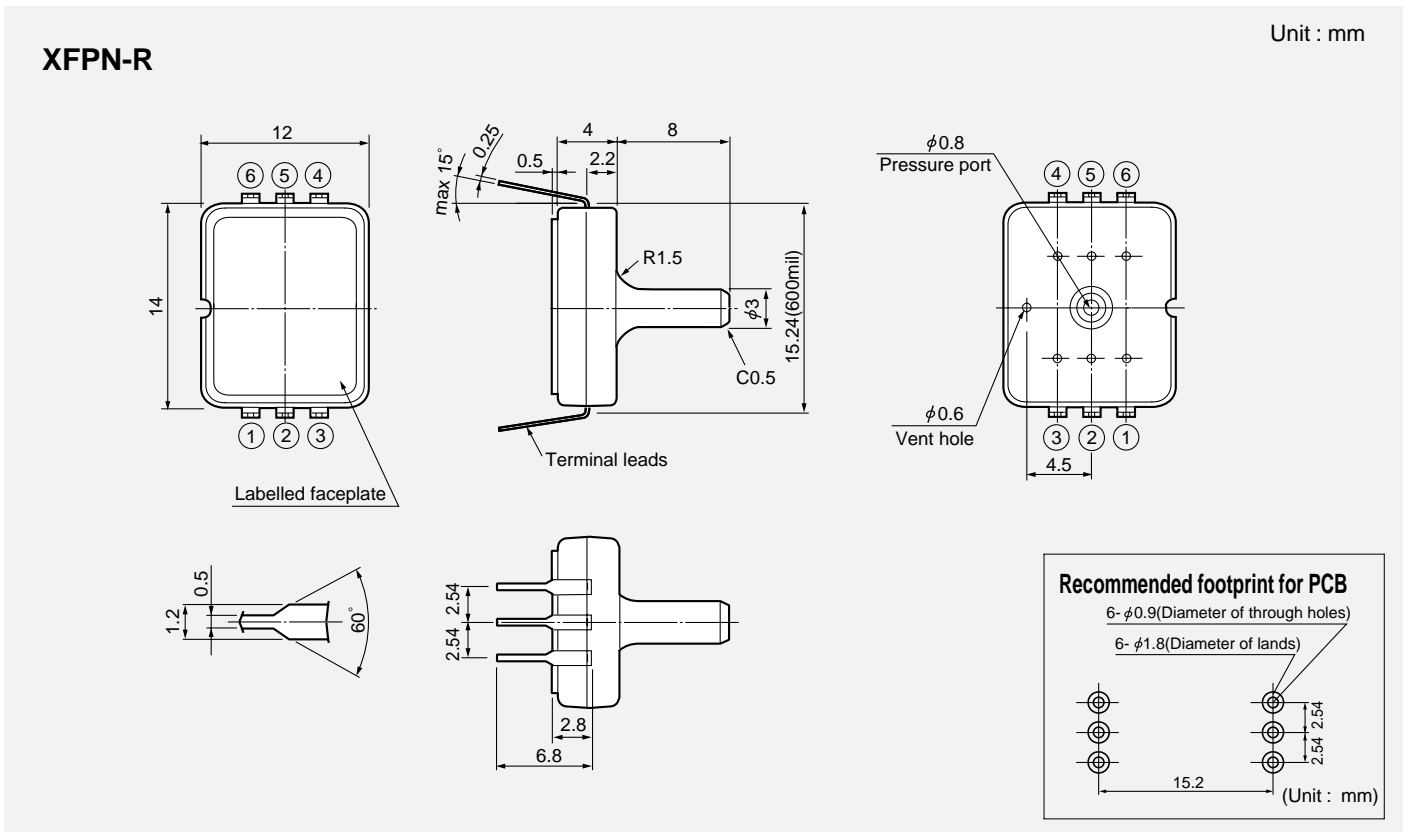
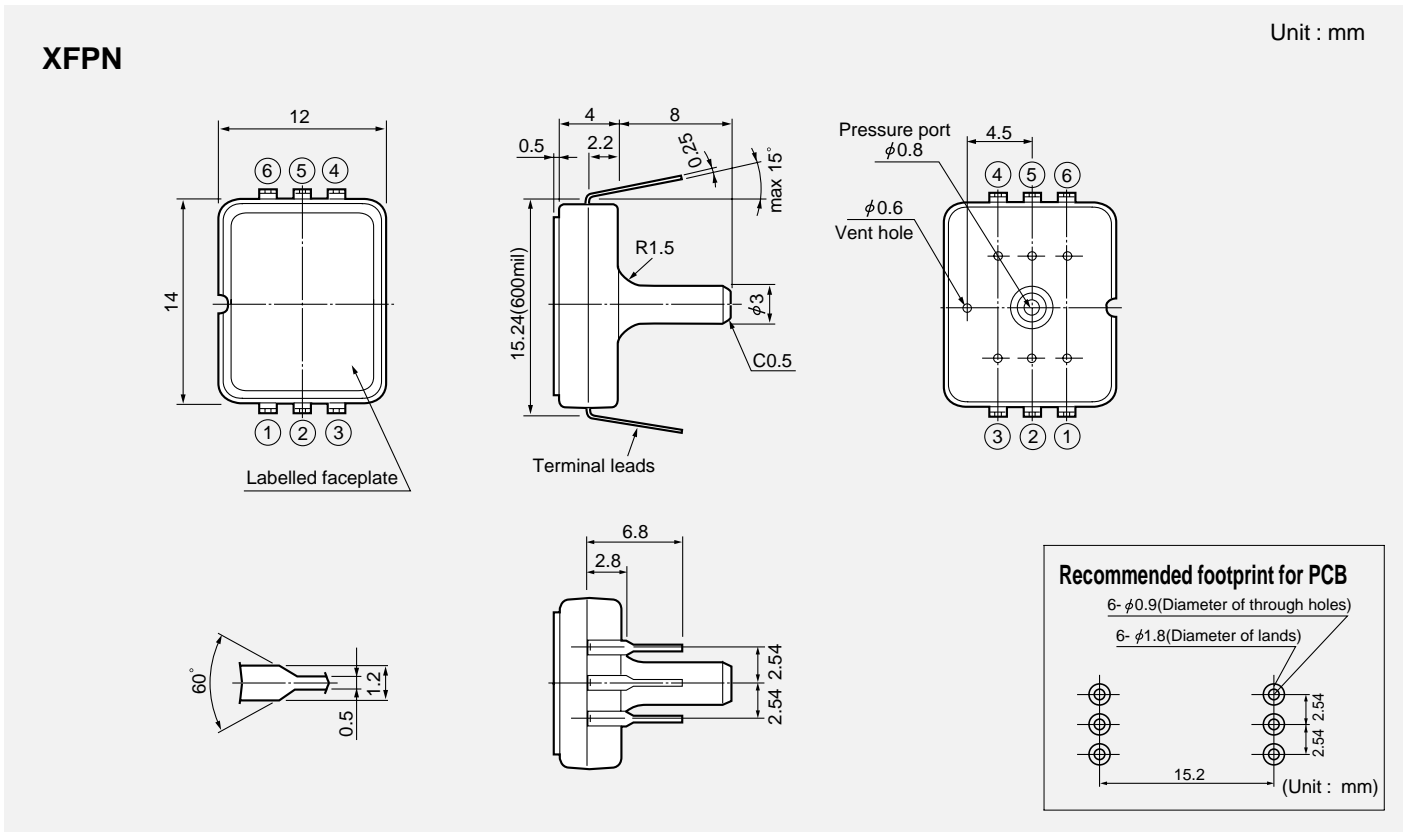
Measurable pressure range (kPa)	Part number for ordering		
0~-24.5	XFPN-03PGV	XFPN-03PGVR	XFGN-603PGVSR
0~-100	XFPN-100KPGV	XFPN-100KPGVR	XFGN-6100KPGVSR
0~25	XFPN-025KPG	XFPN-025KPGR	XFGN-6025KPGSR
0~50	XFPN-050KPG	XFPN-050KPGR	XFGN-6050KPGSR
0~100	XFPN-100KPG	XFPN-100KPGR	XFGN-6100KPGSR
0~200	XFPN-200KPG	XFPN-200KPGR	XFGN-6200KPGSR

## ■ Specifications

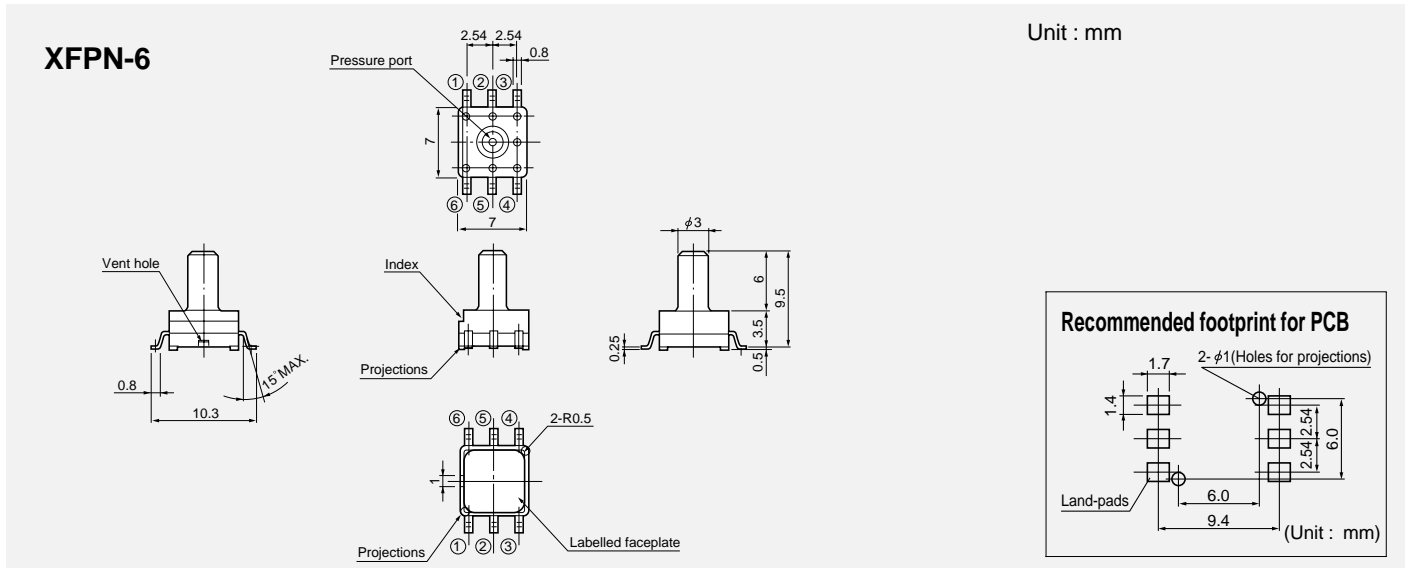
Model/Rated pressure	03PGV	100KPGV	025KPG	050KPG	100KPG	200KPG	Unit
<b>Recommended operating conditions</b>							
Pressure type	Gauge pressure						—
Rated pressure	-24.5	-100	25	50	100	200	kPa
	-0.250	-1.020	0.255	1.020	1.020	2.040	kg/cm <sup>2</sup>
Pressure media	Non-corrosive gas						—
Excitation voltage	5±0.25						VDC
<b>Absolute maximum rating</b>							
Maximum load pressure	Twice of rated pressure						—
Maximum excitation voltage	8						VDC
Operating temperature	-10~80						°C
Storage temperature	-20~100						°C
Operating humidity	30~80 (No dew condensation)						%RH
<b>Electric performances/characteristics (Excitation voltage Vcc=5.0V constant, Ambient temperature Ta=25°C)</b>							
Current consumption	less than 10						mA
Output impedance	less than 10						Ω
Source current	less than 0.2						mA
Sink current	less than 2						mA
Mechanical response time	2 (For the reference)						msec
Full scale span voltage	4.0						V
Offset voltage ※	0.5±0.1						V
Full scale span voltage ※	4.5±0.1						V
Accuracy ※	±5.0						%FS/0~50°C

Note ; ※ Excluding input voltage error.

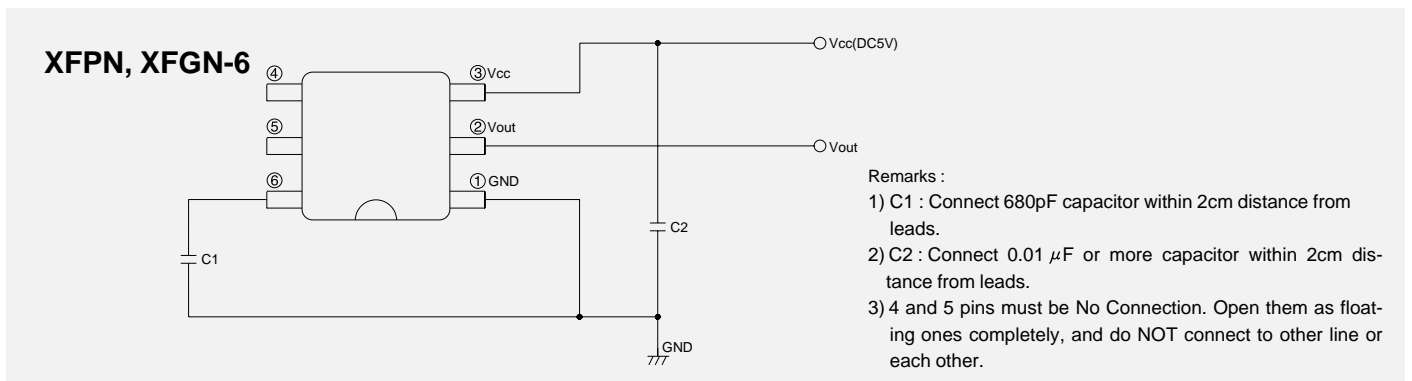
■ Outline dimensions ■



■ Outline dimensions ■



■ Connection diagram ■



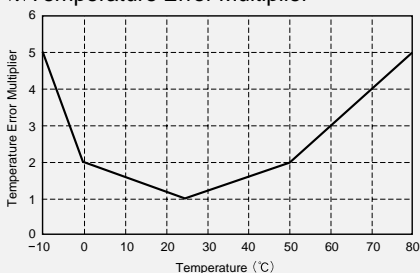
■ Transfer Function ■

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

※Vs=5.0volts Notes ; The output voltage (Vout) is no perfect ratiometric with the power supply voltage.

※P=Input Pressure(kPa)

※Temperature Error Multiplier



Model	pressure range	α	β	Pressure Error(kPa)
03PGV	0~24.5kPa	-0.03266	0.1	0.612
025KPG	0~25kPa	0.032	0.1	0.625
050KPG	0~50kPa	0.016	0.1	1.25
100KPG	0~100kPa	0.008	0.1	2.5
100KPGV	0~-100kPa	-0.008	0.1	2.5
200KPG	0~200kPa	0.004	0.1	5.0

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

**Fujikura Ltd.**

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