

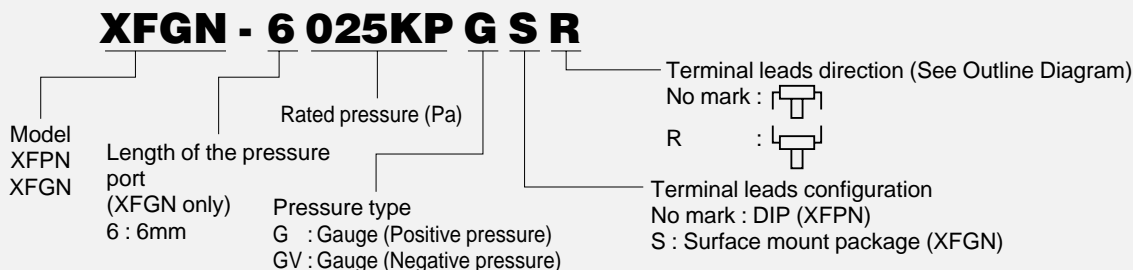
## Features

- 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



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

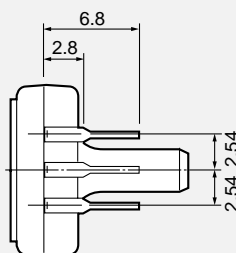
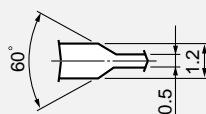
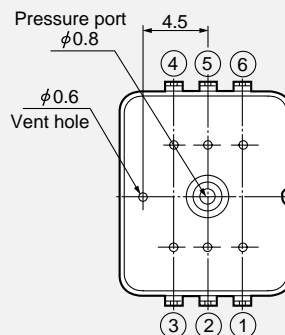
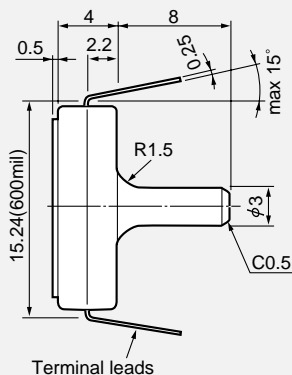
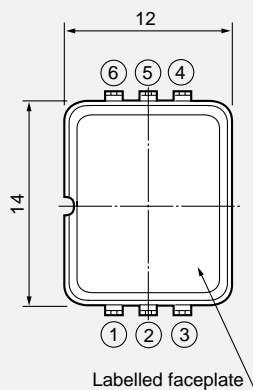
Model/Rated pressure	03PGV	100KPGV	025KPG	050KPG	100KPG	200KPG	Unit
Recommended operating conditions							
Pressure type	Gauge pressure						—
Rated pressure	—24.5	—100	25	50	100	200	kPa
	—0.250	—1.020	0.255	1.020	1.020	2.040	kg/cm <sup>2</sup>
Pressure media	Non-corrosive gas						—
Excitation voltage	5±0.25						VDC
Absolute maximum rating							
Maximum load pressure	Twice of rated pressure						—
Maximum excitation voltage	8						VDC
Operating temperature	—10～80						℃
Storage temperature	—20～100						℃
Operating humidity	30～80 (No dew condensation)						%RH
Electric performances/characteristics (Excitation voltage Vcc=5.0V constant, Ambient temperature Ta=25℃)							
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℃

Note ; ※ Excluding input voltage error.

# **Outline dimensions**

Unit : mm

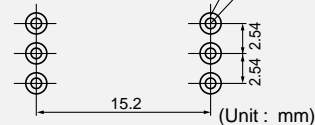
## **XFPN**



### **Recommended footprint for PCB**

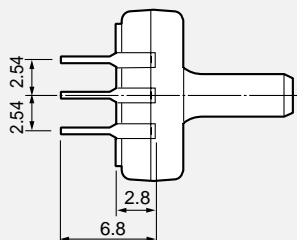
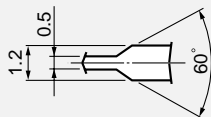
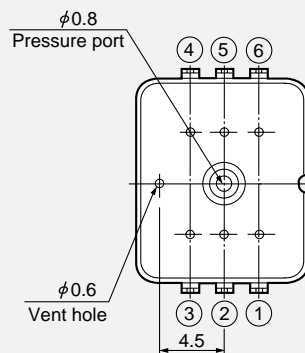
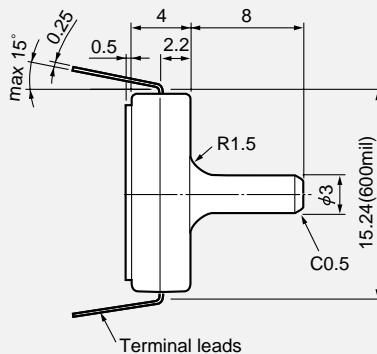
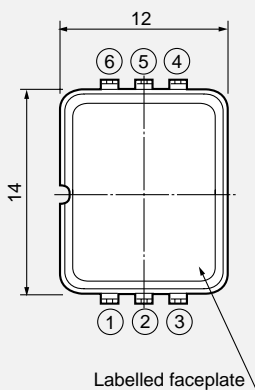
6- φ0.9(Diameter of through holes)

6- φ1.8(Diameter of lands)



## **XFPN-R**

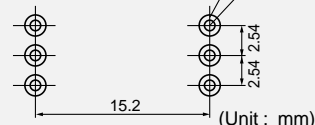
Unit : mm



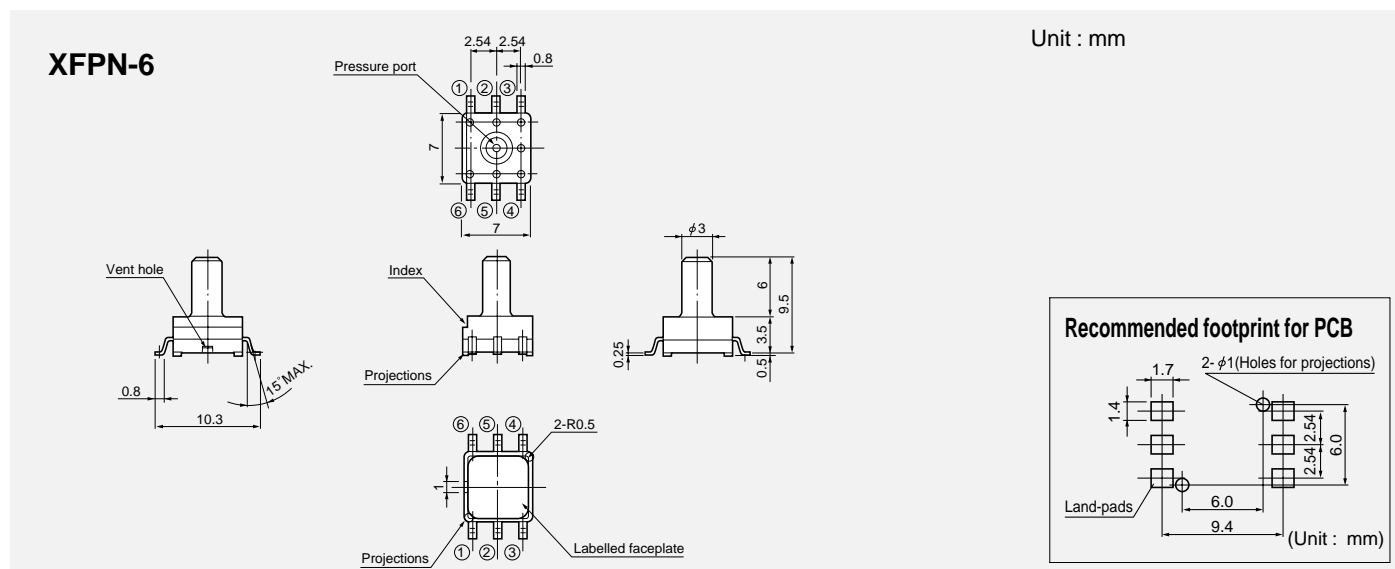
### **Recommended footprint for PCB**

6- φ0.9(Diameter of through holes)

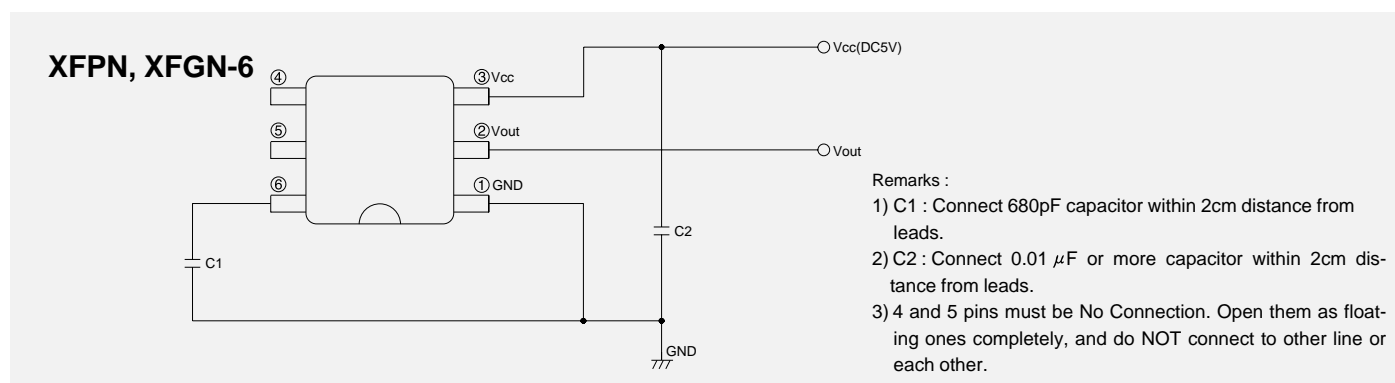
6- φ1.8(Diameter of lands)



## ■ Outline dimensions ■



### ■ Connection diagram ■



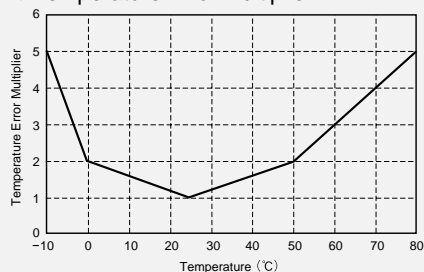
## Transfer Function

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

※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	$\alpha$	$\beta$	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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