

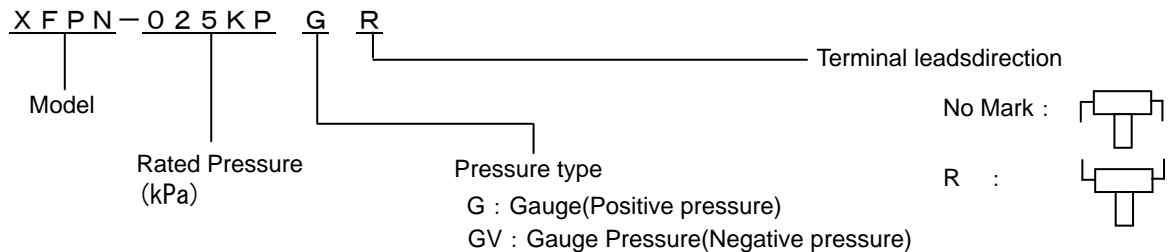
■ Features

- On-chip amplification and temperature compensations
- Pre-calibration of offset voltage and span
- Dual-in-line package (DIP)

■ Applications

- Home use Non-Invasive Blood Pressure (NIBP) monitors
- Vacuum cleaner
- Washing machine

■ Part number for ordering



	Weight (grams)
	1.2



Measurable pressure range(kPa)	Part number for ordering	
0~-24.5	XFPN-03PGV	XFPN-03PGVR
0~-100	XFPN-100KPGV	XFPN-100KPGVR
0~25	XFPN-025KPG	XFPN-025KPGR
0~50	XFPN-050KPG	XFPN-050KPGR
0~100	XFPN-100KPG	XFPN-100KPGR
0~200	XFPN-200KPG	XFPN-200KPGR

■ Specifications

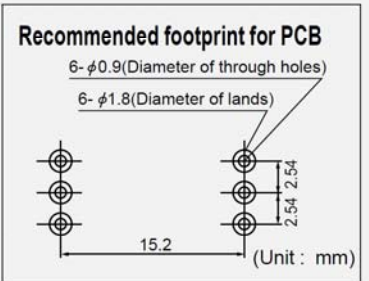
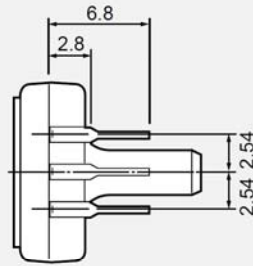
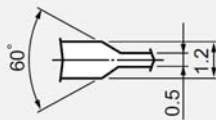
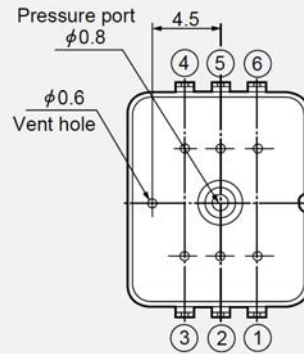
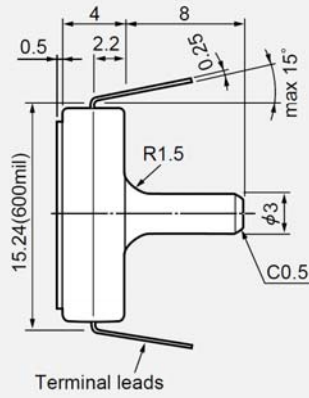
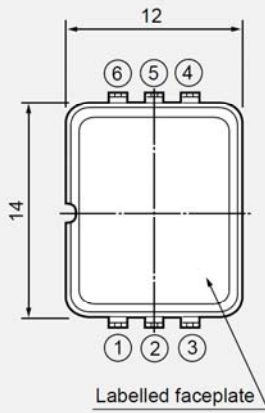
Model	03PGV	100KPGV	025KPG	050KPG	100KPG	200KPG	Unit
Recommended operating conditions							
Pressure type	Gauge pressure						—
Rated pressure	-24.5	-100	25	50	100	200	kPa
Measurable pressure range	0~-24.5	0~-100	0~25	0~50	0~100	0~200	kPa
Temperature range	0~50						°C
Pressure media	Non-corrosive gases only (No liquid)						—
Supply voltage (constant)	5±0.25						VDC
Absolute maximum rating							
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 (Non dew condition)						%RH
Electrical characteristics (Excitation voltage Vcc=5.0V constant ,ambient temperature Ta=25°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 *	0.5±0.1 (at 0 kPa)						V
Output voltage at full scale *	4.5±0.1 (at rated pressure)						V
Accuracy *	±5.0						%FS/0~50°C

* Excluding input voltage error.

■ Outline dimensions ■

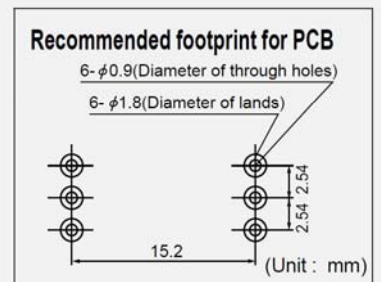
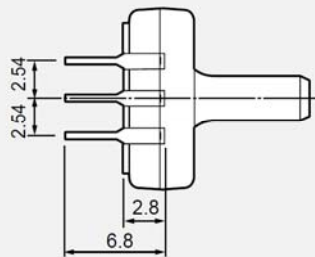
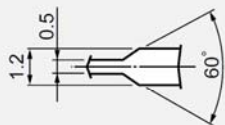
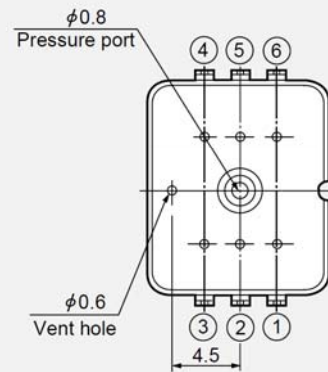
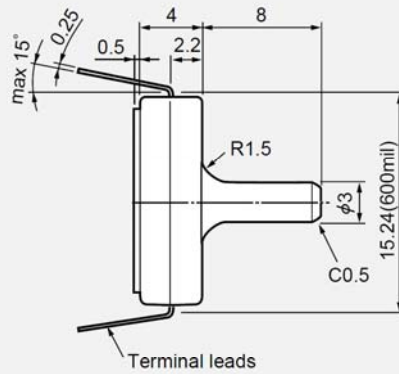
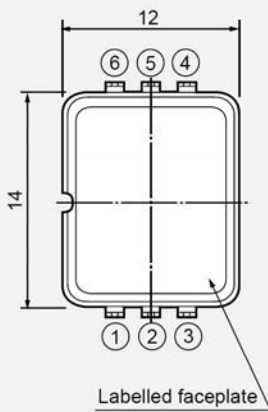
Unit : mm

XFPN

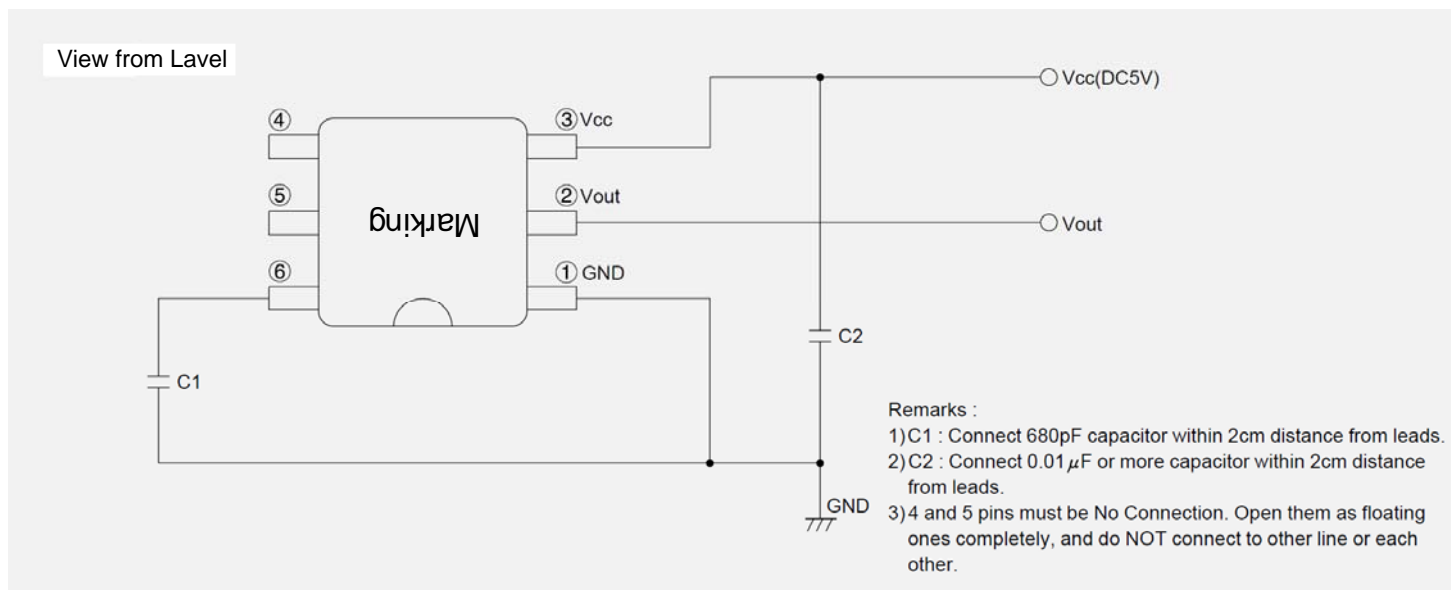


XFPN-R

Unit : mm



■ Connection diagram ■



■ Transfer Function ■

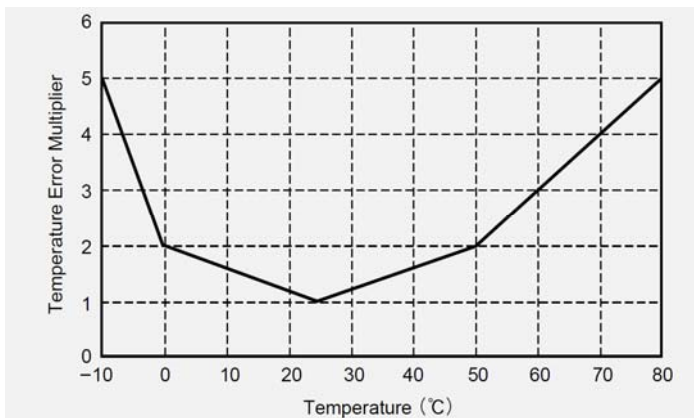
$$V_{out} = V_s \times (P \times \alpha + \beta) \pm (\text{Pressure Error} \times \text{Temperature Error Multiplier} \times \alpha \times V_s)$$

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

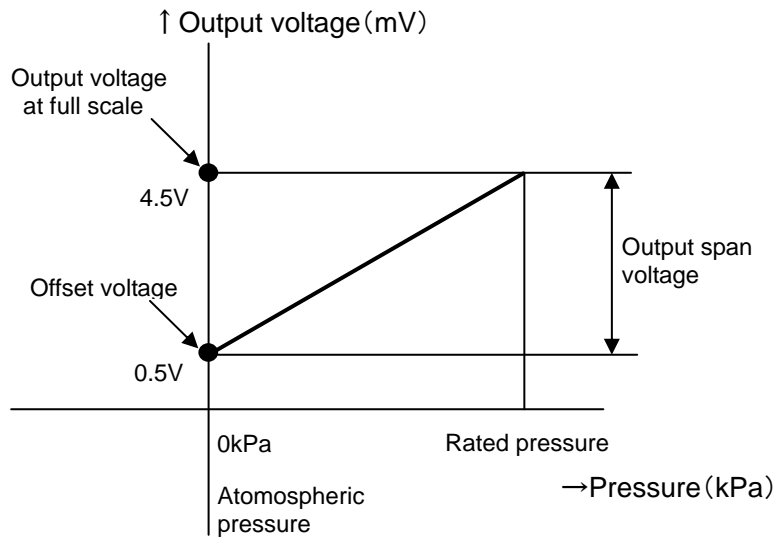
$$P = \text{Input pressure (kPa)}$$

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

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