

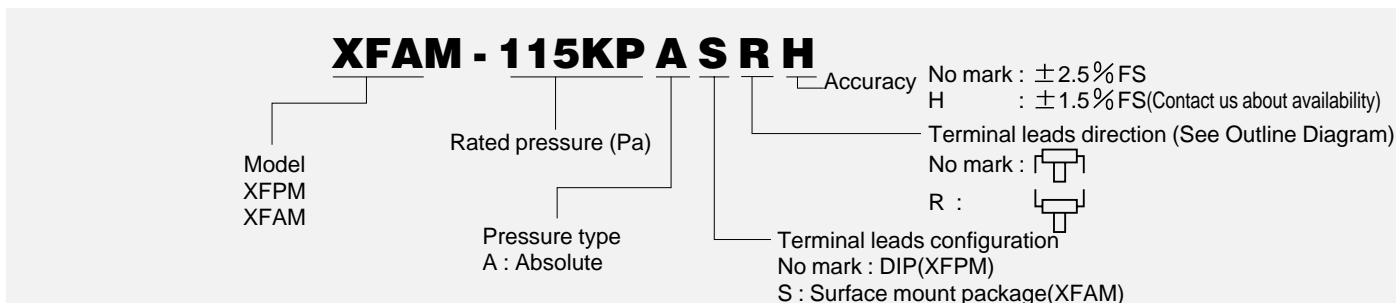
Features

- Two accuracy ranks, $\pm 1.5\%$ FS and $\pm 2.5\%$ FS available
- Volt level output
- On-chip amplification and temperature compensations
- Pre-calibration of offset voltage and span

Applications

- Industrial instrumentation
- Medical device
- Barometer, Altimeter
- Altitude compensation

Part number for ordering



Pressure type	Absolute pressure	
	XFPM	XFAM
Model		
Package configuration	Dual-In-line-Package (DIP)	Surface mount package

Measurable pressure range (kPa)	Part number for ordering		
15~115	XFPM-115KPA	XFPM-115KPAR	XFAM-115KPASR

Specifications

Model/Rated pressure	115KPA	Unit
Recommended operating conditions		
Pressure type	Absolute pressure	—
Rated pressure	115	kPa-abs
Measurable pressure range	15~115	kPa-abs
Pressure media	Non-corrosive gas only	—
Excitation voltage	5 ± 0.25	VDC
Absolute maximum rating		
Maximum load pressure	Twice of rated pressure	—
Maximum excitation voltage	8	VDC
Operating temperature	$-40 \sim 125$	$^{\circ}\text{C}$
Storage temperature	$-40 \sim 125$	$^{\circ}\text{C}$
Operating humidity	$30 \sim 80$ (No dew condensation)	%RH
Electric performances/characteristics (Excitation voltage $V_{cc}=5.0\text{V}$ constant, Ambient temperature $T_a=25^{\circ}\text{C}$)		
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	4.5	V
Offset voltage ※	$0.2 \pm 0.1125, 0.2 \pm 0.0675(\text{H})$	V
Full scale span voltage ※	$4.7 \pm 0.1125, 4.7 \pm 0.0675(\text{H})$	V
Accuracy ※	$\pm 2.5, \pm 1.5(\text{H})$	%FS/0~85 $^{\circ}\text{C}$

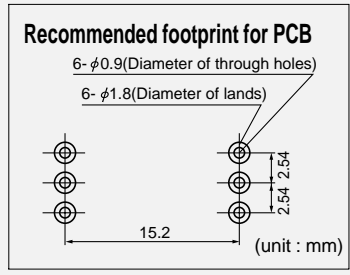
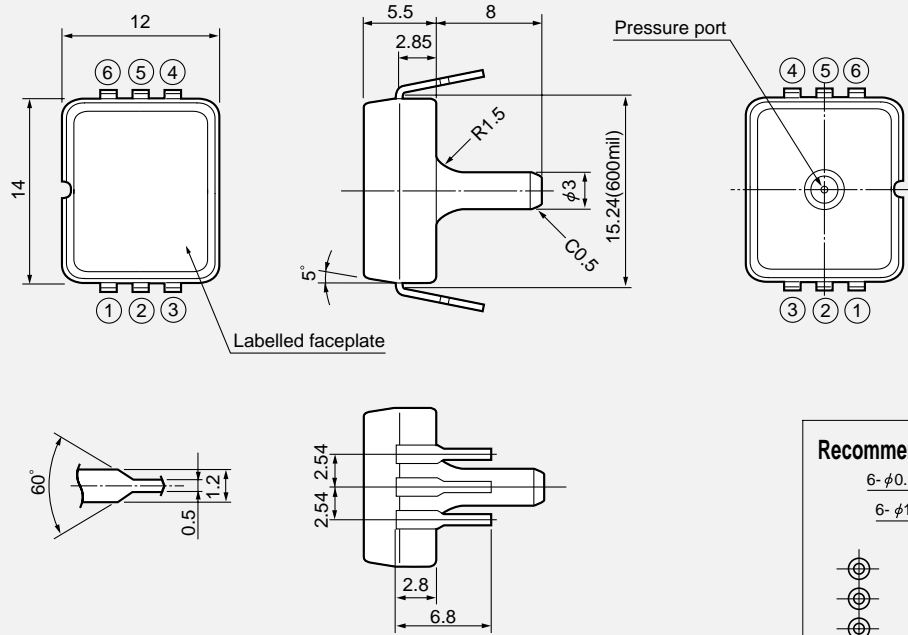
Note ; ※ Excluding input voltage error.

※ Please consult us available liquid pressure media when you chose the H models.

■ Outline dimensions ■

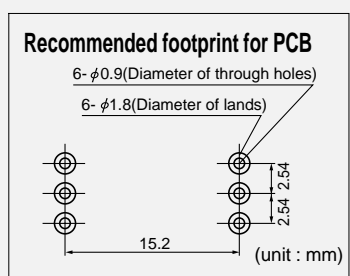
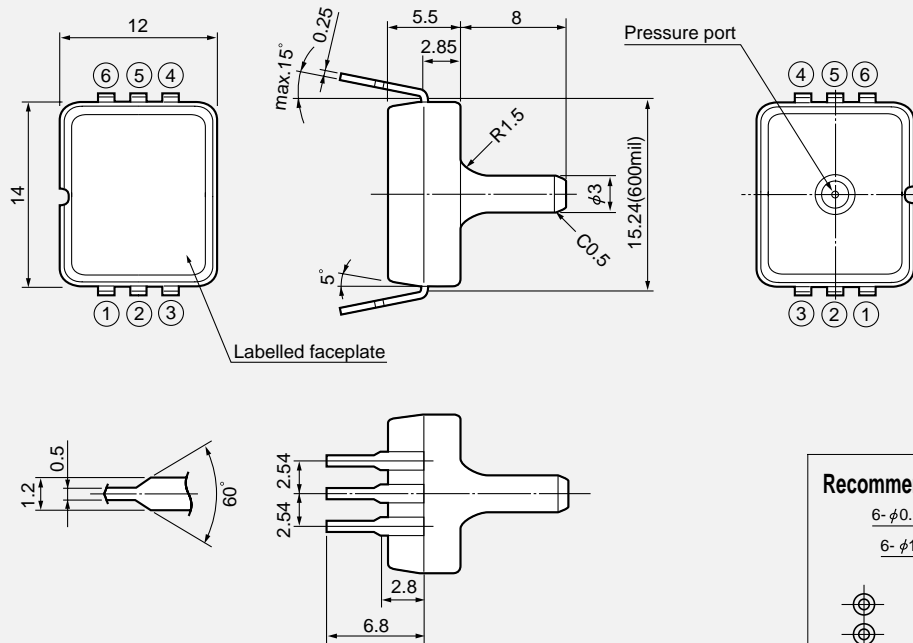
Unit : mm

XFPM (Absolute pressure)

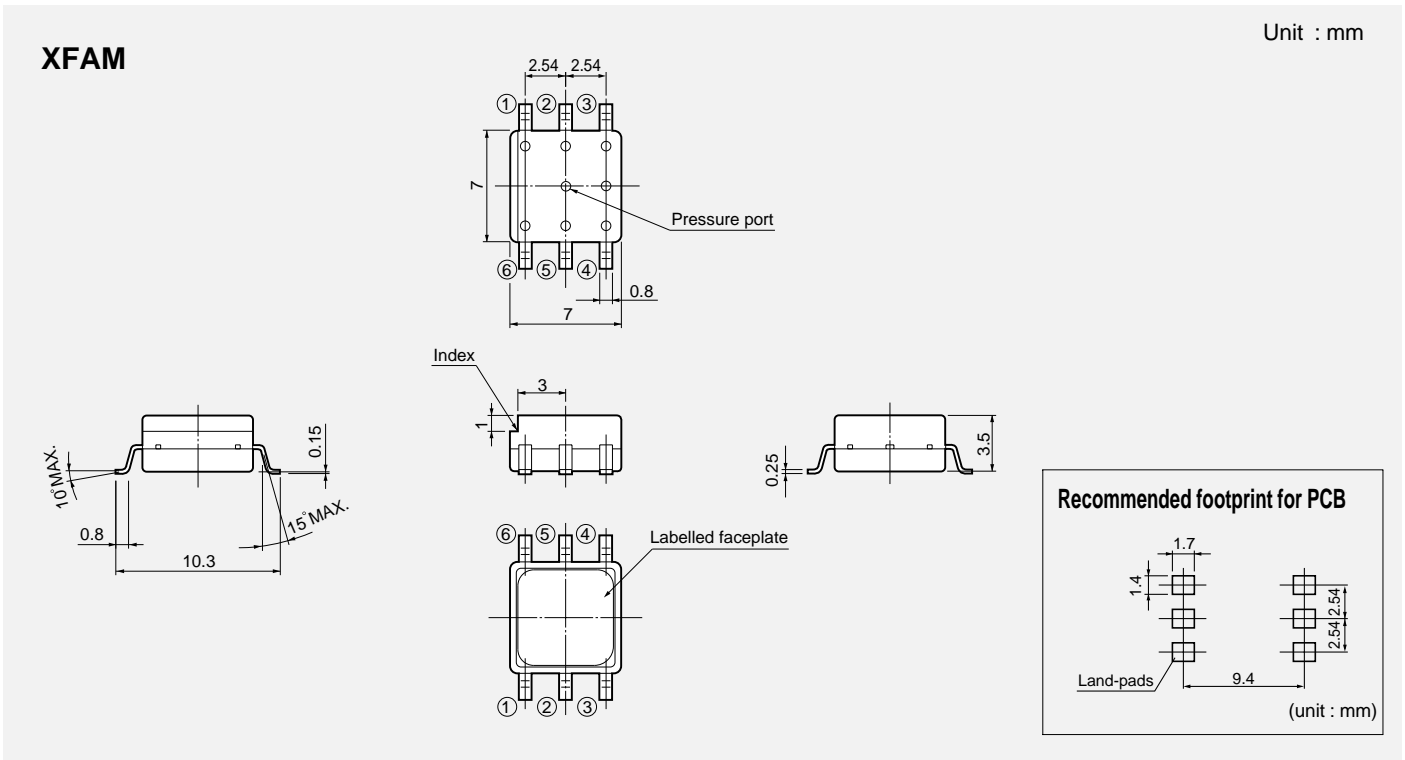


Unit : mm

XFPM-R (Absolute pressure)



■ Outline dimensions ■



■ Transfer Function ■

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

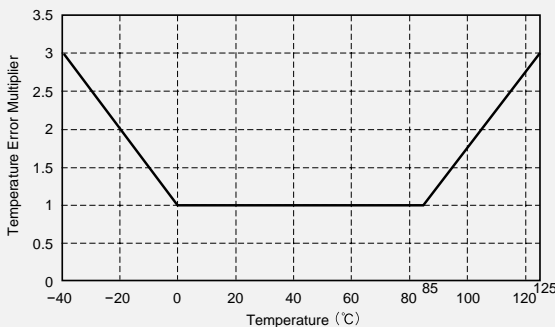
※ $V_s = 5.0$ volts

Notes ; The output voltage (V_{out}) is no perfect ratiometric with the power supply voltage.

※ $P = \text{Input Pressure (kPa)}$

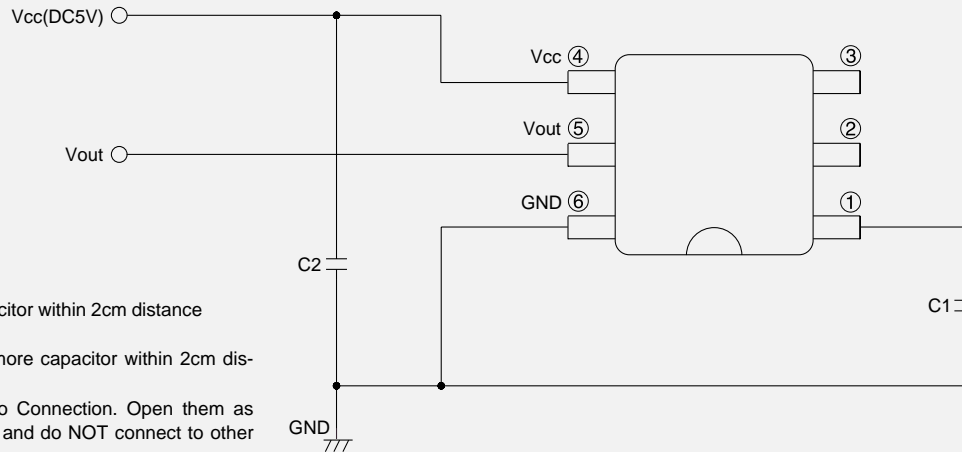
Model	pressure range	α	β	Pressure Error(kPa)
025KPG(D)	0~25kPa	0.036	0.04	0.625
050KPG(D)	0~50kPa	0.018	0.04	1.25
100KPG(D)	0~100kPa	0.009	0.04	2.5
100KPGV	0~-100kPa	-0.009	0.04	2.5
100KPGW(DW)	-100~+100kPa	0.0045	0.49	5.0
200KPG(D)	0~200kPa	0.0045	0.04	5.0
001MPG(D)	0~1MPa	0.0009	0.04	25
115KPA	15~115kPa.abs	0.009	-0.095	2.5

※Temperature Error Multiplier



■ Connection diagram ■

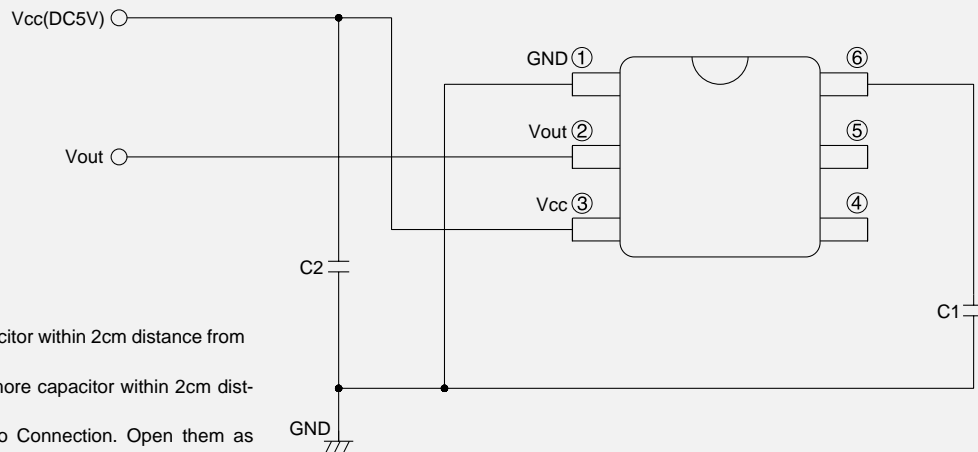
XFPM (Absolute pressure)



Remarks :

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

XFAM



Remarks :

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

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.
Sensor Engineering Department 5-1 Kiba 1-chome, Koto-ku, Tokyo 135-8512, Japan
Phone +81-(0)3-5606-1072 Fax. +81-(0)3-5606-1538
E-mail : sensor@fujikura.co.jp