

## ■ 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

**XFAM - 115KP A S R H**

Model  
XFPM  
XFAM

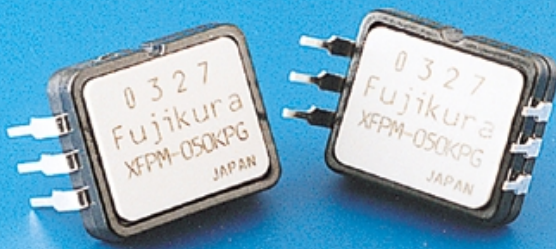
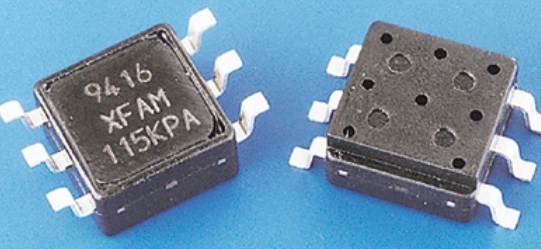
Rated pressure (Pa)

Pressure type  
A : Absolute

Accuracy  
No mark :  $\pm 2.5\%$ FS  
H :  $\pm 1.5\%$ FS(Contact us about availability)

Terminal leads direction (See Outline Diagram)  
No mark :   
R :

Terminal leads configuration  
No mark : DIP(XFPM)  
S : Surface mount package(XFAM)

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
<b>Recommended operating conditions</b>		
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 $\pm$ 0.25	VDC
<b>Absolute maximum rating</b>		
Maximum load pressure	Twice of rated pressure	—
Maximum excitation voltage	8	VDC
Operating temperature	-40~125	°C
Storage temperature	-40~125	°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	$\Omega$
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(H)	V
Full scale span voltage ※	4.7 $\pm$ 0.1125, 4.7 $\pm$ 0.0675(H)	V
Accuracy ※	$\pm 2.5, \pm 1.5$ (H)	%FS/0~85°C

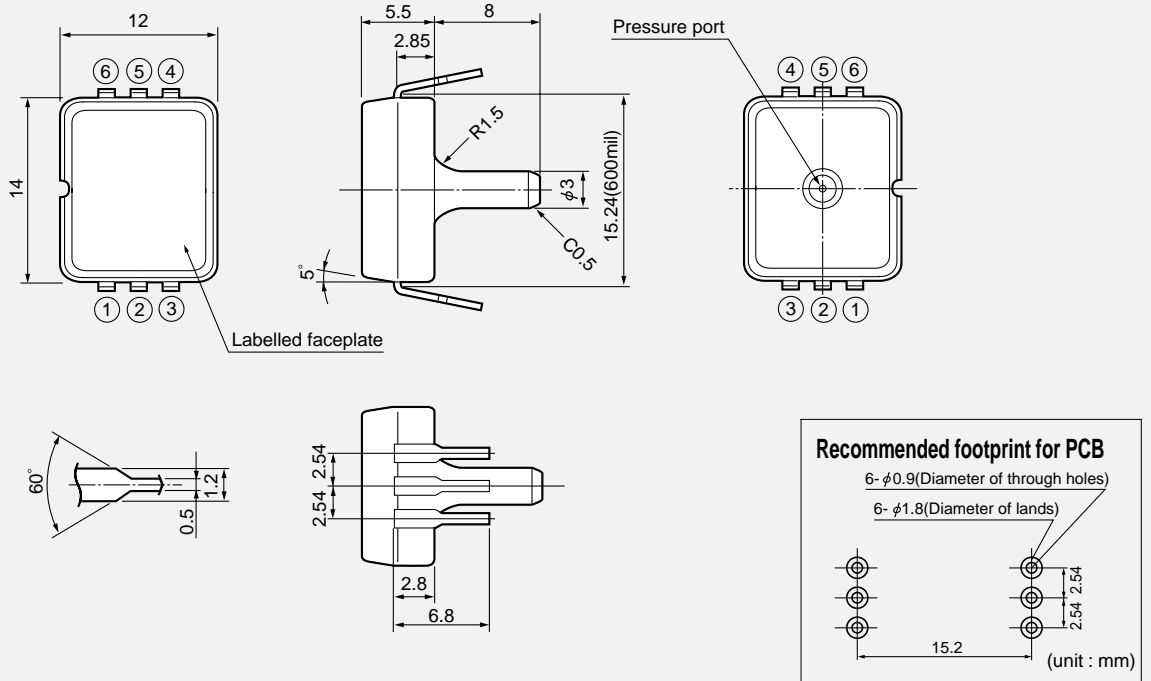
Note ; ※ Excluding input voltage error.

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

■ Outline dimensions ■

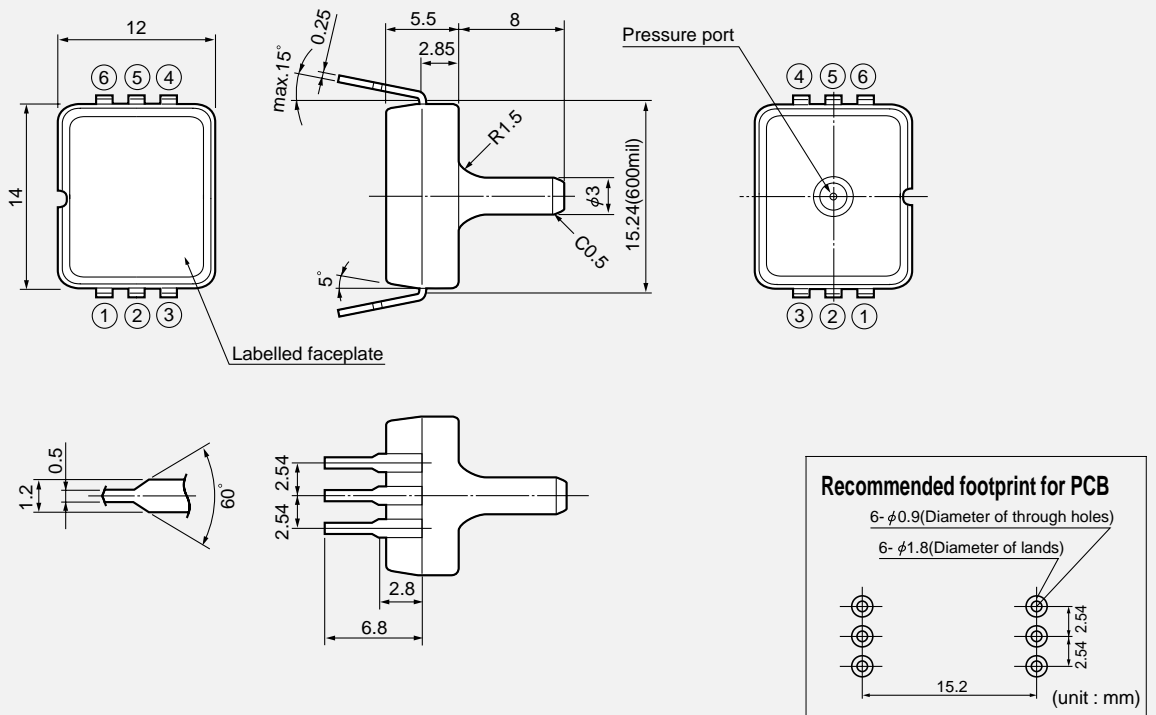
Unit : mm

XFPM (Absolute pressure)



XFPM-R (Absolute pressure)

Unit : mm



■ Outline dimensions ■

Unit : mm

**XFAM**

**Recommended footprint for PCB**

(unit : mm)

■ Transfer Function ■

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

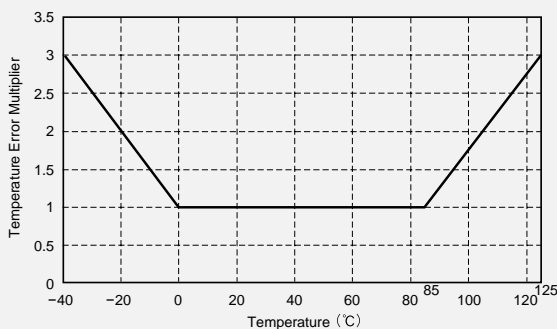
※ $V_s = 5.0$ volts

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

※ $P = \text{Input Pressure (kPa)}$

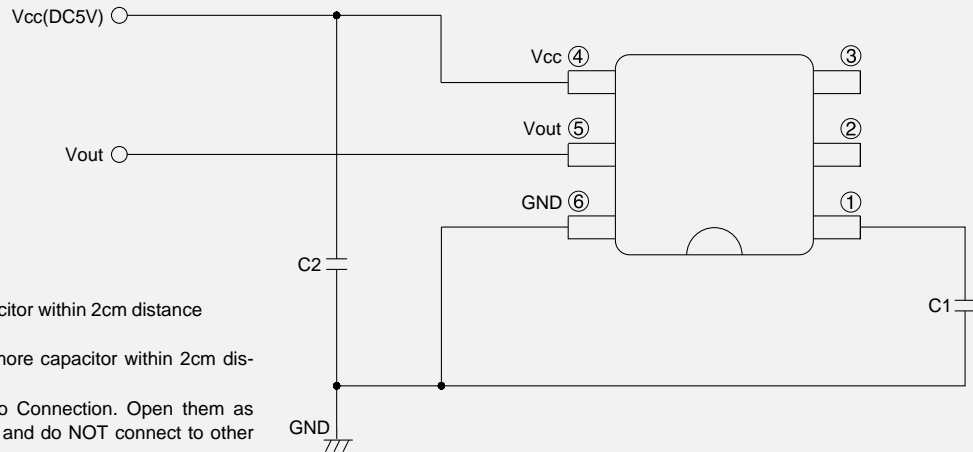
Model	pressure range	$\alpha$	$\beta$	Pressure Error(kPa)
025KPG(D)	0~25kPa	0.036	0.04	0.625
050KPG(D)	0~50kPa	0.018	0.04	1.25
100KPG(D)	0~100kPa	0.009	0.04	2.5
100KPGV	0~-100kPa	-0.009	0.04	2.5
100KPGW(DW)	-100~+100kPa	0.0045	0.49	5.0
200KPG(D)	0~200kPa	0.0045	0.04	5.0
001MPG(D)	0~1MPa	0.0009	0.04	25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

※Temperature Error Multiplier



## ■ Connection diagram ■

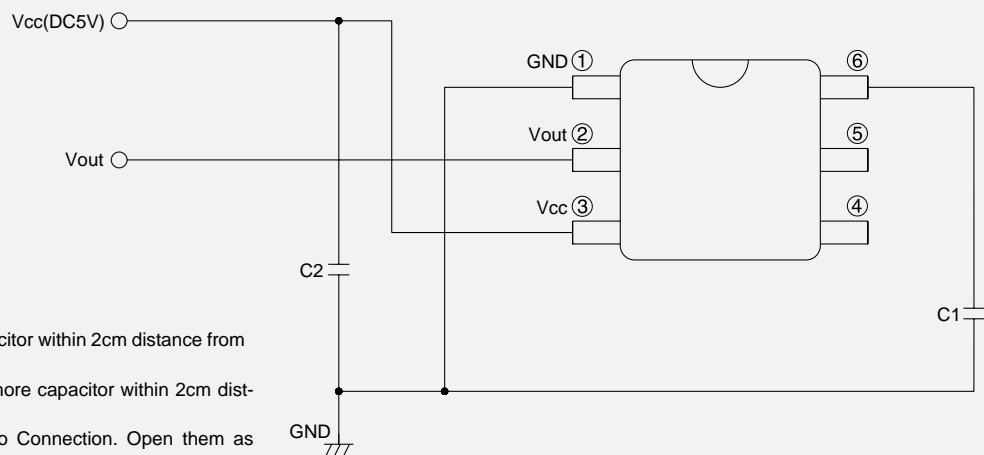
### XFPM (Absolute pressure)



#### Remarks :

- 1) C1 : Connect 680pF capacitor within 2cm distance from leads.
- 2) C2 : Connect 0.01 $\mu$ 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 $\mu$ 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.  
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