

## Features

- Accuracy,  $\pm 1.8\%$ FS
- Gasoline vapor measurable
- Volt level output
- On-chip amplification and temperature compensations
- Pre-calibration of offset voltage and span

## Applications

- Automotive system
- Industrial instrumentation
- Medical device
- Barometer, Relative altimeter
- Altitude compensation

## Part number for ordering


### XFPMC - 105KP A R


Model  
XFPMC

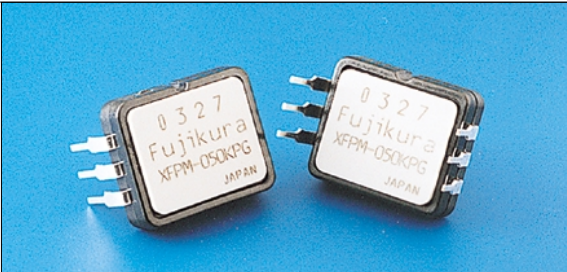
Rated pressure (Pa)

Pressure type  
A : Absolute

Terminal leads direction (See Outline Diagram)

No mark : 

R : 

Pressure type	Absolute pressure XFPMC
Model	
Package configuration	Dual-In-line-Package (DIP)
Measurable pressure range (kPa)	Part number for ordering
17~105	XFPMC-105KPA XFPMC-105KPAR

## Specifications

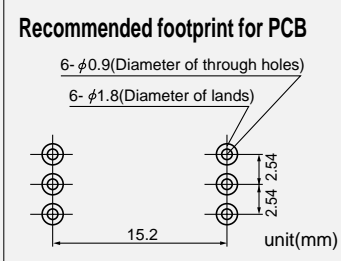
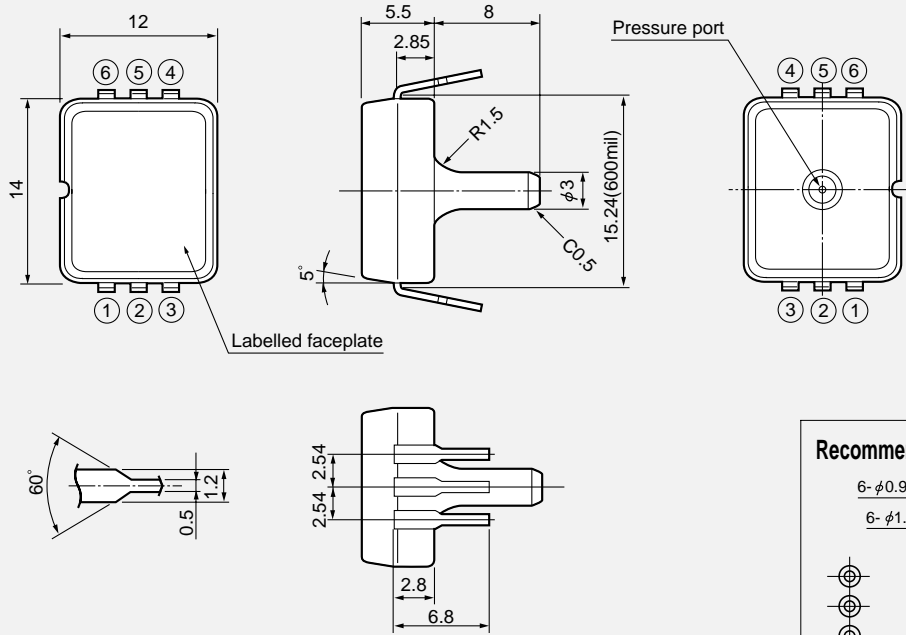
Model/Rated pressure	105KPA	Unit
<b>Recommended operating conditions</b>		
Pressure type	Absolute pressure	—
Rated pressure	105	kPa-abs
Measurable pressure range	17~105	kPa-abs
Pressure media	Air & Gasoline vapor	—
Excitation voltage	$5 \pm 0.25$	VDC
<b>Absolute maximum rating</b>		
Maximum load pressure	Twice of rated pressure	kPa-abs
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
<b>Electric performances/characteristics (Excitation voltage <math>V_{cc}=5.0\text{V}</math> constant, Ambient temperature <math>T_a=25^{\circ}\text{C}</math>)</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 ※	$0.25 \pm 0.081$	V
Full scale span voltage ※	$4.75 \pm 0.081$	V
Accuracy ※	$\pm 1.8$	%FS/0~85 $^{\circ}\text{C}$

Note ; ※ Excluding input voltage error.

■ Outline dimensions ■

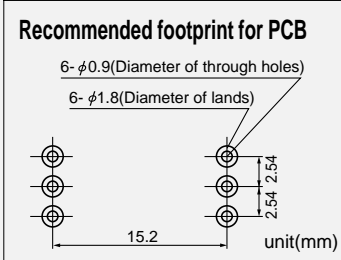
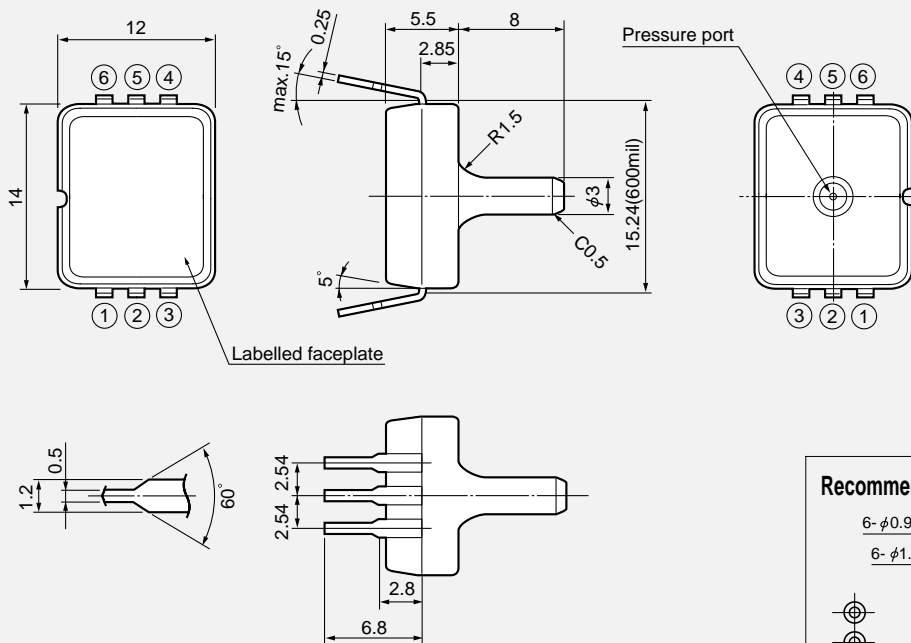
Unit (mm)

**XFPM (Absolute pressure)**

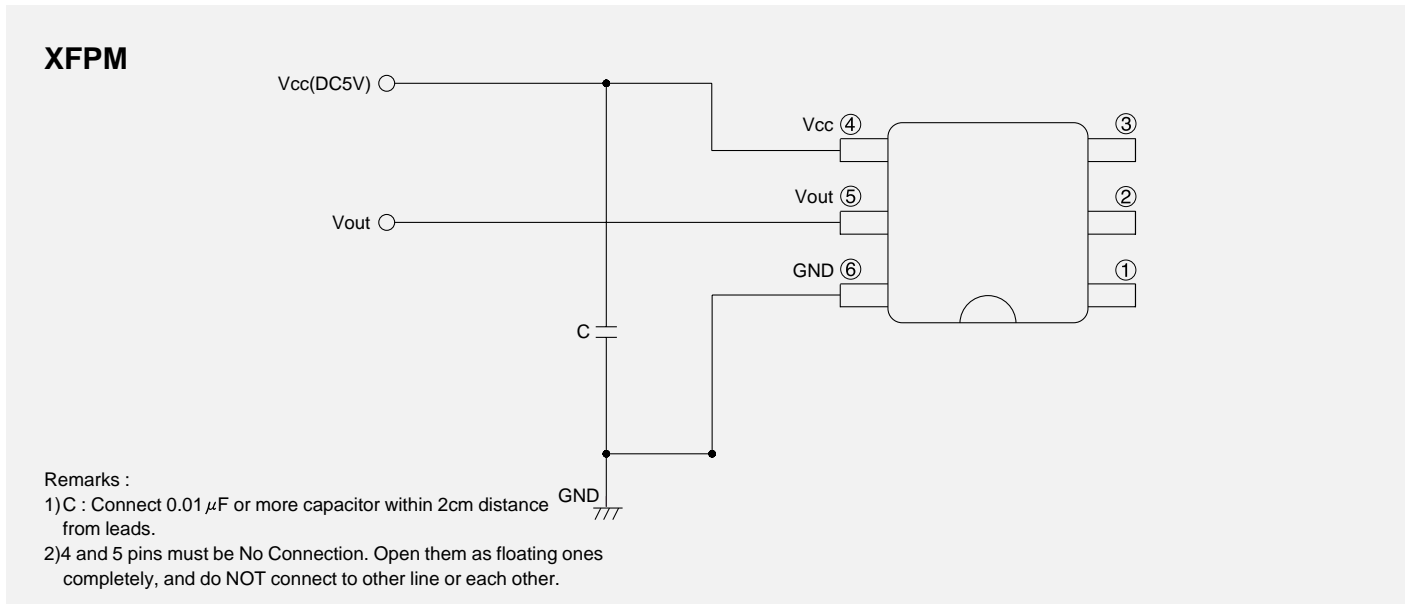


Unit (mm)

**XFPM-R (Absolute pressure)**



■ Connection diagram ■



■ Transfer Function ■

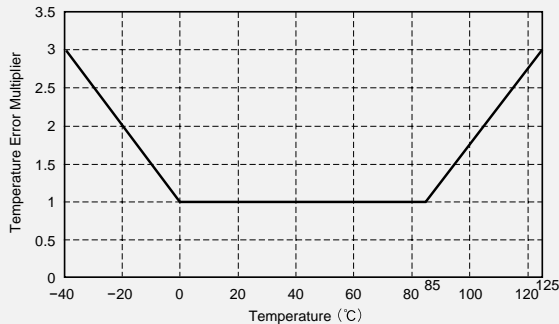
$$V_{out} = V_s \times (P \times 0.01023 - 0.1238) \pm (1.584 \times \text{Temperature Error Multiplier} \times 0.01023 \times V_s)$$

※ $V_s = 5.0$ volts

Notes ; The output voltage (Vout) is no perfect ratiometric with the power supply voltage.

※P=Input Pressure : 17~105kPa

※Temperature Error Multiplier



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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