Pre-amplified/5V Excitation/Absolute XFPM(MAP) Data sheet

■Features

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

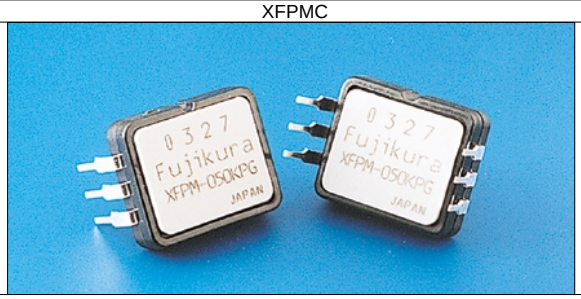
■Applications

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

■Part number for ordering

XFPMC - 105KP A R

- XFPMC — Model
- 105KP — Rated pressure (Pa)
- A — Pressure type (A : Absolute)
- R — Terminal leads direction (See Outline Diagram)
  - No mark :
  - R :

Pressure type	Absolute pressure
Model	XFPMC
	
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
Recommended operating conditions		
Pressure type	Absolute pressure	—
Rated pressure	105	kPa·abs
Measurable pressure range	17～105	kPa·abs
Pressure media	Air＆Gasoline vapor	—
Excitation voltage	5±0.25	VDC
Absolute maximum rating		
Maximum load pressure	Twice of rated pressure	kPa·abs
Maximum excitation voltage	8	VDC
Operating temperature	−40～125	℃
Storage temperature	−40～125	℃
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	4.5	V
Offset voltage※	0.25±0.081	V
Full scale span voltage※	4.75±0.081	V
Accuracy※	±1.8	％FS/0～85℃

Note ; ※ Excluding input voltage error.

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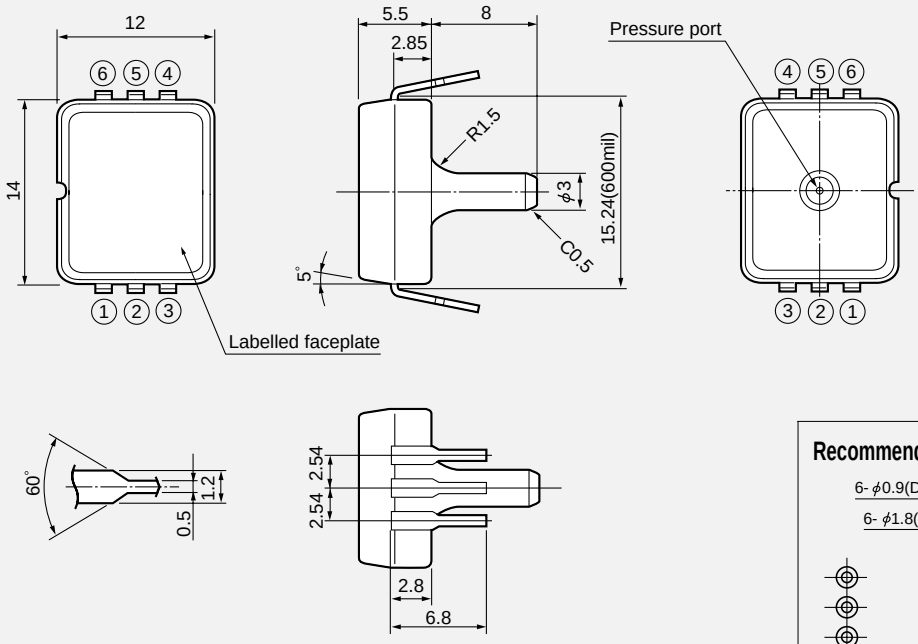
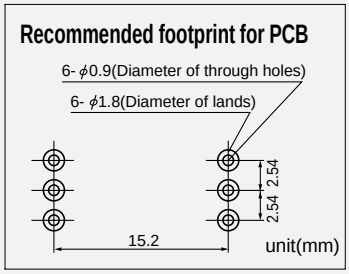
■ Outline dimensions ■

Unit (mm)

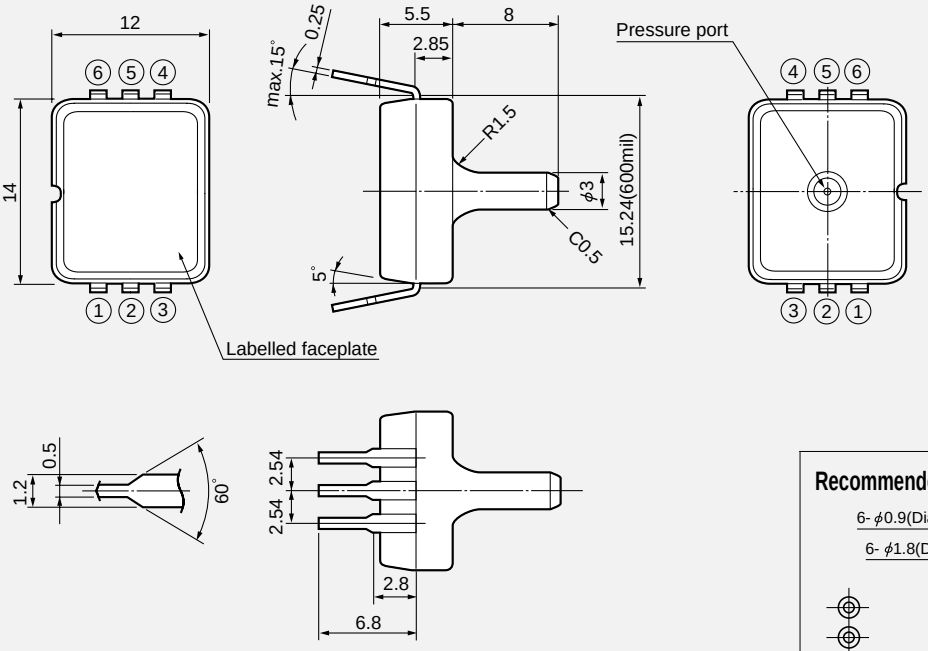
XFPM (Absolute pressure)

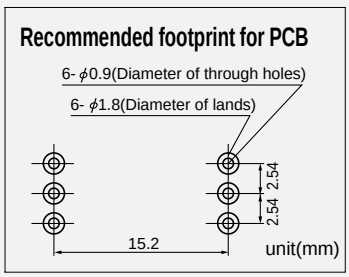




Unit (mm)

XFPM-R (Absolute pressure)





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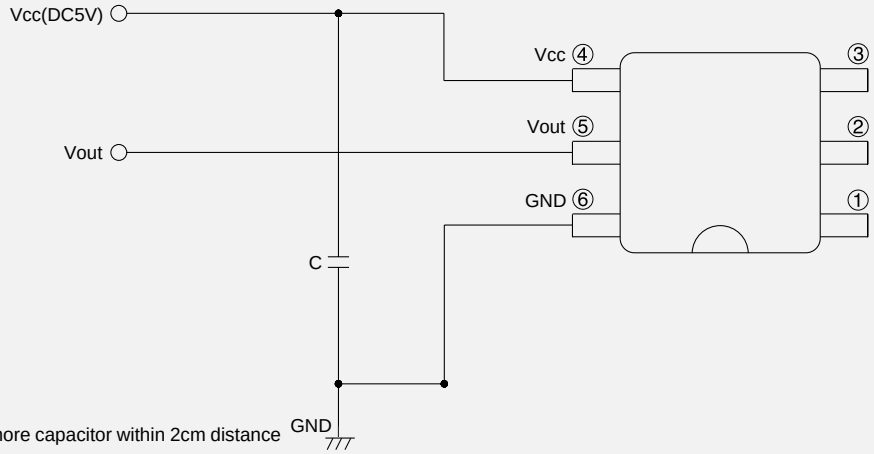
■ Connection diagram ■

XFPM



Remarks :
1) C : Connect 0.01μF or more capacitor within 2cm distance from leads.
2) 4 and 5 pins must be No Connection. Open them as floating ones completely, and do NOT connect to other line or each other.

■ Transfer Function ■

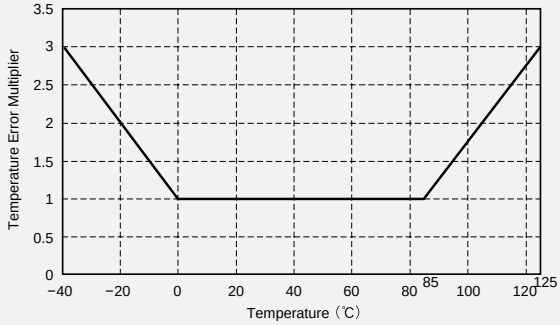
Vout=Vs×(P×0.01023−0.1238)±(1.584×Temperature Error Multiplier×0.01023×Vs)

※Vs=5.0volts

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.
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