

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
- Non-corrosive liquid measurable (XFPMC, XFHMC only)

Applications

- Industrial instrumentation
- Pressure switch, Pneumatic device
- Medical device

Part number for ordering

XFPM C - 025KP G R H



Model
XFPM
XFHM

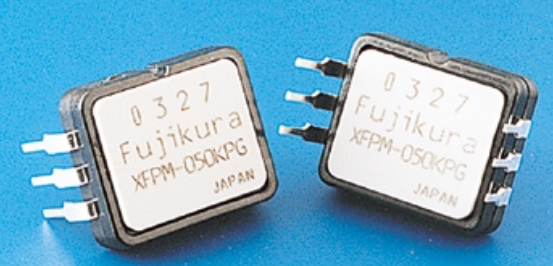
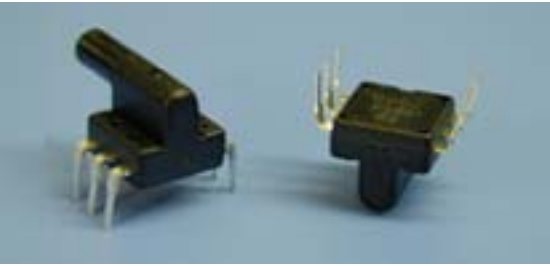
Available pressure media
No mark : Non-corrosive gas only
C : Non-corrosive gas and liquid
(Contact us about availability)

Rated pressure (Pa)

Pressure type
G : Gauge (Positive pressure)
GV : Gauge (Negative pressure)
GW : Gauge (Bipolar pressure)

Accuracy
No mark : ± 2.5 FS %
H : ± 1.5 FS %
(Contact us about availability)

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

Pressure type	Gauge pressure	
	XFPM	XFHM
Model		
Package configuration	Dual-In-line-Package (DIP)	Horizontal pressure port DIP

Measurable pressure range (kPa)	Part number for ordering		
-100 ~ 100	XFPM-100KPGW	XFPM-100KPGWR	XFHM-100KPGWR
0 ~ -100	XFPM-100KPGV	XFPM-100KPGVR	XFHM-100KPGVR
0 ~ 25	XFPM-025KPG	XFPM-025KPGR	XFHM-025KPGR
0 ~ 50	XFPM-050KPG	XFPM-050KPGR	XFHM-050KPGR
0 ~ 100	XFPM-100KPG	XFPM-100KPGR	XFHM-100KPGR
0 ~ 200	XFPM-200KPG	XFPM-200KPGR	XFHM-200KPGR
0 ~ 1000	XFPM-001MPG	XFPM-001MPGR	XFHM-001MPGR

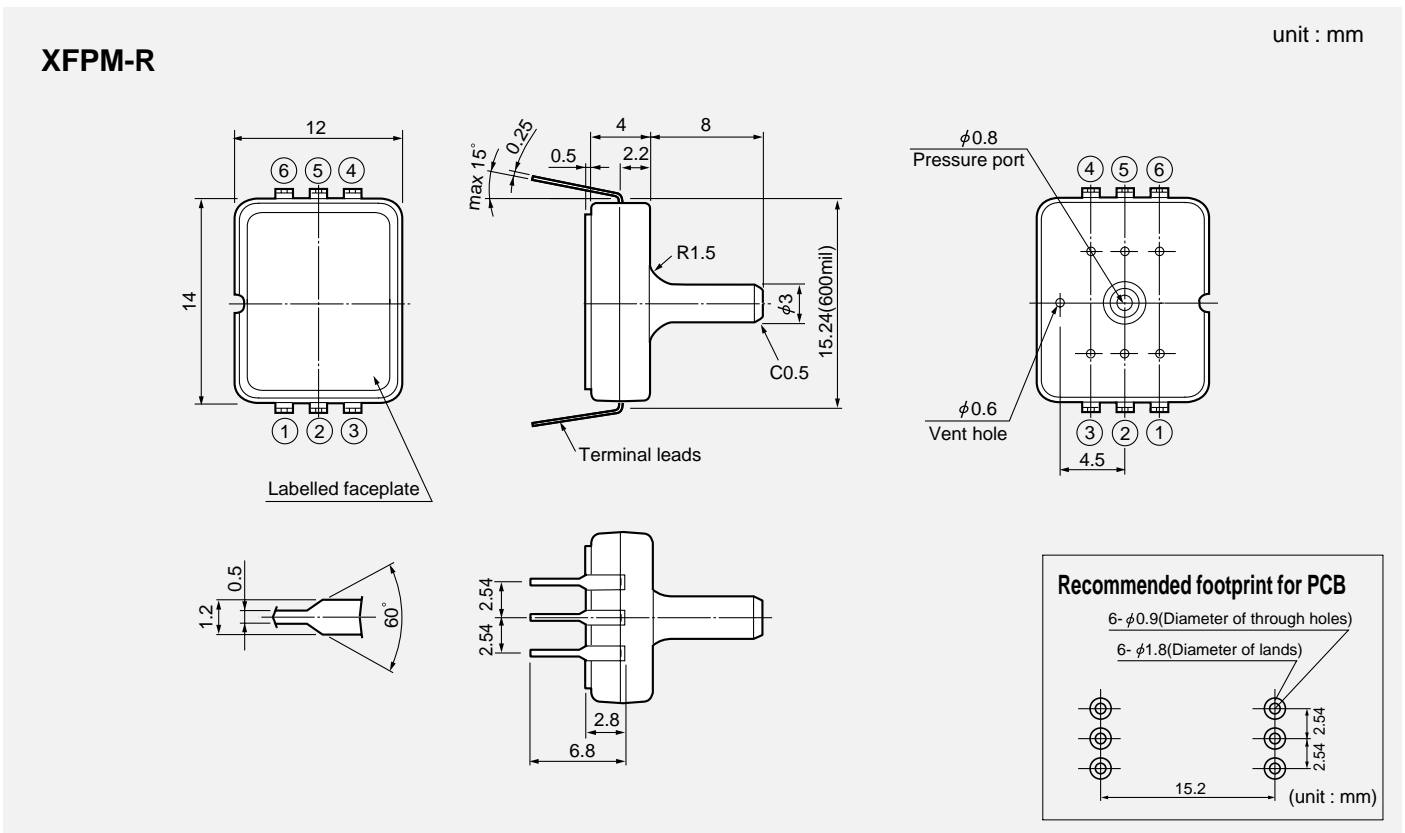
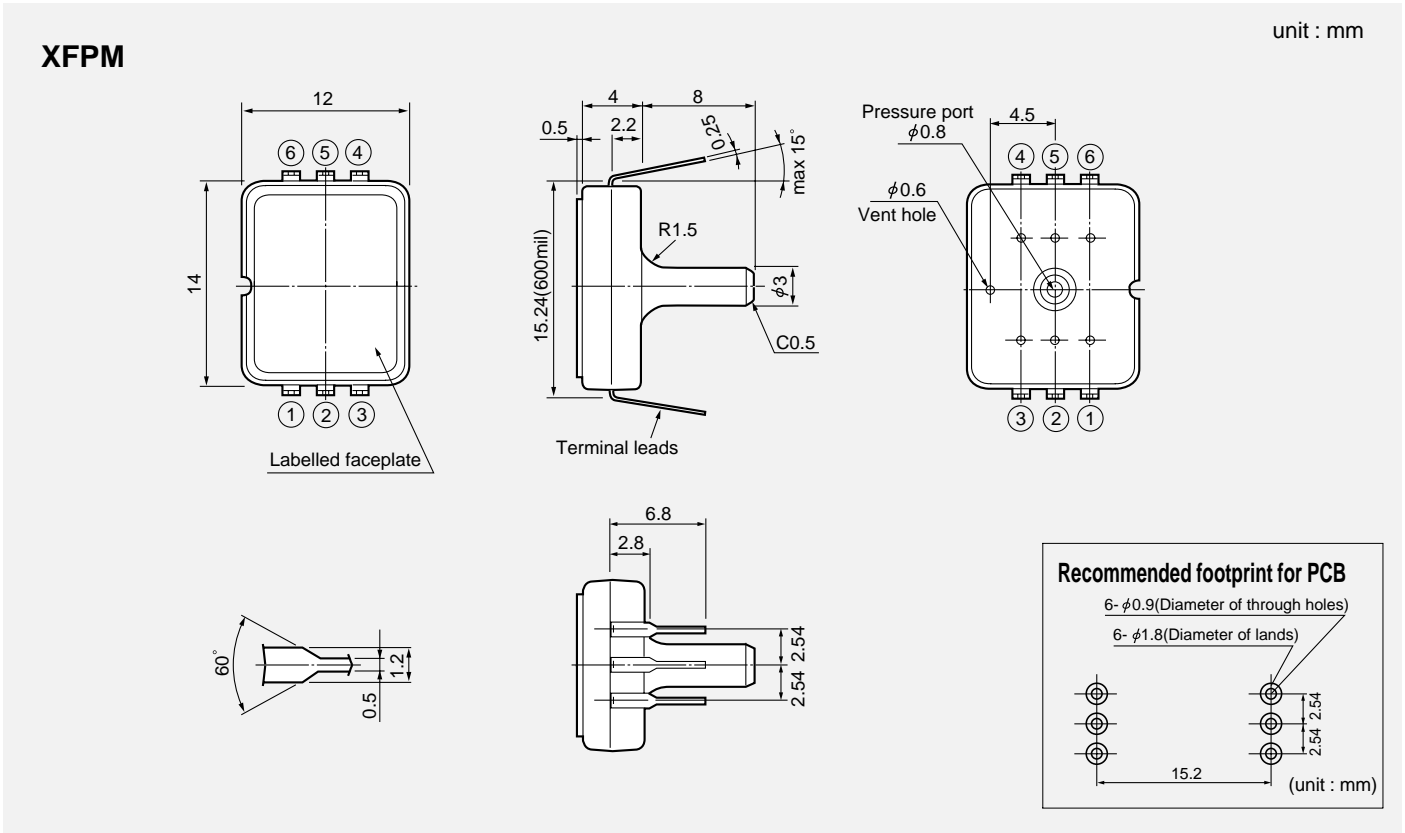
Specifications

Model/Rated pressure	100KPGW	100KPGV	025KPG	050KPG	100KPG	200KPG	001MPG	Unit
Recommended operating conditions								
Pressure type	Gauge pressure							—
Rated pressure	± 100	-100	25	50	100	200	1000	kPa
	± 1.020	-1.020	0.255	0.510	1.020	2.040	10.20	kg/cm ²
Measurable pressure range	-100 ~ 100	0 ~ -100	0 ~ 25	0 ~ 50	0 ~ 100	0 ~ 200	0 ~ 1000	kPa
Pressure media ※1	XFPM, XFHM : Non-corrosive gas only, XFPMC, XFHMC : Non-corrosive gas and liquid							—
Excitation voltage	5.0 \pm 0.25							VDC
Absolute maximum rating								
Maximum load pressure	Twice of rated pressure						1.5 times 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
Electric performances/characteristics (Excitation voltage Vcc=5.0V constant, Ambient temperature Ta=25°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 ※1.2	0.2 \pm 0.1125, 0.2 \pm 0.0675 (H)							V
Full scale span voltage ※1.2	4.7 \pm 0.1125, 4.7 \pm 0.0675 (H)							V
Accuracy ※1.2	$\pm 2.5, \pm 1.5$ (H)							%FS/0 ~ 85°C

Note ; ※1) Please consult us available when you choose the C models and the H models.

※2) Excluding input voltage error.

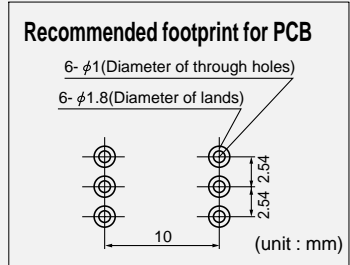
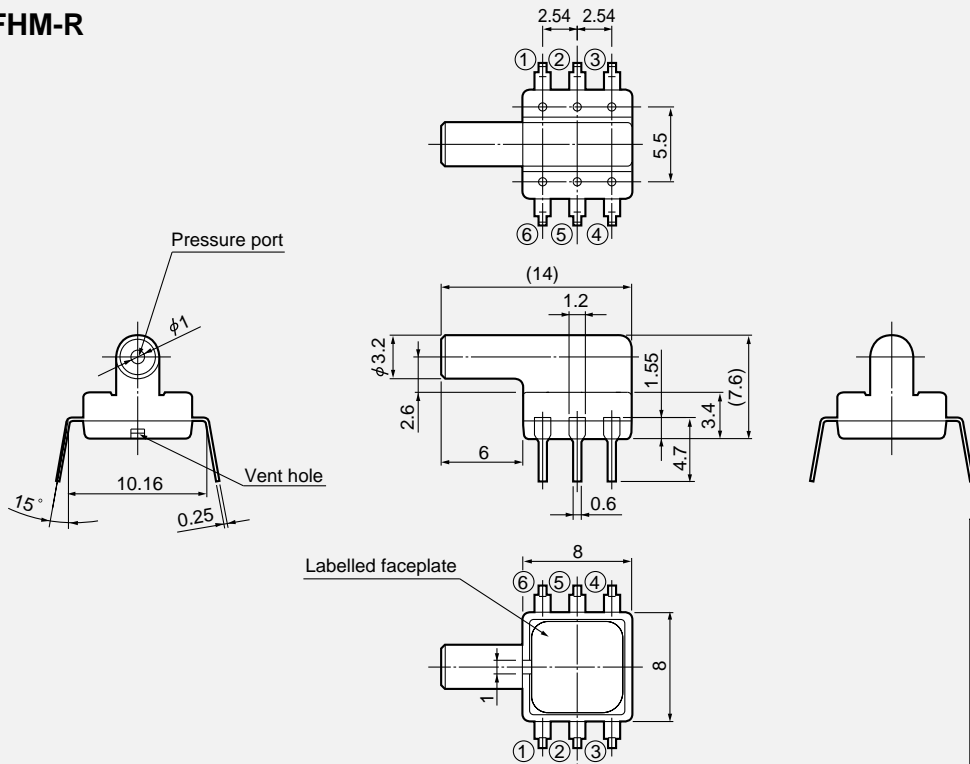
Outline dimensions



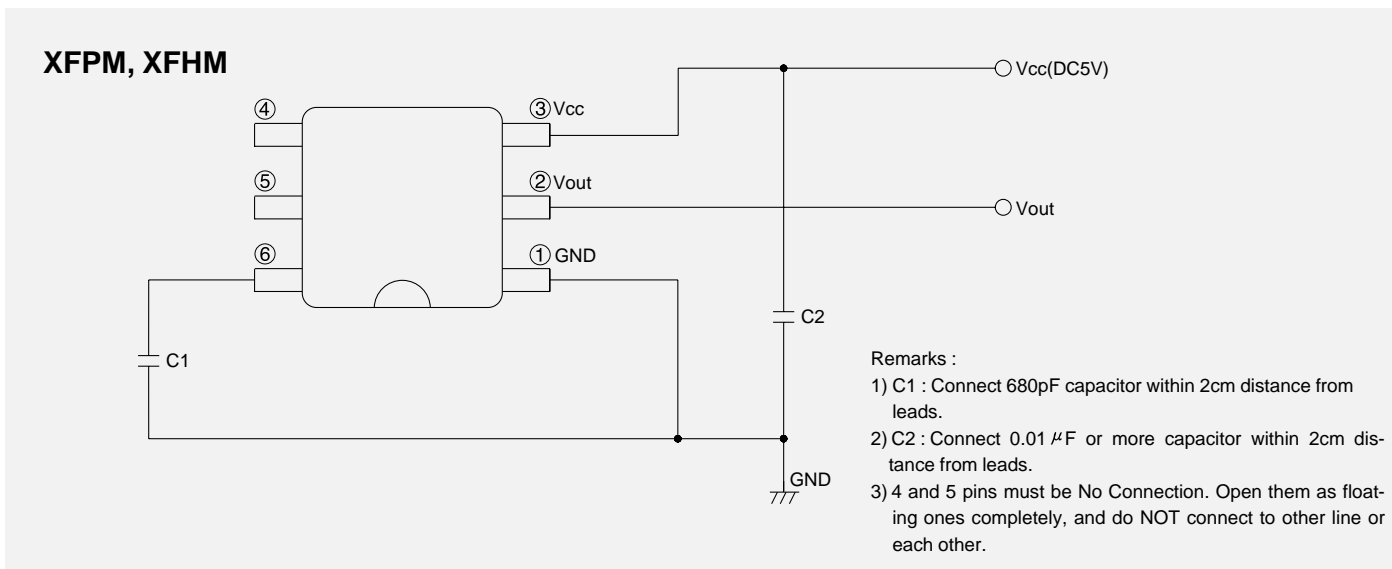
■ Outline dimensions ■

unit : mm

XFHM-R



■ Connection diagram ■



■ Transfer Function ■

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

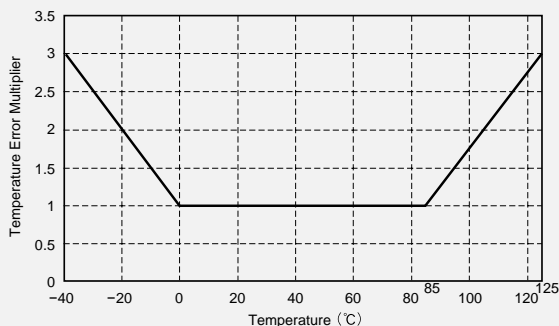
※ $V_s = 5.0$ volts

Notes ; The output voltage (Vout) 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



Fujikura Ltd.

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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