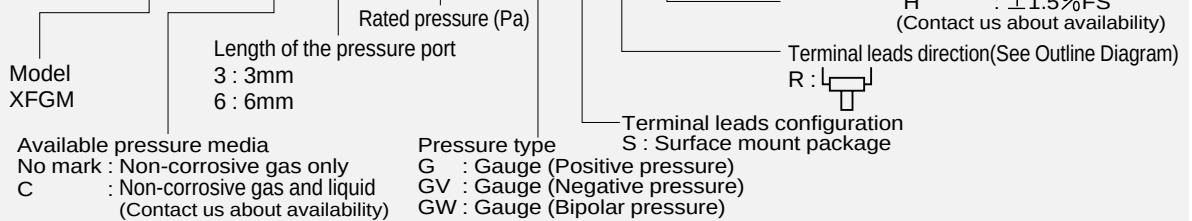


Features

- 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 (XFGMC only)

Applications

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

Part number for ordering**XFGM C - 3 025KP G S R H**

Pressure type	Gauge pressure	
	XFGM-3	XFGM-6
Model		
Package configuration	Surface mount package, 3mm pressure port	Surface mount package, 6mm pressure port

Measurable pressure range (kPa)	Part number for ordering	
-100~100	XFGM-3100KPGWSR	XFGM-6100KPGWSR
0~-100	XFGM-3100KPGVSR	XFGM-6100KPGVSR
0~25	XFGM-3025KPGSR	XFGM-6025KPGSR
0~50	XFGM-3050KPGSR	XFGM-6050KPGSR
0~100	XFGM-3100KPGSR	XFGM-6100KPGSR
0~200	XFGM-3200KPGSR	XFGM-6200KPGSR
0~1000	XFGM-3001MPGSR	XFGM-6001MPGSR

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/cm²
Measurable pressure range	—100~100	0~—100	0~25	0~50	0~100	0~200	0~1000	kPa
Pressure media ※1	XFGM : Non-corrosive gas only, XFGMC : Non-corrosive gas and liquid							—
Excitation voltage	5.0±0.25							VDC
Absolute maximum rating								
Maximum load pressure	Twice of rated pressure						1.5times of rated pressure	—
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 ※1.2	0.2±0.1125, 0.2±0.0675(H)							V
Full scale span voltage※1.2	4.7±0.1125, 4.7±0.0675(H)							V
Accuracy ※1.2	±2.5, ±1.5(H)							%FS/0~85℃

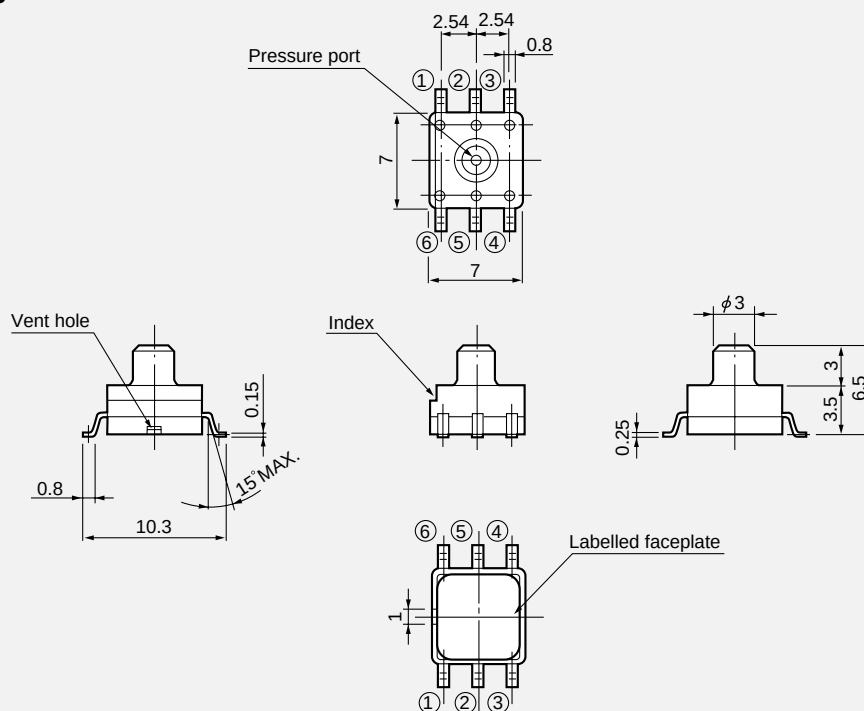
Note ; ※1) Please consult us available when you choose the C models and the H models.

※2) Excluding input voltage error.

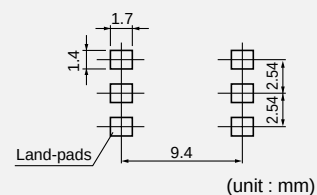
Outline dimensions

unit : mm

XFGM-3



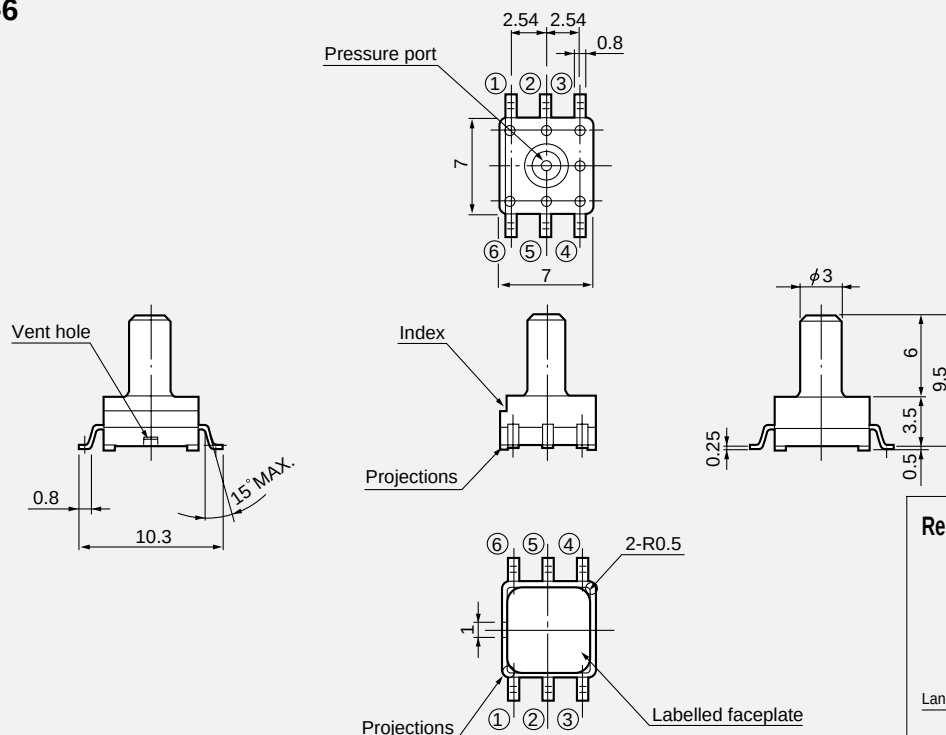
Recommended footprint for PCB



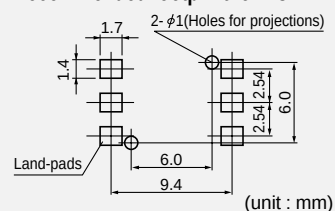
(unit : mm)

XFGM-6

unit : mm



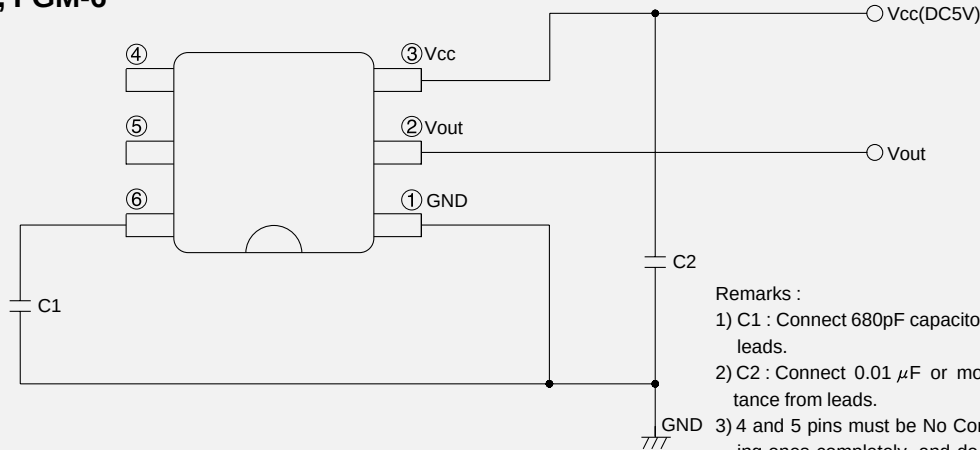
Recommended footprint for PCB



(unit : mm)

■ Connection diagram ■

XFGM-3, FGM-6



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 floating ones completely, and do NOT connect to other line or each other.

■ Transfer Function ■

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

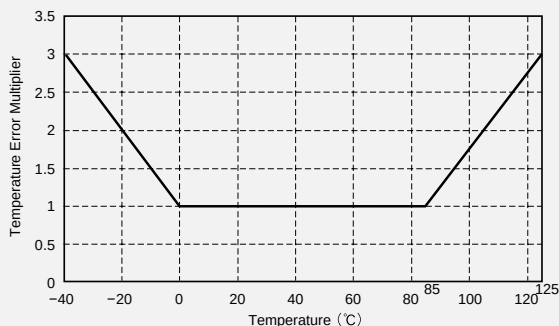
※ $V_s=5.0$ volts

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

※ P =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



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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