

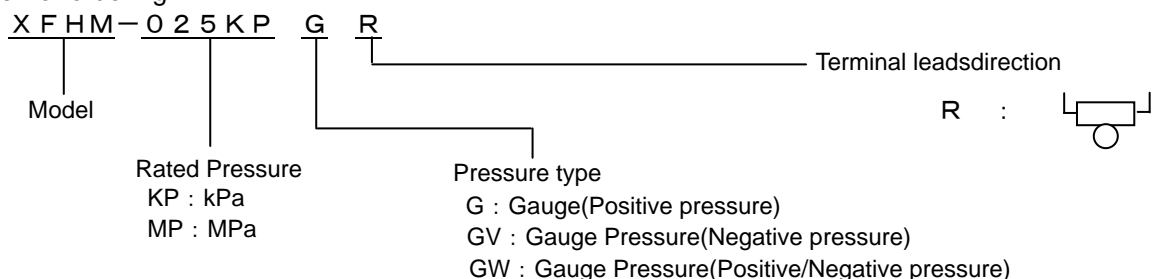
■ Features

- On-chip amplification and temperature compensations
- Pre-calibration of offset voltage and span
- Horizontal pressure port

■ Applications

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

■ Part number for ordering



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

■ Specifications

Model	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
Measurable pressure range	-100~100	0~-100	0~25	0~50	0~100	0~200	0~1000	kPa
Temperature range	0~85							°C
Pressure media	Non-corrosive gases only (No liquid)							—
Supply voltage (constant)	5±0.25							VDC
Absolute maximum rating								
Maximum load pressure	Twice of rated pressure						1.5 times of rating pressure	—
Maximum excitation voltage	8							VDC
Operating temperature	-40~125							°C
Storage temperature	-40~125							°C
Operating humidity	30~80 (Non dew condition)							%RH
Electrical characteristics (Excitation voltage Vcc=5.0V constant , ambient temperature Ta=25°C)								
Power consumption	10mA max.							mA
Output impedance	10Ω max.							Ω
Source current	0.2mA max.							mA
Sink current	2mA max.							mA
Response time	2 (for the reference)							msec
Output span voltage	4.5							V
Offset voltage *	*2	*3	0.2±0.1125 (at 0 kPa)				V	
Output voltage at full scale *	*4	*5	4.7±0.1125 (at rated pressure)				V	
Accuracy *	±2.5							%FS/0~85°C

*1 Excluding input voltage error.

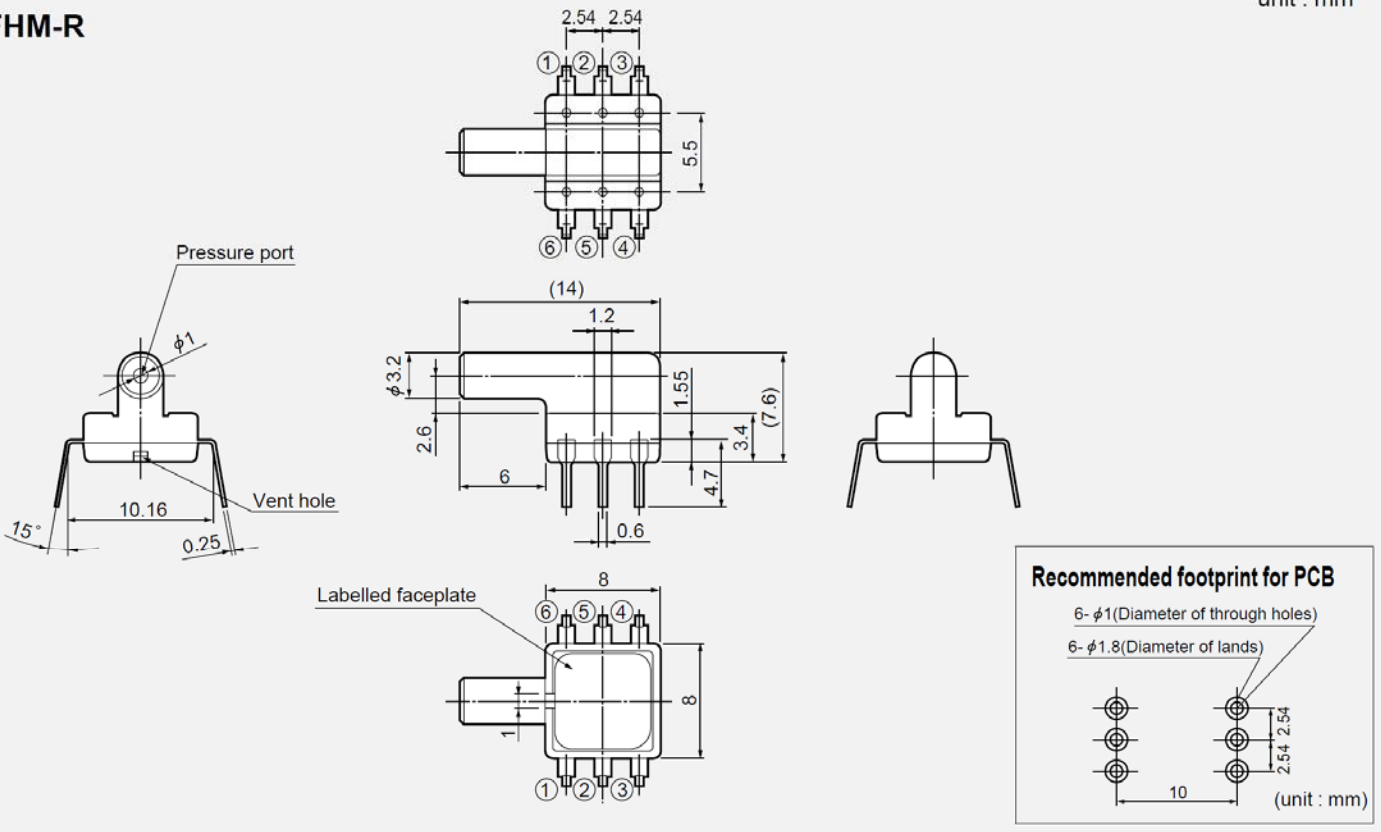
*2 0.2±0.1125V(at -100kPa) *3 0.2±0.1125V(at 0kPa)

*4 4.7±0.1125V(at +100kPa) *5 4.7±0.1125V(at -100kPa)

■ Outline dimensions ■

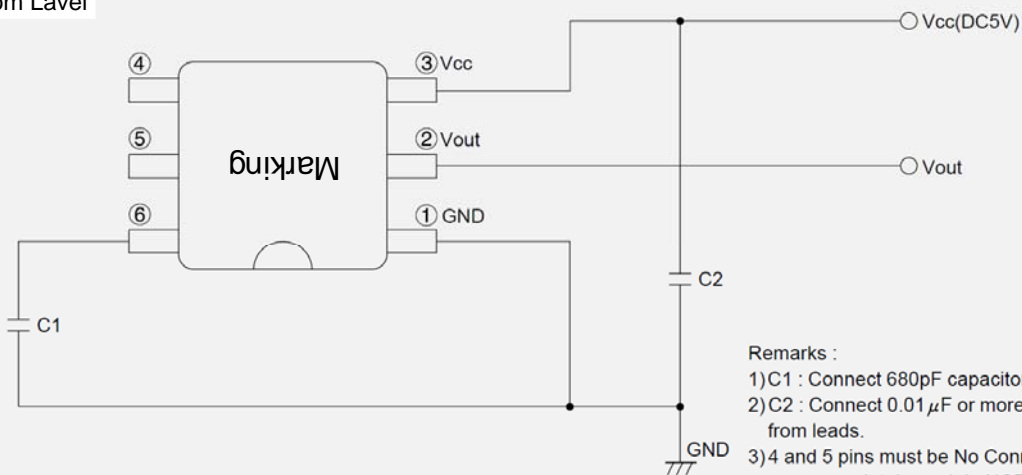
XFHM-R

unit : mm



■ Connection diagram ■

View from Level



- 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

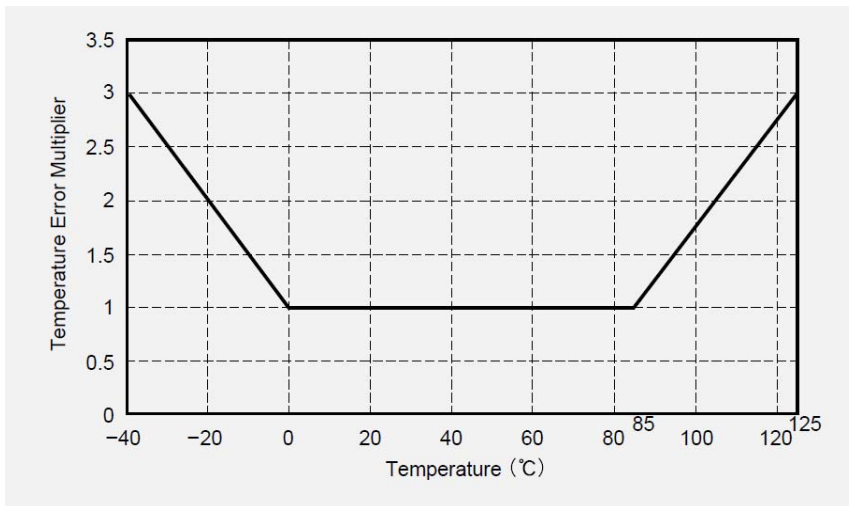
$$V_{out} = V_s \times (P \times \alpha + \beta) \pm (\text{Pressure Error} \times \text{Temperature Error Multiplier} \times \alpha \times V_s)$$

$$V_s = V_{cc} = 5.0V$$

$$P = \text{Input pressure (kPa)}$$

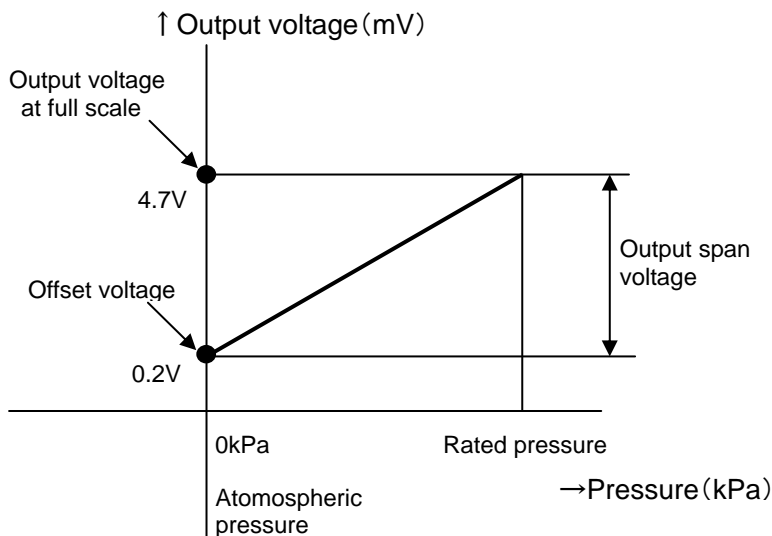
Model	Measurable pressure range (kPa)	α	β	Pressure Error (kPa)
XFHM-100KPGWR	-100~100	0.0045	0.49	5
XFHM-100KPGVR	0~-100	-0.008	0.04	2.5
XFHM-025KPGR	0~25	0.036	0.04	0.625
XFHM-050KPGR	0~50	0.018	0.04	1.25
XFHM-100KPGR	0~100	0.009	0.04	2.5
XFHM-200KPGR	0~200	0.0045	0.04	5
XFHM-001MPGR	0~1000	0.0009	0.04	25

温度誤差係数

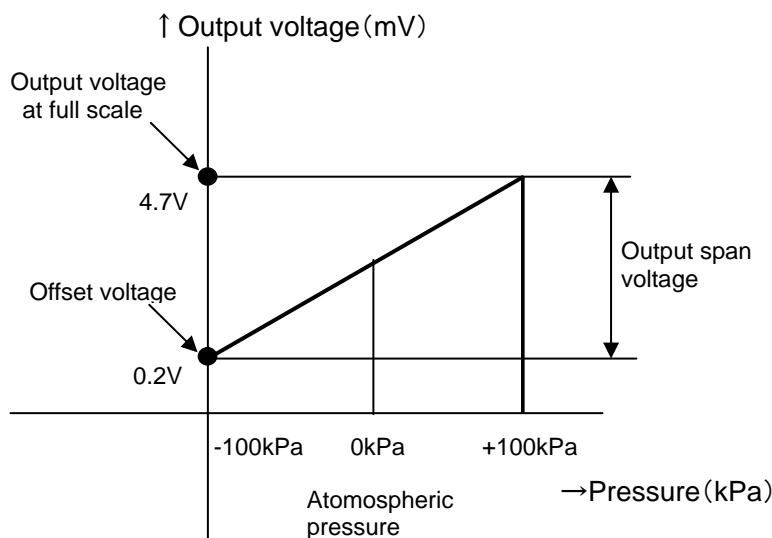


■ Output characteristics ■

XFHM-100KPGWR
XFHM-100KPGVR
XFHM-025KPGR
XFHM-050KPGR
XFHM-100KPGR
XFHM-200KPGR



XFHM-100KPGWR



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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