

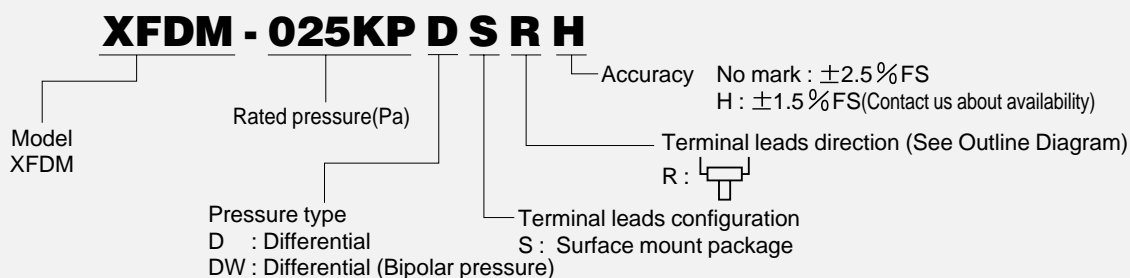
## Features

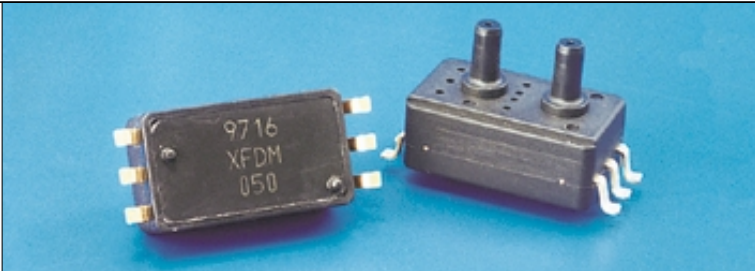
- Two accuracy ranks,  $\pm 1.5\%$ FS and  $\pm 2.5\%$ FS available
- Volt level output
- On-chip amplification and temperature compensations
- Pre-calibration of offset voltage and span
- Very small surface mountable package, Easy to mount on PCB

## Applications

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

## Part number for ordering



Pressure type	Differential pressure
	XFDM
Model	
Package configuration	Surface mount package

Measurable pressure range (kPa)	Part number for ordering
-100~100	XFDM-100KPDWSR
0~25	XFDM-025KPDSR
0~50	XFDM-050KPDSR
0~100	XFDM-100KPDSR
0~200	XFDM-200KPDSR
0~1000	XFDM-001MPDSR

## Specifications

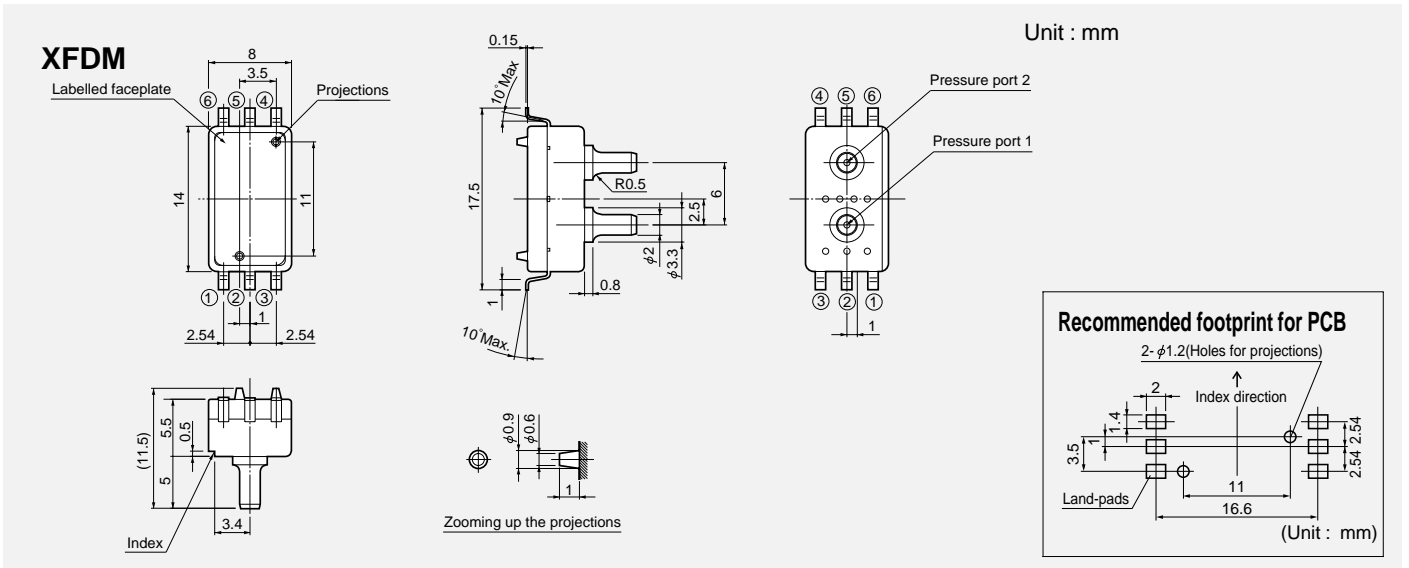
Model/Rated pressure	100KPDW	025KPD	050KPD	100KPD	200KPD	001MPD	Unit
<b>Recommended operating conditions</b>							
Pressure type	Differential pressure						—
Rated pressure	$\pm 100$	25	50	100	200	1000	kPa
	$\pm 1.020$	0.255	0.510	1.020	2.040	10.20	kg/cm <sup>2</sup>
Measurable pressure range	-100~100	0~25	0~50	0~100	0~200	0~1000	kPa
Pressure media	Non-corrosive gas only						—
Excitation voltage	5.0 $\pm$ 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						°C
Storage temperature	-40~125						°C
Operating humidity	30~80 (No dew condensation)						%RH
<b>Electric performances/characteristics (Excitation voltage Vcc=5.0V constant, Ambient temperature Ta=25°C)</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 ※1, 2, 3	0.2 $\pm$ 0.1125, 0.2 $\pm$ 0.0675(H)						V
Full scale span voltage ※1, 2, 3	4.7 $\pm$ 0.1125, 4.7 $\pm$ 0.0675(H)						V
Accuracy ※2, 3	$\pm 2.5$ , $\pm 1.5$ (H)						%FS/0~85°C

Note ; ※1) Output refers to pressure at pressure port 2.

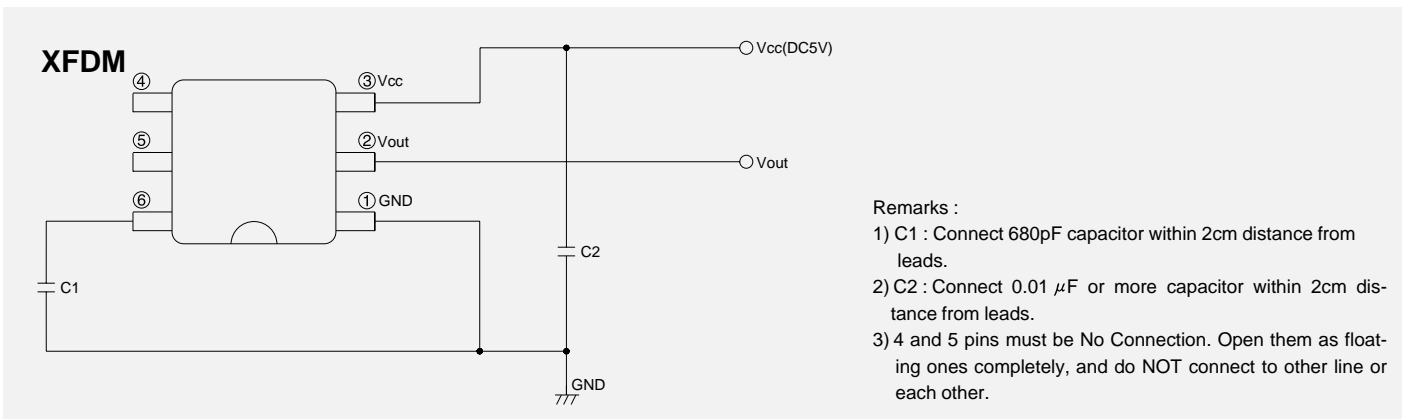
※2) Excluding input voltage error.

※3) Please consult us availability when you choose the H models.

■ Outline dimensions ■



■ Connection diagram ■



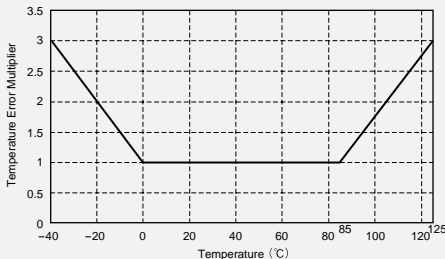
■ Transfer Function ■

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

※Vs=5.0volts Notes ; The output voltage (Vout) is no perfect ratiometric with the power supply voltage.

※P=Input Pressure(kPa)

※Temperature Error Multiplier



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)	-0~+100kPa	0.0045	0.49	5.0
200KPG(D)	0~200kPa	0.0045	0.04	5.0
001MPGW(D)	0~+1MPa	0.0009	0.04	25
115KPA	15~115kPa.abs	0.009	-0.095	2.5

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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