

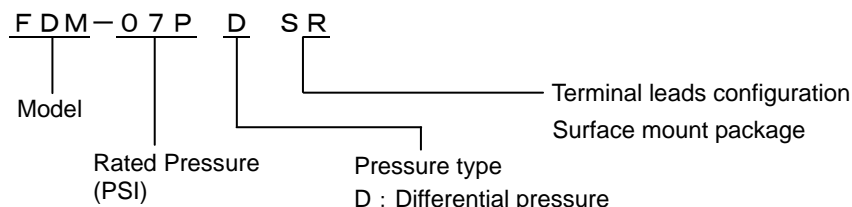
■ Features

Differential pressure, Surface mount package

■ Applications

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

■ Ordering Information



RoHS compliance

Measurable pressure range(kPa)	Part number
-13.79~13.79	FDM-02PDSR
-34.47~34.47	FDM-05PDSR
-48.26~48.26	FDM-07PDSR
-103.4~103.4	FDM-15PDSR
-206.8~206.8	FDM-30PDSR
-344.7~344.7	FDM-50PDSR
-482.6~482.6	FDM-70PDSR
-827.4~827.4	FDM-120PDSR

■ Specifications

Model	02PD	05PD	07PD	15PD	30PD	50PD	70PD	120PD	Unit
Recommended operating conditions									
Pressure type	Differential pressure								—
Rated pressure	13.79	34.47	48.26	103.4	206.8	344.7	482.6	827.4	kPa
Measurable pressure range	-13.79 ~13.79	-34.47 ~34.47	-48.26 ~48.26	-103.4 ~103.4	-206.8~ 206.8	-344.7~ 344.7	-482.6~ 482.6	-827.4~ 827.4	kPa
Temperature range	0~50								°C
Pressure media	Non-corrosive gases only (No liquid)								—
Excitation current (Constant)	1.5								mADC
Absolute maximum rating									
Maximum differential pressure **1	Twice of rated pressure							1.5 times of rating pressure	—
Port1 Maximum load pressure									
Port2 Maximum load pressure									
Maximum excitation current	3.0								mADC
Operating temperature	-20~100								°C
Storage temperature	-40~120								°C
Operating humidity	30~80 (Non dew condition)								%RH
Electric characteristics (Drive Current 1.5mA constant, ambient temperature Ta=25°C)									
Output span voltage **2	60~140 (at 0kPa~rated pressure)								mV
Offset voltage	±20 (at 0kPa)								mV
Bridge resistance	4000~6000								Ω
Response time	2 (for the reference)								msec
Accuracy	TSO*	±5							%FS/ 0~50°C
	TCS*	2.5							
	Linearity	±0.5	±0.3				±0.5	±0.6	%FS
	Pressure hysteresis	±0.4	±0.2				±0.4		%FS

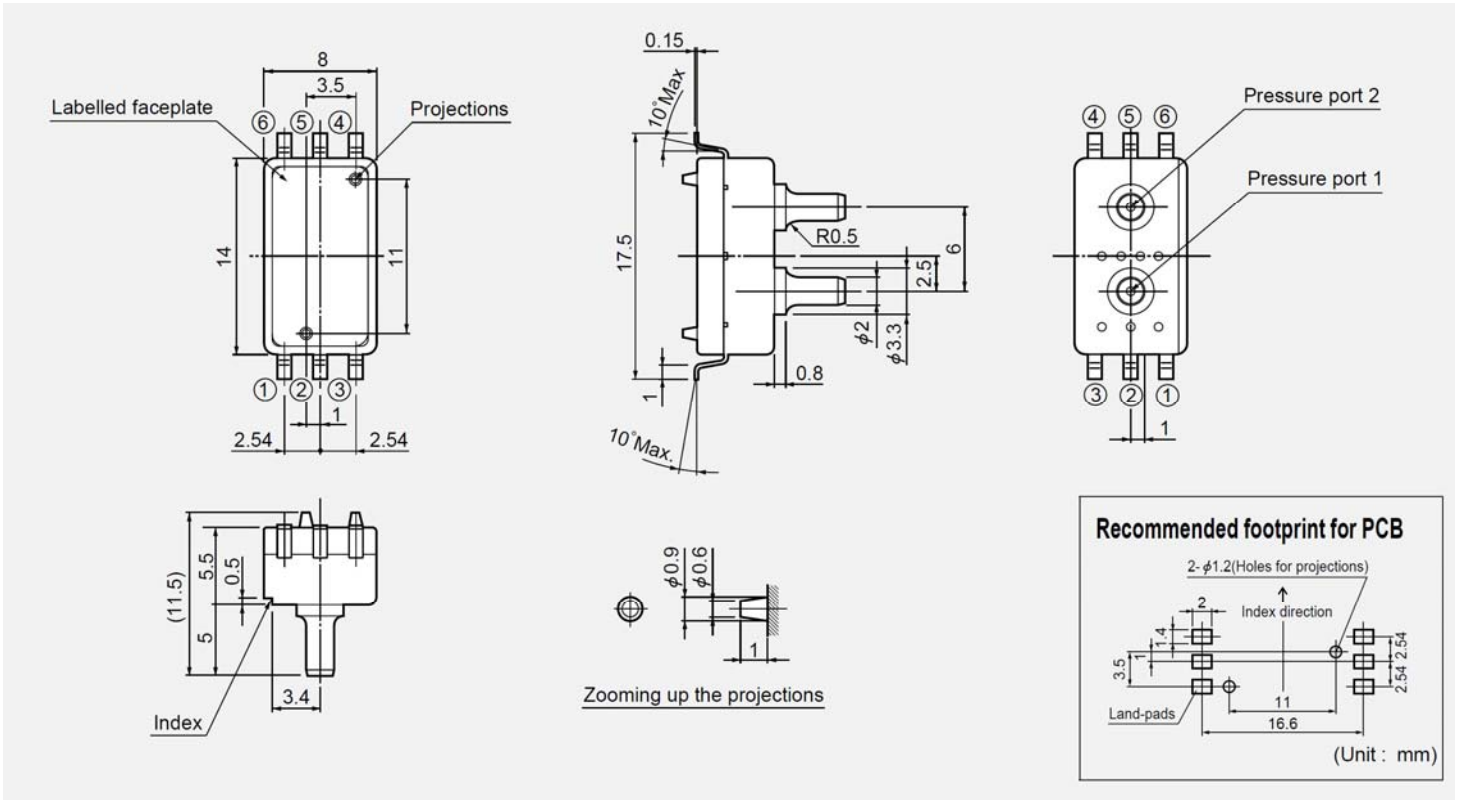
*TSO: Temperature sensitivity of offset voltage *TCS: Temperature coefficient of output span voltage

*Temperature range from 0-50 deg C

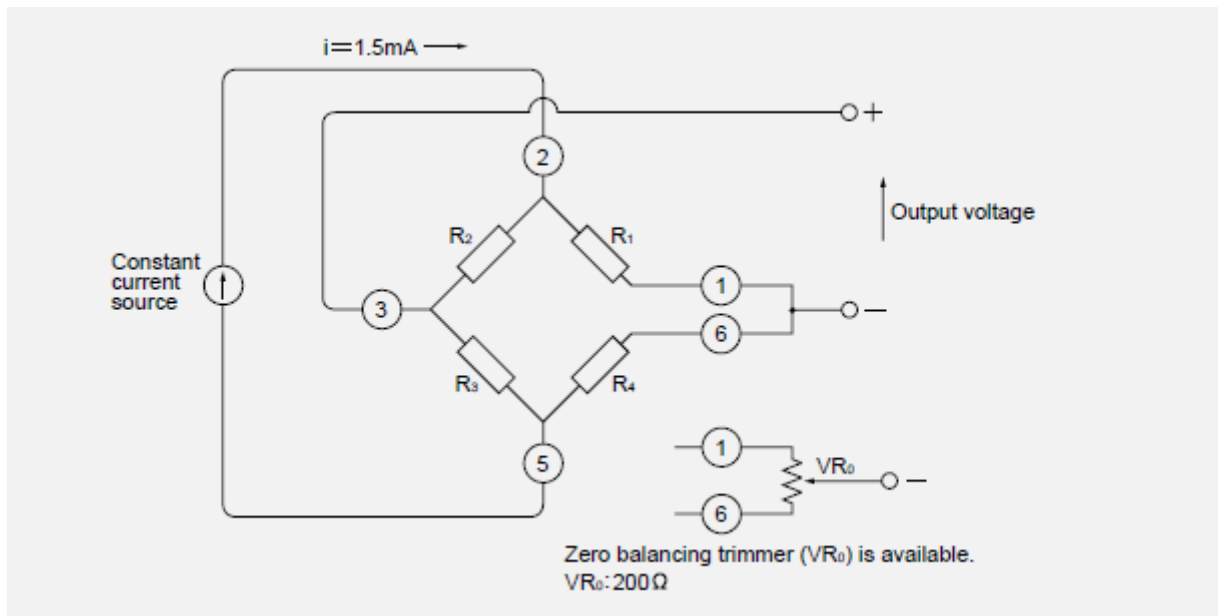
**1 Port1 pressure >Port2 pressure, Port2 pressure: reference pressure

**2 Output refers to pressure at pressure port2.

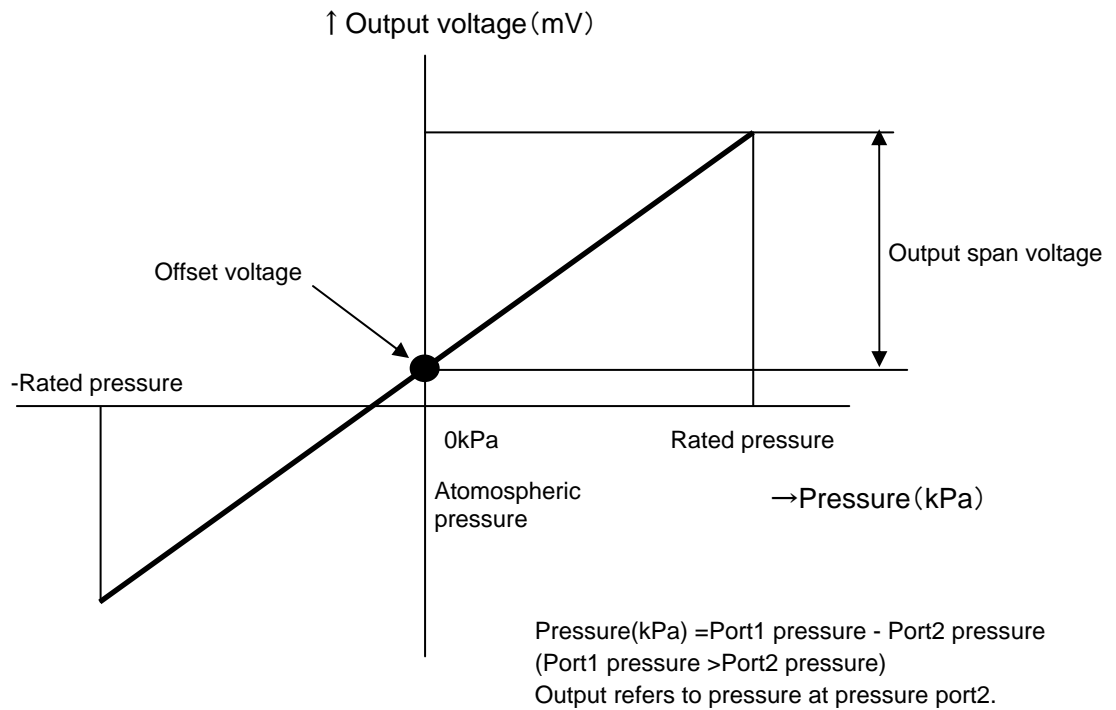
■ Outline dimensions ■



■ Connection diagram ■



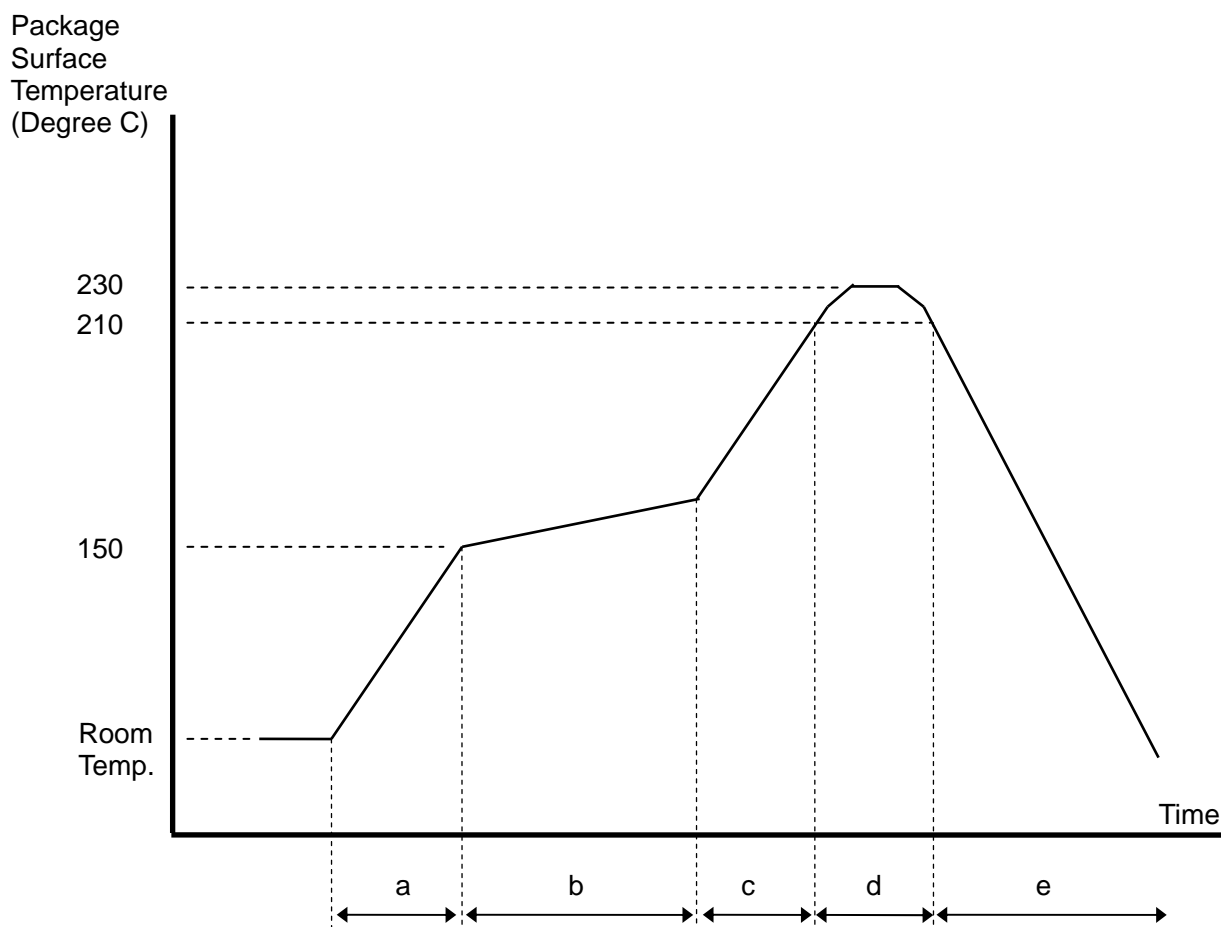
■ Output characteristics ■



Note ; Please read instruction "Notes" before using the sensor.
Fujikura reserves the right to change specifications without notice.

Please set Zero-calibration function up your products. The offset voltage may be shifted some mechanical stress such as mounting, installation and etc. over longtime using.

Reflow Soldering process recommendation profile



- | | |
|-------------------|--|
| a: Ramp up rate | 1 or 2 degree C/sec. |
| b: Pre-heating | 150°C~180°C within 60~120sec. |
| c: Ramp up rate | 1 to 2 degree C/sec. |
| d: Heating | max.230 degree C,max.10sec. 210 degree C,within 30sec. |
| e: Ramp down rate | 1 or 2 degree C/sec. |

- Note ;
- 1) Temperature means Surface temperature of the sensor package.
 - 2) Reflow process max. 2 times.
 - 3) Do not wash the sensor.
 - 4) Do not put the solder and flux on the sensor package.

If you have any questions regarding technical issues or specifications, please contact us.
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