

Features

- Accuracy, $\pm 1.0\%$ FS
- Volt level output
- Piggy-back style, pre-amplified and pre-compensated module
- Pre-calibration of offset voltage and span

Applications

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

Part number for ordering

PSM C - 025KP G

Model
PSM

Rated pressure(Pa)

Available pressure media

No mark : Non-corrosive gas only

C : Non-corrosive gas and liquid
(Contact us about availability)

Pressure type

G : Gauge(Positive pressure)

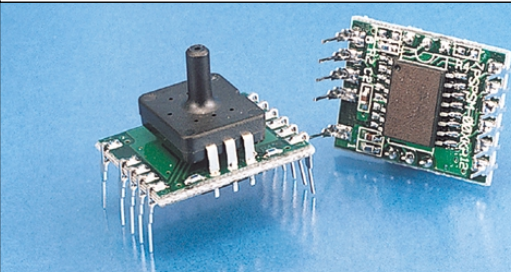
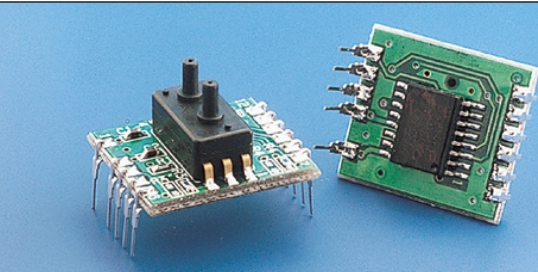
GV : Gauge(Negative pressure)

GW : Gauge(Bipolar pressure)

D : Differential(Positive pressure)

DV : Differential(Negative pressure)

DW : Differential(Bipolar pressure)

Pressure type	Gauge pressure PSM-G	Differential pressure PSM-D
Model		
Package configuration	Piggy-back style module	Piggy-back style module

Measurable pressure range (kPa)	Part number for ordering	
-100~100	PSM-100KPGW	PSM-100KPDW
0~-100	PSM-100KPGV	PSM-100KPDV
0~25	PSM-025KPG	PSM-025KPD
0~50	PSM-050KPG	PSM-050KPD
0~100	PSM-100KPG	PSM-100KPD
0~200	PSM-200KPG	PSM-200KPD

Specifications

Model/Rated pressure	100KPGW 100KPDW	100KPGV 100KPDV	025KPG 025KPD	050KPG 050KPD	100KPG 100KPD	200KPG 200KPD	Unit
Recommended operating conditions							
Pressure type	Gauge pressure						—
Rated pressure	±100	—100	25	50	100	200	kPa
	±1.020	—1.020	0.255	0.510	1.020	2.040	kg/cm ²
Measurable pressure range	100～100	0～-100	0～25	0～50	0～100	0～200	kPa
Pressure media※1	PSM : Non-corrosive gas only, PSMC : Non-corrosive gas and liquid						—
Excitation voltage	5±0.25						VDC
Absolute maximum rating							
Maximum load pressure	Twice of rated pressure						
Maximum excitation voltage	7						VDC
Operating temperature	-20～100						℃
Storage temperature	-40～120						℃
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 5						mA
Mechanical response time	2 (For the reference)						msec
Output voltage ※2, ※3	0.5 (-100kPa)	0.5 (0kPa)	0.5 (0kPa)	0.5 (0kPa)	0.5 (0kPa)	0.5 (0kPa)	V
	4.5 (100kPa)	4.5 (-100kPa)	4.5 (25kPa)	4.5 (50kPa)	4.5 (100kPa)	4.5 (200kPa)	
Full scale span voltage※3	4.0						V
Offset voltage ※2, ※3	0.5±0.04						V
Full scale span voltage ※2, ※3	4.5±0.04						V
Accuracy ※3	±1.0						%FS/0～50℃

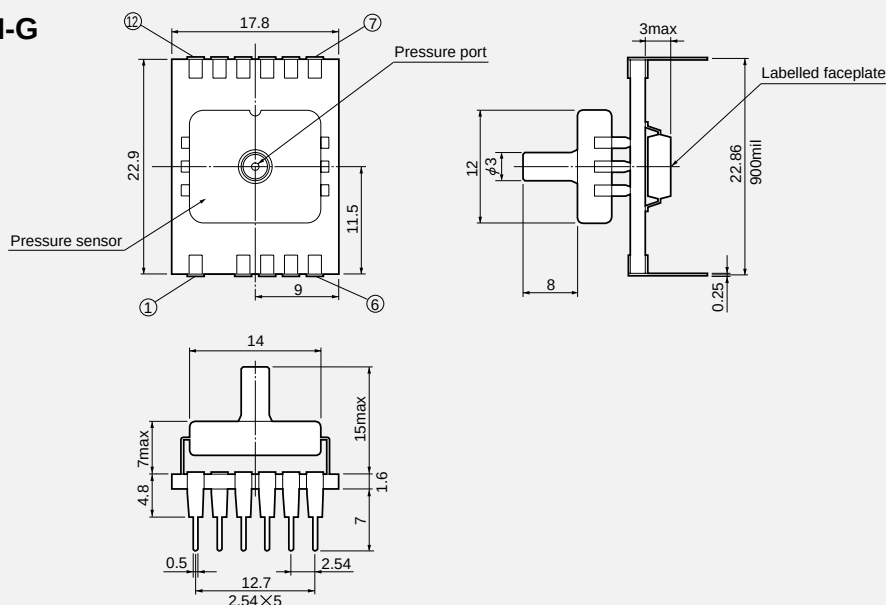
Note ; ※1) Please consult us available when you choose the C models.

※2) Output refers to pressure at pressure port 2.

※3) Excluding input voltage error.

Outline dimensions

PSM-G

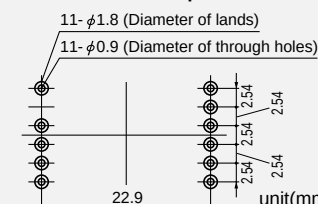


unit (mm)

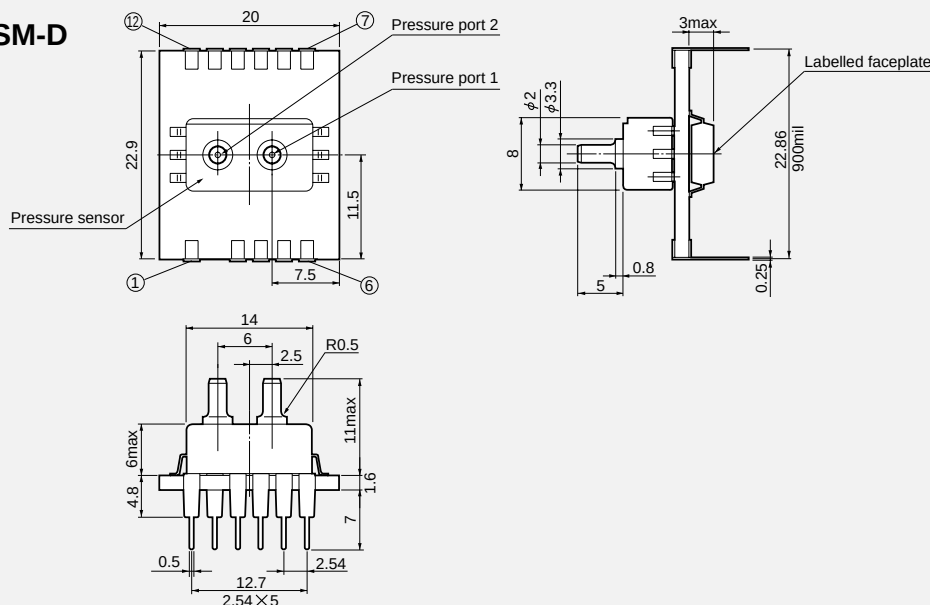
ELECTRICAL PIN CONNECTIONS

PIN NO.	SYMBOL
①	Vcc
②	NO PIN
③	Vout
④	NC
⑤	NC
⑥	NC
⑦	NC
⑧	NC
⑨	NC
⑩	NC
⑪	NC
⑫	GND

Recommended footprint for PCB



PSM-D

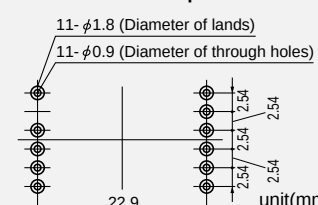


unit (mm)

ELECTRICAL PIN CONNECTIONS

PIN NO.	SYMBOL
①	Vcc
②	NO PIN
③	Vout
④	NC
⑤	NC
⑥	NC
⑦	NC
⑧	NC
⑨	NC
⑩	NC
⑪	NC
⑫	GND

Recommended footprint for PCB



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

※ P =Input Pressure(kPa)

※Temperature Error Multiplier=1

Model	pressure range	α	β	Pressure Error(kPa)
025KPG(D)	0~25kPa	0.032	0.1	0.25
050KPG(D)	0~50kPa	0.016	0.1	0.5
100KPG(D)	0~100kPa	0.008	0.1	1.0
100KPGV(DV)	0~100kPa	-0.008	0.1	1.0
100KPGW(DW)	-0~+100kPa	0.004	0.5	2.0
200KPG(D)	0~200kPa	0.004	0.1	2.0

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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