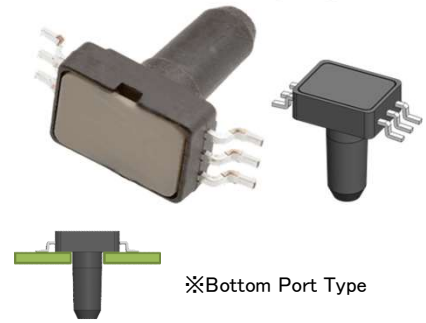


Analog output pressure sensor

MMS901 (-50~+50[kPa])

Product image for illustration purposes only.



Outline

Ultra-compact, low power consumption MEMS gauge pressure sensor. It is possible to output a highly accurate pressure value with little influence on temperature. (Analog output)

Applications

Device that use air

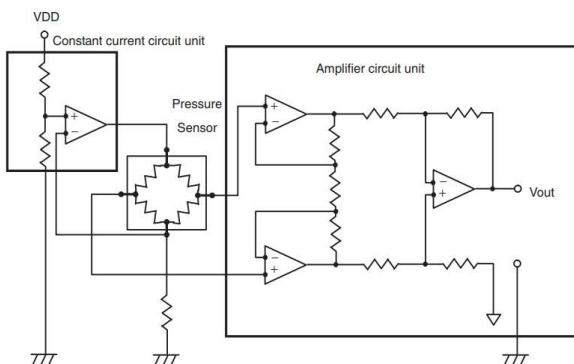
Features

- ① High Accuracy
 - 50 to +50kPa pressre range
 - Offset voltage of 0 ± 4.0 mV
 - Span voltage of 42.0 ± 5.5 mV
 - (At rated pressure 50kPa, 100 μ ADC current supply)
- ② Small size & Bottom port
- ③ Low Power consumption of 0.2mW
- ④ Low Temperature Influence
 - Offset of $\pm 3.0\%$ FS
 - Span of $\pm 5.0\%$ FS
 - (100 μ ADC current supply)

Specification (Draft)

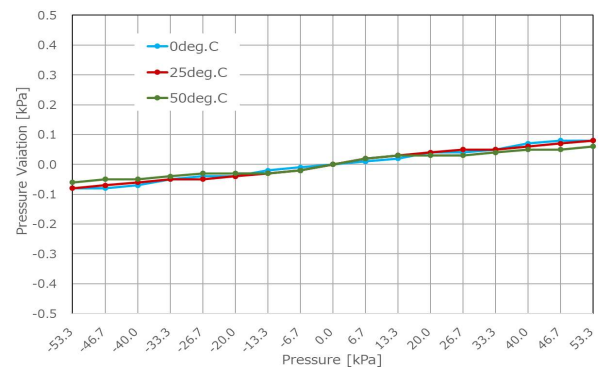
ITEM	SPECIFICATION
Type of pressure	Gauge pressure
Pressure medium	Air
Pressure range	-50 to 50 [kPa]
Ambient operating temperature	-20 ~ 100°C
Ambient operating humidity	10 to 90 %RH
Drive current	100uA DC
Pressure resistant	-80 to 120 [kPa]
Absolute maximum current	200uA DC
Offset voltage	0 ± 4.0 mV(± 4.8 kPa)
Span voltage	42.0 ± 5.5 mV(± 6.5 kPa)
Structure	SOP
Size	6.1(W) × 4.7(D) × 8.2(H)mm (T.B.D)
Weight	0.17g

Block Diagram



- (1) The pressure sensor is designed to convert a voltage by means of constant current drive.
- (2) Please amplifier the output voltage of the pressure sensor by using the amplifying circuit if necessary.

Typical Performance Characteristics



Ultra-compact, low-power MEMS gauge pressure sensor (analog output), $-50\text{kPa} \sim +50\text{kPa}$ ※

※Customizable

We have developed an ultra-compact, low-power consumption gauge pressure sensor (analog output type) that can measure a pressure range of ± 50 kPa. Both analog and digital output types are available.

◆Example of use(How sensors are used)

●Sphygmomanometer



●Oxygen concentrators



●Gas detectors



●CPAP

•Breath detection
(exhalation and inhalation)

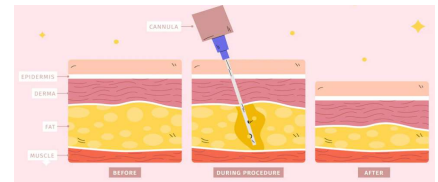


●Coffee makers



●Liposuction machine

•Suction force adjustment



◆Development Schedule

MMS901	TS	ES	MP
	Released	Planning	Planning

* Please understand that the schedule is subject to change without notice.

* Other specifications Please contact us individually for more information.