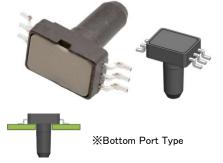
# MITSUMI

# Product image for illustration purposes only.

## Analog output pressure sensor

MMS901 (-50~+50[kPa])



#### 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

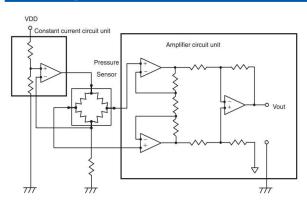
Device that use air

## Features

- 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, 100µADC current supply)
- ② Small size & Bottom port
- $\ensuremath{\textcircled{}}$  3 Low Power consumption of 0.2mW
- ④ Low Temperature Influence
  - •Offset of ±3.0%FS
  - Span of ±5.0 %FS
  - (100µADC current supply)

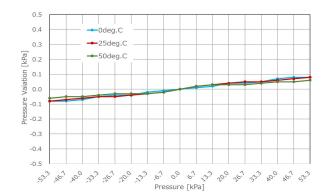
#### **Block Diagram**



## **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±4.0mV(±4.8kPa)	
Span voltage	42.0±5.5mV(±6.5kPa)	
Structure	SOP	
Size	6.1(W) × 4.7(D) × 8.2(H)mm (T.B.D)	
Weight	0.17g	

#### **Typical Performance Characteristics**



(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.

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Mitsumi Electric CO.,LTD.

Semiconductor Business Division Strategy Engineering Department

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The details listed here are not a guarantee of the individual products at the time of ordering. When using the products, you will be asked to check their specifications.

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

## **%Customizable**

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

# Example of use(How sensors are used)

- Sphygmomanometer
- •Oxygen concentrators



Coffee makers

Gas detectors



•Liposuction machine •Suction force adjustment

 CPAP
 Breath detection (exhalation and inhalation)





# ◆ Development Schedule

MMS901	TS	ES	MP
	Released	Planning	Planning

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

 $\ast$  Other specifications Please contact us individually for more information.