

Digital output differential pressure sensor

Product image for illustration purposes only.

MMS601





Outline

This product is a small differential pressure sensor using MEMS technology. Thermal flow MEMS can be high-accuracy measurement with low preesure level. The product mounts a $\Delta\Sigma$ AD converter with a resolution of 24 bits and outputs a high-accuracy pressure value as a digital value. I2C is adopted for the interface and communication is performed with a microcomputer.

Applications

CPAP, Ventilator, HVAC/VAV

Devices using air differential pressure

Features

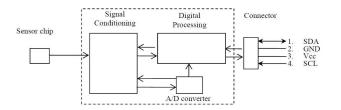
- ① Small package 26.0(W) ×18.0(D) ×24.0(H)mm
- 2) High-accuracy measurement with low preesure level
- ③ ΔΣ AD converter with a resolution of 24 bits and outputs a high-accuracy pressure value as a digital value.

Specification (Draft)

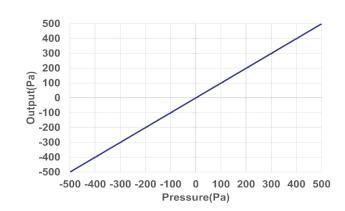
ITEM	SPECIFICATION		
Calibrated for	Air		
Measurement range	-500Pa to 500Pa / 0Pa to +250Pa / -50Pa to 50Pa		
Zero point accuracy	±0.2Pa		
Span accuracy	±3%RD		
Supply Voltage	2.7V ~ 3.6V		
Flow step response time	5msec		
Span shift due to temperature variation	0.5%RD/10°C		
Operating Temperature	-20°C to 80°C		
Resolution	24bit		
Interface	I2C		
Size*	26.0(W) ×18.0(D) ×24.0(H)mm		
	<u> </u>		

%TBD

Block Diagram



Typical Performance Characteristics







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Differential pressure sensor capable of measuring a pressure range of ± 50 Pa* with high accuracy (±3%RD) (MEMS Calorimetric (thermal flow))

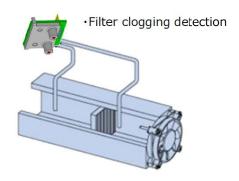
****Customizable**

This product is a small differential pressure sensor using MEMS technology. Thermal flow MEMS can be highaccuracy measurement with low preesure level.

- ◆Example of use(How sensors are used)
 - HVAC/VAV
 - ·Airflow control







- CPAP
- ·Breath detection



- Oxygen concentrators
- ·Breath detection



- Robot
- ·Contact detection



◆ Development Schedule

MMS601	TS	ES	MP
	Apr.'23	Sep.'23	Feb.'24

- * Please understand that the schedule is subject to change without notice.
- * Other specifications Please contact us individually for more information.