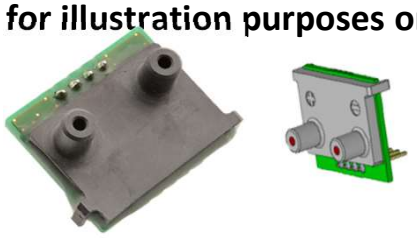
Digital output differential pressure sensor

MMS601

Product image for illustration purposes only.



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 ⊿Σ 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

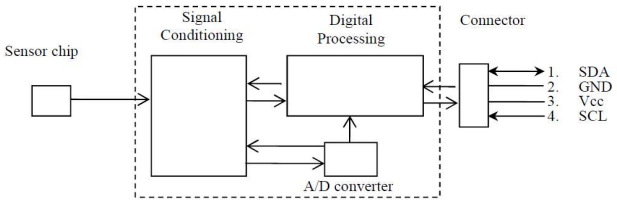
③ ⊿Σ AD converter with a resolution of 24 bits and outputs a high-accuracy pressure value as a digital value.

Specification（Draft）

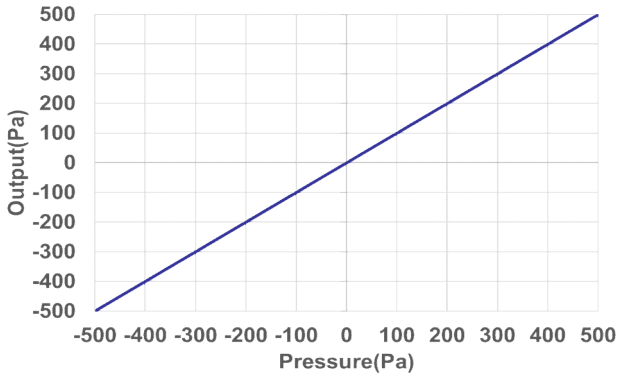
ITEM	SPECIFICATION
Calibrated for	Air
Measurement range	-500Pa to 500Pa / 0Pa to +250Pa / -50Pa to 50Pa
Zero point accuracy	±0.2Pa
Span accuracy	±3%RD
Supply Voltage	2.7V ～ 3.6V
Flow step response time	5msec
Span shift due to temperature variation	0.5%RD/10℃
Operating Temperature	-20℃ to 80℃
Resolution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

※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))

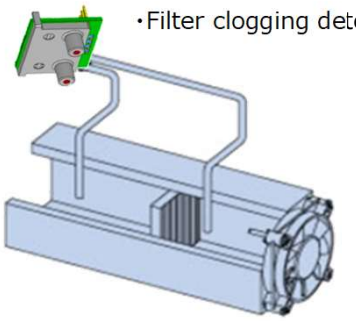
※Customizable

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

・Filter clogging detection

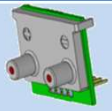


●CPAP
・Breath detection

●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.