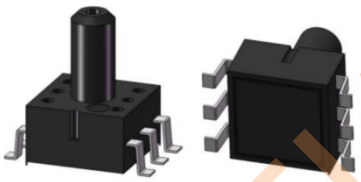
1. Product Feature

- Pressure Ranges -100 ~ 0kPa (can be customized)
- Package SOP6
- High accuracy over the life
- Supply Voltage 5V
- Output Ranges 0.2-4.7V (can be customized)



2. Applications

- Vacuum cleaner
- Air bed, massage chair
- Smart blood pressure monitoring, oxygen concentrators
- Industrial pressure sensor
- IoT pressure sensor

3.Product Overview

WF100E series are calibrated gauge pressure sensor which combines state-of-art MEMS sensor technology and CMOS mix-signal processing technology to produce an amplified, fully conditioned, multi-order pressure and temperature compensated sensor in a Small Outline Package (SOP) with tube port. WF100E series pressure sensor is target for consumer and medical application. Combining the pressure sensor with a signal conditioning ASIC in a single package simplifies the use of advanced silicon micromachined pressure sensors. The pressure sensor can be mounted directly to a standard printed circuit board and an amplified, highlevel, calibrated pressure signal can be analog output. This eliminates the need for additional circuitry, such as a compensation network or micro-controller containing a custom correction algorithm.

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4.Key Features

Table 1. Electrical Characteristic

Parameters	数值	Unit
Output range	0.2 ~ 4.7	V
Accuracy*	±1%	Span
Zero drift	±0.03	FS/℃
full scale zero drift	±0.03	FS/℃
Proof pressure	4×	Rated
Burst pressure	5×	
compensated temperatures	0 ~ 45	℃
Operating temperature	-40 ~ 125	℃
Storage temperature	-40 ~ 150	℃

* The accuracy is the output error of full scale

5.Recommended Operating Conditions

Table 2. Specifications

Parameters	Min	Typ	Max	Unit	Comments
Supply voltage		5V		V	supply voltage will affect output voltage
Operating curren@25℃		1600		Ua	
Filter capacitor		1		nF	connected between SO and GND
PSRR		60		dB	
Output load current			5	mA	
CMRR	80	110		dB	
Short current limit	15	20	25	mA	
levelupper clamp level	3/4		1	VDD	
Lower clamp level	0		1/4	VDD	

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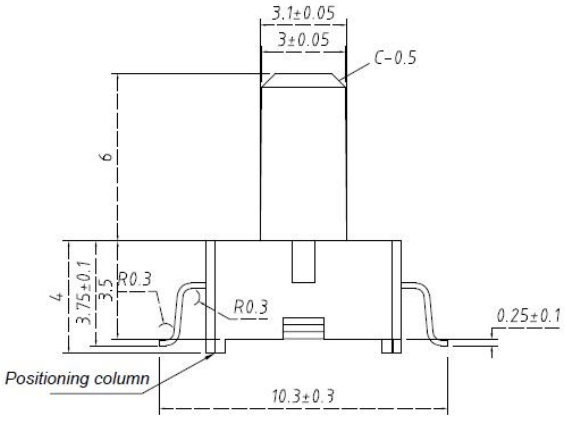
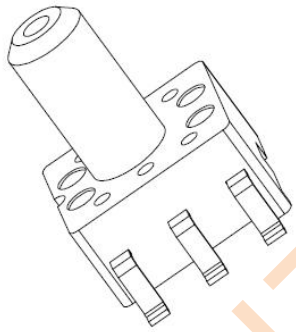
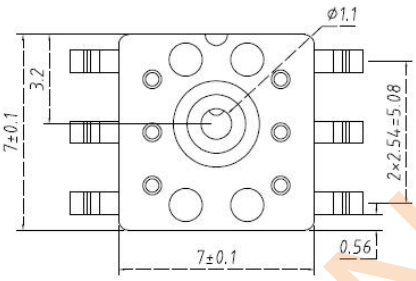
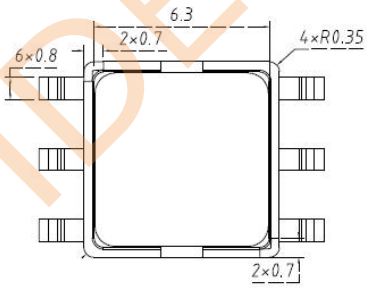
6.Package Information









7.Pin Configuration and Functions

Top view

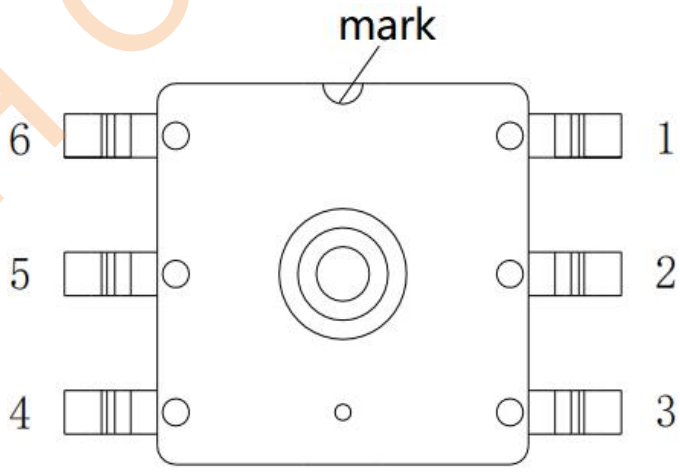


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Table 3. pin description

Pin NO.	1	2	3	4	5	6
Pin name	GND	SO	VDD	NC	NC	NC

Note:

1. The pin numbering of this product is different from the general definition. Please confirm the electrical definition before assembly.
2. The NC pin should not have any electrical connections, as it may cause a malfunction in product functionality.
3. Take proper precautions against electrostatic discharge during the soldering process.
4. Overvoltage (6Vdc) may damage the circuit chip.
5. Please add a 0.1uF capacitor between VDD and GND, with the capacitor placed close to the sensor.
6. This product does not have reverse polarity protection. Please pay attention to the power supply polarity during assembly.

8.output transfer

Pressure(Kpa)=-(voltage-0.2（V）)/ 0.045

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