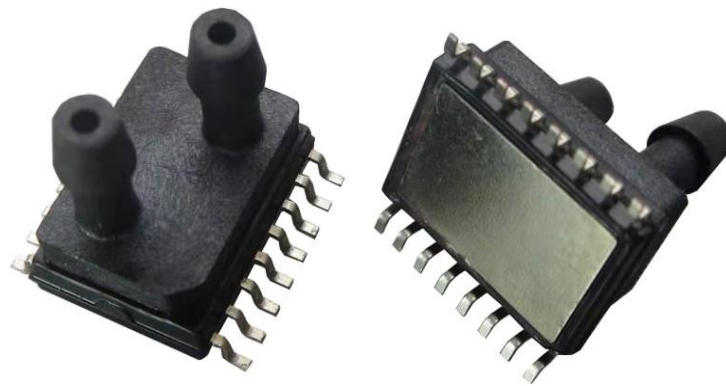




WF200S pressure sensor is a MEMS differential pressure sensor with all silicon structure, which adopts Wheatstone full bridge. Under the standard working power supply, it can achieve accurate measurement of pressure of 0~10kPa, and has a good linear relationship with the output voltage. This series of pressure sensors are packaged with SOP16 with double air nozzles.

WF200S

Product introduction



FEATURES

- ◆ High-sensitivity
- ◆ High-reliability
- ◆ High-precision
- ◆ High-stability
- ◆ Pressure range: 0~10kPa (differential pressure)
- ◆ Constant voltage power supply: 0 V~10V
- ◆ Constant current power supply: 0 mA ~2mA
- ◆ Operating temperature: -40~+125℃
- ◆ Size: 10.2 X10.3 X 10.3mm

APPLICATIONS

- ◆ Household electronics
- ◆ Industrial control
- ◆ Medical monitoring



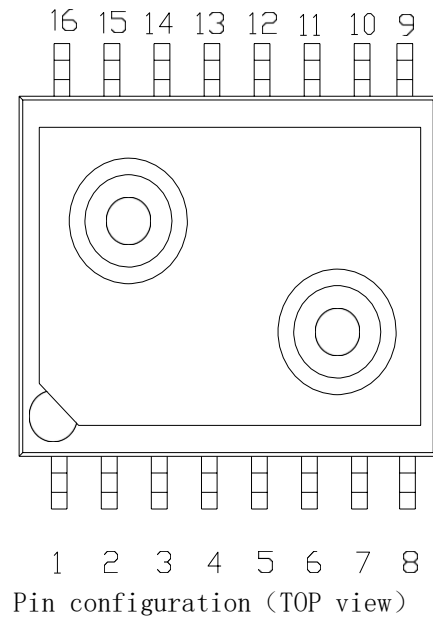
1. Performance parameters

Unless otherwise specified, all parameters are measured under 5V excitation voltage at room temperature

Parameter name	conditi ons	Min.	Typ.	Max.	Unit	Note
General characteristics						
Pressure range	-	0~10; 0~40; 0~200			kPa	1
Overload pressure	T _A =25℃	2X			FS	
Burst pressure	T _A =25℃	>3X			FS	
Operating Temp	-	-20		+85	℃	
Storage Temp	-	-40		+125	℃	
Media Compatibility		Air and non corrosive gas				
Electrical characteristics						
Excitation voltage	T _A =25℃		5	10	V	
Excitation current	T _A =25℃		1	2	mA	
Bridge arm resistance	T _A =25℃	4	5	6	kΩ	2
Zero shift	T _A =25℃	-15	0	15	mV	
Full range output	T _A =25℃	45	60	75	mV	10kPa range
		60	75	90	mV	40kPa range
		70	90	110	mV	200kPa range
Linearity	T _A =25℃	-0.3		0.3	%V _{FS}	Best Fit Line
Zero shift temperature coefficient	T _A =25℃	-0.08		0.08	%V _{FS}	
Full range output temperature coefficient	T _A =25℃	-0.27	-0.22	-0.17	%V _{FS} /℃	Constant pressure excitation
Full range output temperature coefficient	T _A =25℃	-0.03		0.03	%V _{FS} /℃	Constant current excitation
Resistance temperature coefficient TCR	T _A =25℃	1600	2000	2400	ppm/℃	
Pressure hysteresis	T _A =25℃	-0.1	0.05	0.1	%V _{FS}	
Temperature hysteresis	T _A =25℃	-0.3		0.3	%V _{FS}	



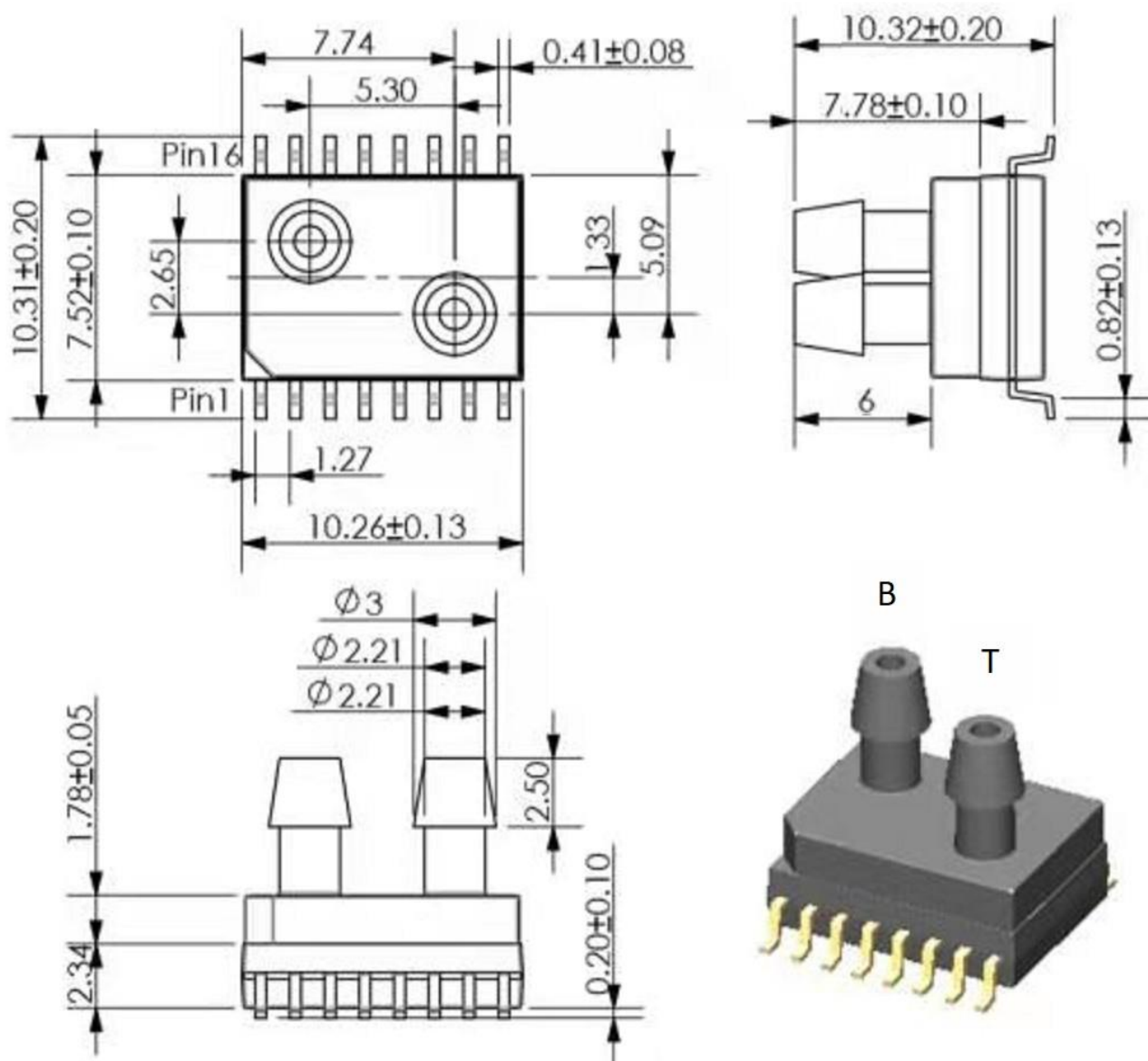
2.PIN CONFIGURATION



Pin configuration

Pin NO	Pin name	Description
3	VDD	Power Supply
5	VOUT-	Output negative
11	GND	Ground
12	VOUT+	Output positive

3. Dimension drawing (mm)



Dimension drawing

Note:

- 1) All dimensions are in mm. The dimension tolerance is $\pm 0.05\text{mm}$ if the tolerance position is not marked
- 2) B is the air pipe connected to the bottom of the sensor, and T is the air pipe connected to the top of the sensor. The top gas pipe T is defined as a high pressure interface.