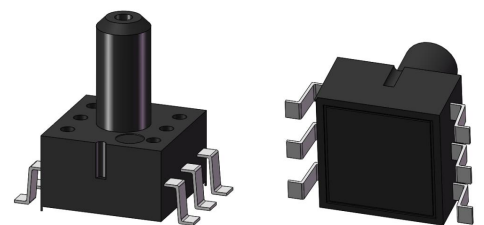


BANNING

PRESSURE SENSOR

BLWP21000



BANNING

DESCRIPTION

BLWP21000 is a high-precision MEMS pressure sensor. When the ambient temperature is $-45 \sim 125$, it can accurately measure the pressure from 0 to 1000kPa. The pressure and output voltage show a good linear relationship. The pressure sensor uses open loop detection, SOP6 package.

CHARACTERISTICS

- Range: 0~1000kPa
- High sensitivity
- High reliability
- High stability
- Constant voltage source or constant current source supply
- Small size
- Low cost

PERFORMANCE

Parameter	Minimum	Typical	Maximum	Unit	Note
Supply voltage	-	5	10	Vdc	
Working current		1		mAdc	
Range		1000		kPa	
Bridge arm resistance	4.5	5	5.5	k	
Zero bias	-15	0	+15	mV	
Full scale output	40	55	70	mV	
Non linearity	-	0.2	0.5	%FS	
Zero output temperature coefficient TCO	-0.08	-0.03	0.08	%FS/	Constant pressure mode
	-0.08	-0.04	0.08	%FS/	Constant current mode
Full scale output temperature coefficient TCS	-0.27	-0.22	-0.17	%FS/	Constant pressure mode
	-0.05	± 0.02	0.05	%FS/	Constant current mode
Resistance temperature coefficient	1500	2000	2500	ppm/	
Hysteresis	-	0.05	0.1	%FS	
Stability of	0.2			%FS/Y	
Over load capacity	1.5 times the reference range			--	
Operating temperature	-45	-	125		
Storage temperature	-55	-	150		

Note : Unless otherwise specified, all values in this table are tested at a voltage of 5Vdc and a temperature of 25 ± 3

APPLICATION

- Medical equipment
- Industrial control
- Household electronics
- Medical monitoring

SCHEMATIC DIAGRAM

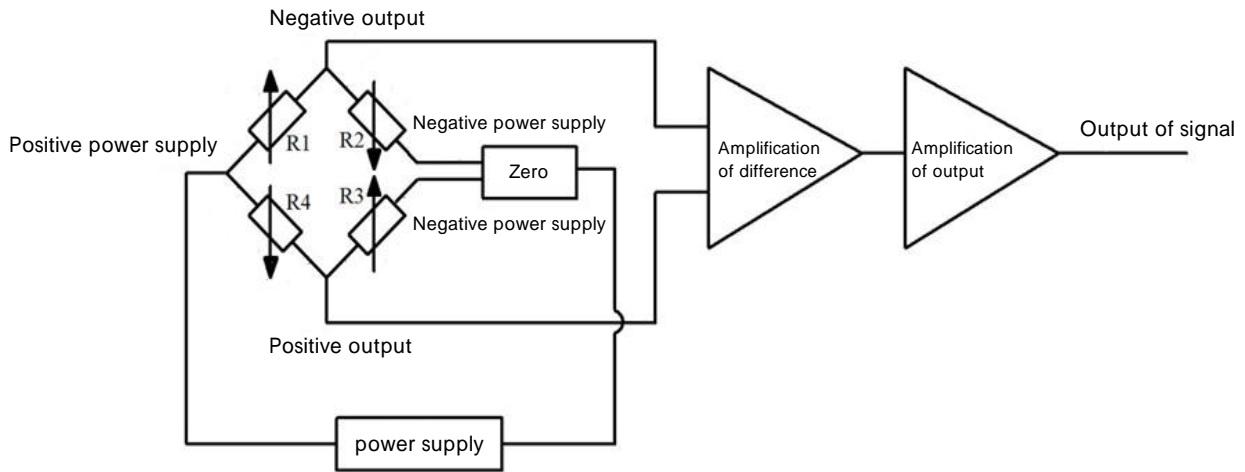


Figure.1 Pressure sensor circuit (dual power supply with negative input)

PIN DEFINITION

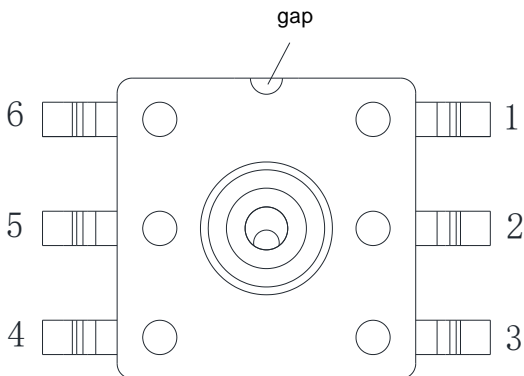
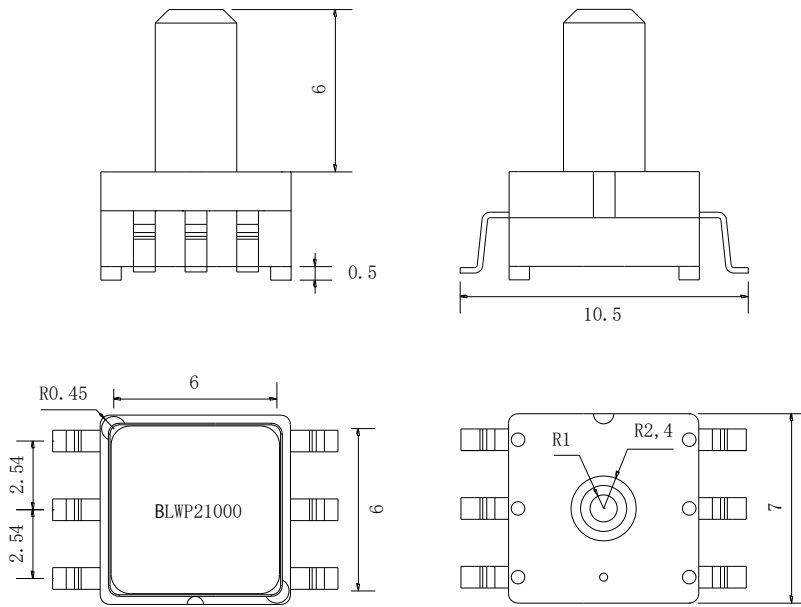


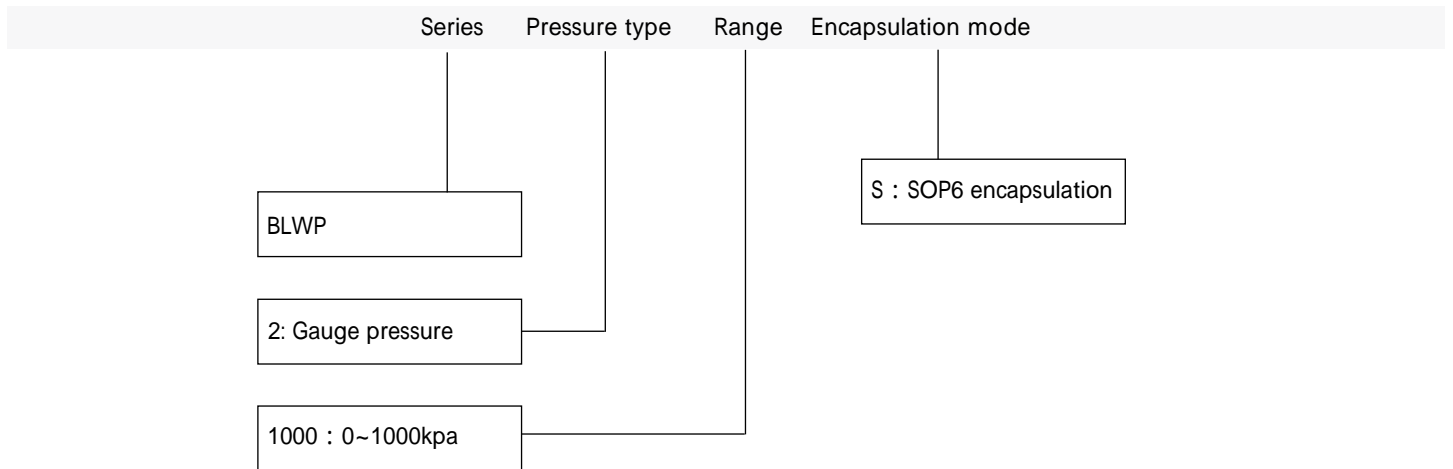
Figure.2 Top view

Pin number	Pin definition
1	GND
2	Vout+
3	Vin+
4	NC
5	Vout-
6	GND

DIMENSIONS (mm)



SELECTION



FOR EXAMPLE : BLWP21000S

The series is BLWP, pressure type is gauge pressure, range is 0~1000kpa, SOP6 encapsulation.

DISCLAIMER

Warning

LIFE OR PROPERTY RISK

- Please ensure that this product has been designed as part of whole system and already considered related risks, make sure the product has the correct ratings and is designed based on the entire system. It must not be used when applications related to serious life or property damage risks.

Failure to follow this instruction can result in death or serious injury.

Warning

PERSONAL INJURY

- DO NOT USE these products as safety or emergency stop devices or in any other application where failure of the product could result in personal injury.

Failure to follow this instruction can result in death or serious injury.

Warning

MISUSE OF DOCUMENTATION

- The information presented in this product sheet is for reference only. Do not use this document as a product installation guide.
- Complete installation, operation, and maintenance information is provided in the instructions supplied with each product.

Failure to follow this instruction can result in death or serious injury.

Warranty/Remedy

Banning warrants goods of its manufacture as being free of defective materials and faulty workmanship during the applicable warranty period. Banning's standard product warranty applies unless agreed to otherwise by Banning in writing; please refer to your order acknowledgment or consult your local sales office for specific warranty details. If warranted goods are returned to Banning during the period of coverage, Banning will repair or replace, at its option, without charge those items that Banning, in its sole discretion, finds defective. The foregoing is buyer's sole remedy and is in lieu of all other warranties, expressed or implied, including those of merchantability and fitness for a particular purpose. In no event shall Banning be liable for consequential special, or indirect damages.

While Banning may provide application assistance personally, through our literature and the Banning web site, it is buyer's sole responsibility to determine the suitability of the product in the application.

Specifications may change without notice. The information we supply is believed to be accurate and reliable as of this writing. However, Banning assumes no responsibility for its use.

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