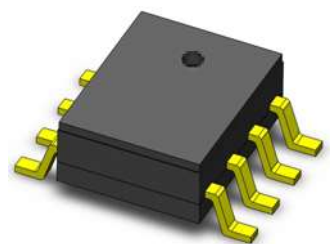




BANNING
PRESSURE SENSOR
BLWP3XXX



BANNING

DESCRIPTION

All-silicon MEMS absolute pressure sensor series products BLWP 3XXX can achieve the precise measurement of external ambient temperature $-45 \sim 125$, multi-range absolute pressure, and has a good linear relationship with the output voltage. This series of pressure sensors has the advantages of small size, high reliability and diversified packaging.

CHARACTERISTICS

- Range: 0~ 110,0 ~ 300,0 ~ 700,0 ~ 1000,0 ~1700kPa, etc. (absolute pressure)
- All-silicon structure
- High stability and reliability
- Nonlinearity better than 0.1%
- With 3 times the benchmark range overload capacity
- It has high repeatability and consistency
- Full-scale output voltage 50mV ~ 90mV (typical value for 5V power supply)

PERFORMANCE

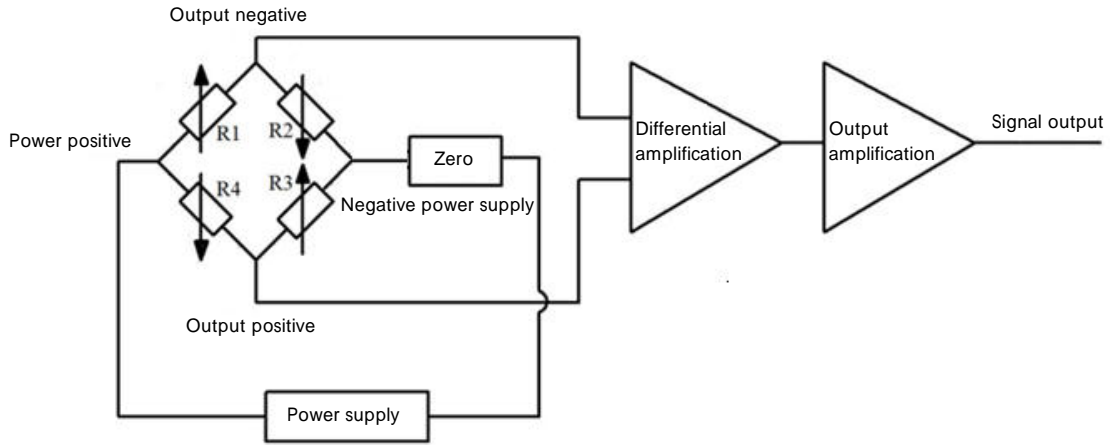
Parameter	Minimum	Typical	Maximum	Unit	Note
Supply voltage		5	10	Vdc	
Working current		1		mAdc	
Bridge arm resistance	4.5	5	5.5	k	
Zero bias	-10	5	30	mV	
Full scale output	50	70	90	mV	
Non linearity	-	0.25	0.4	%FS	
Zero output temperature coefficient TCO	-0.08	-0.03	0.08	%FS/	Constant pressure mode
	-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/	
Stability of		0.2		%FS/Y	
hysteresis	-	0.05	0.1	%FS	
Over load capacity	3 times the reference range			-	
Operating temperature	-45		125		
Temperature of storage	-55		150		

- (1) Detection accuracy of ambient temperature when the sensor is in a constant temperature field;

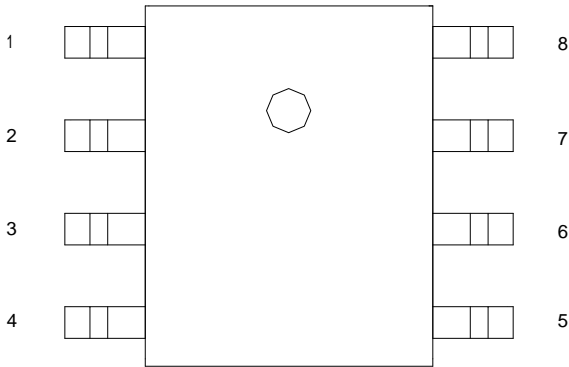
APPLICATION

- Automotive electronics
- Auxiliary GPS navigation
- Weather forecast
- Altimeter

MODULE CONNECTION

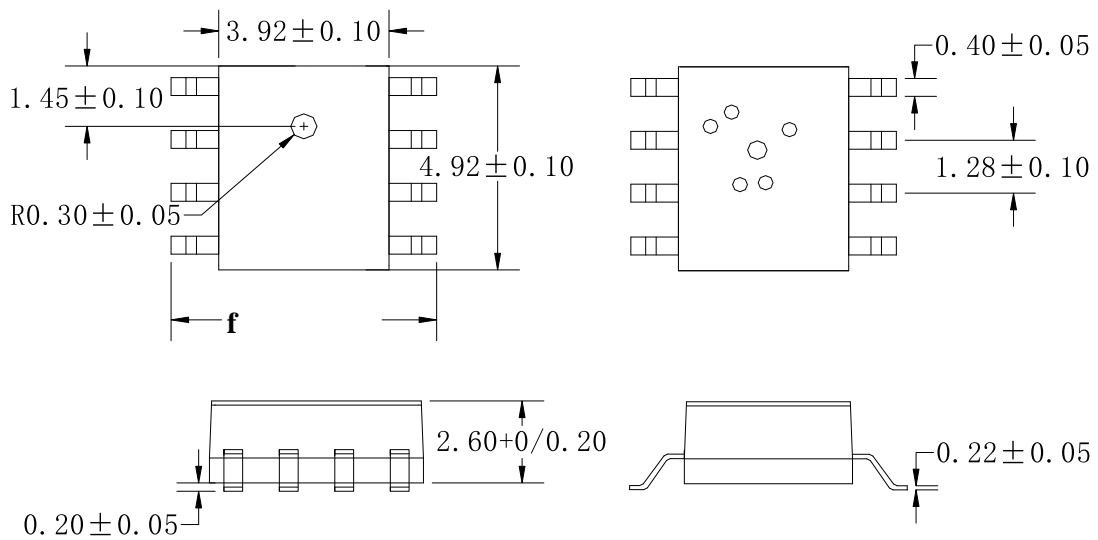


PIN DEFINITION



Pin number	Pin definition
1	NC
2	Vout+
3	NC
4	GND
5	GND
6	V _{OUT-}
7	NC
8	V _{DD}

PACKAGE SIZE (mm)



ORDER

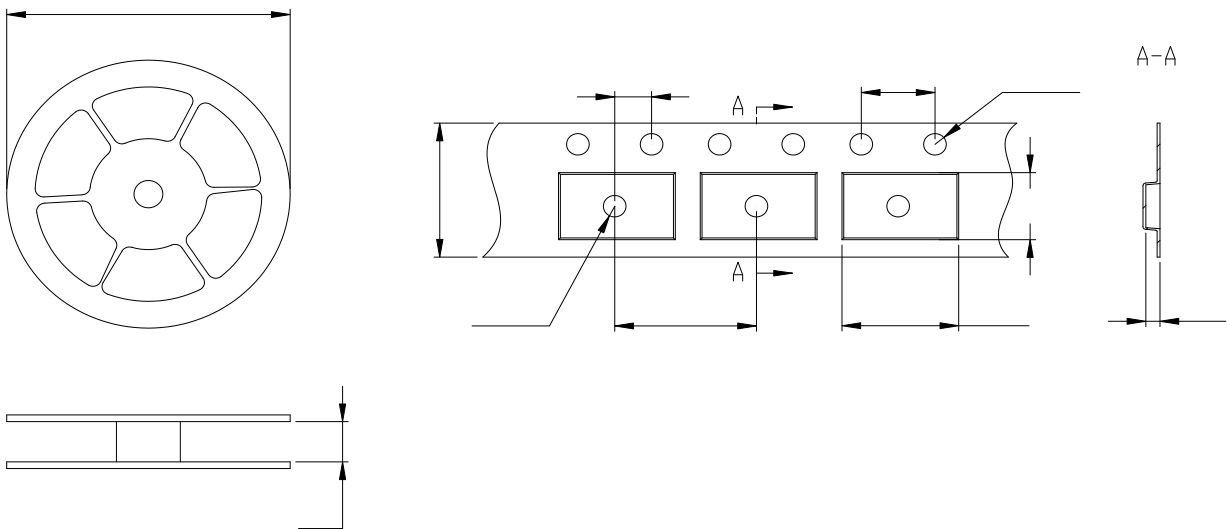
Pressure sensor	Range	Packing method	Minimum package
BLWP3110	0~110kPa	Winding tape	3000
		Material pipe	2000
BLWP3300	0~300kPa	Winding tape	3000
		Material pipe	2000
BLWP3700	0~700kPa	Winding tape	3000
		Material pipe	2000
BLWP31000	0~1000kPa	Winding tape	3000
		Material pipe	2000
BLWP31700	0~1700kPa	Winding tape	3000
		Material pipe	2000

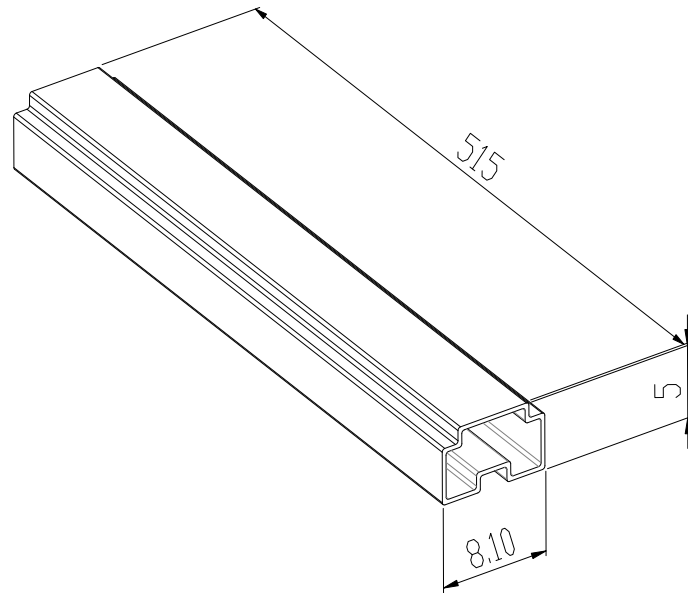
METHOD OF PACKING

SOP8 series products adopt two packaging methods: tape and material tube:

(1) Tape packing: 3000PCS/ roll;

(2) Material pipe packaging: 2000PCS/ box (20 tubes per box, 100PCS per tube).

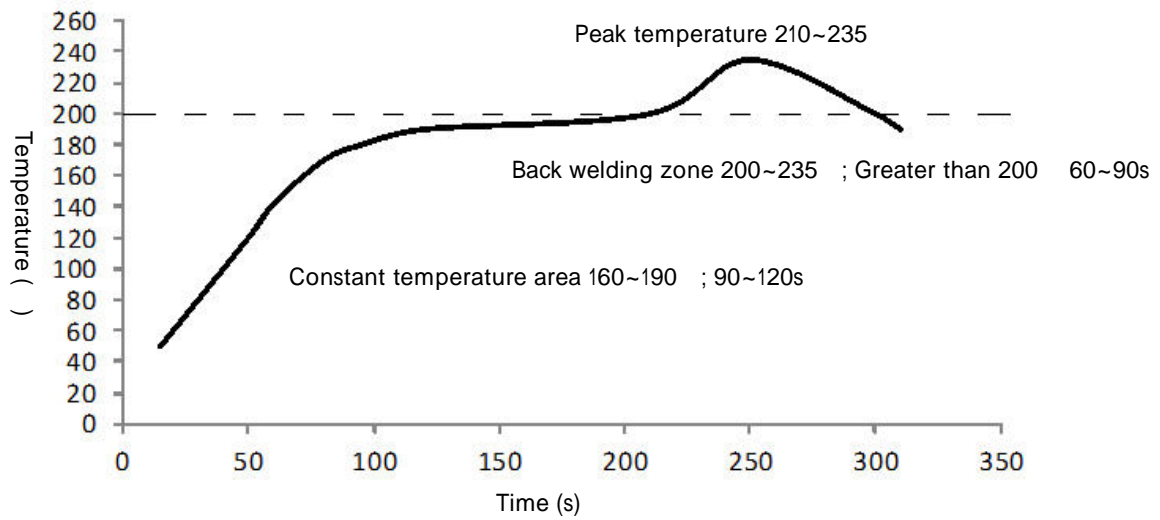




PRECAUTIONS FOR USE

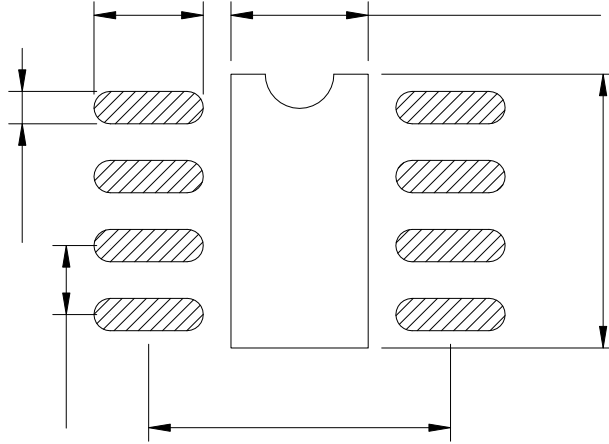
Reflow temperature

BLWP3XXX series products, it is recommended to use medium temperature solder paste welding, the highest welding temperature is not higher than 235 , the welding temperature can be set according to the figure



INSTALL

The surface mount layout is a key part of the overall design. Use the correct gasket geometry to ensure that welded connections are secure and reliable to avoid bridging and short circuiting between welded points.



Recommended circuit pad layout (mm)

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.

SALES & SERVICE

Banning serves its clients through a worldwide network of sales offices, agents and distributors. For application assistance specifications, prices or names with the nearest authorized dealer, please contact your sales specialist or contact us directly:

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