

Piezo resistance diffusion type semiconductive pressure sensor

KP0807(SMD) series

This sensor is used to the piezo electric effect of semiconductor. This sensor was realized the miniature, high sensitivity, high responsivity and high reproductivity with semiconductive properties. A miniature and a low price were realized by the plastics package.

● Features

- High accuracy.
- Gauge pressure type.
- Superior temperature properties.
- High resistance to pressure.
- SMD type.
- Vacuum measurement.



● Main use

- Medical machine
- Electric tonometer
- Industrial air/water pressure machine
- Industrial measurement
- Cars

● Specification

Parameter	A501GZ	A102GZ	A202GZ	A502GZ	A103GZ	Unit
Operating and recommended condition						
Measurable pressure range	-49.0~49.0	-98.1~98.1	-98.1~196.1	-98.1~490.3	-98.1~980.7	kPa
Rated pressure	49	98.1	196.1	490.3	980.7	kPa
Pressure type	Gauge pressure					
Pressure media	Non-corrosive gas					
Excitation current	1.0	1.0	1.0	1.0	1.0	mA DC
Absolute maximum rating						
Max. load pressure	10	10	5	3	3	Times of rated pressure
Max. excitation current	2	2	2	2	2	mA DC
Operating temp.	-20~100	-20~100	-20~100	-20~100	-20~100	°C
Storage temp.	-40~125	-40~125	-40~125	-40~125	-40~125	°C
Electrical properties I=1.0mA, Ta=25°C						
Full scale span	80±40	100±40	100±40	100±40	100±40	mV
Offset voltage	±25	±25	±25	±25	±25	mV
Bridge impedance	4000~6000	4000~6000	4000~6000	4000~6000	4000~6000	Ω
Accuracy						
Temp. sensitivity of offset voltage	±5.0	±5.0	±5.0	±5.0	±5.0	%FS(0~50°C)
Temp. coefficient of output span voltage	±2.5	±2.5	±2.5	±2.5	±2.5	%FS(0~50°C)
Linearity	±0.5	±0.3	±0.3	±0.3	±0.3	%FS
Pressure hysteresis	±0.4	±0.2	±0.2	±0.2	±0.2	%FS

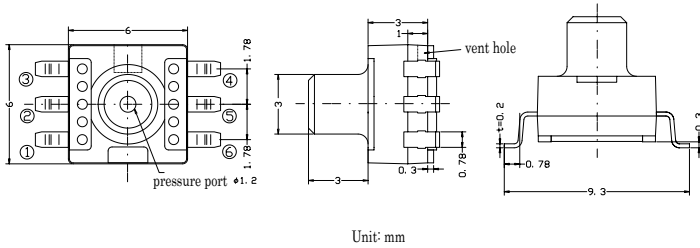
Notes: Data subject to change without notice. Make it demand specifications to our company, and make it confirm it about this contents when you do purchase, use and design. 2013. 10

Manufacture and Sales

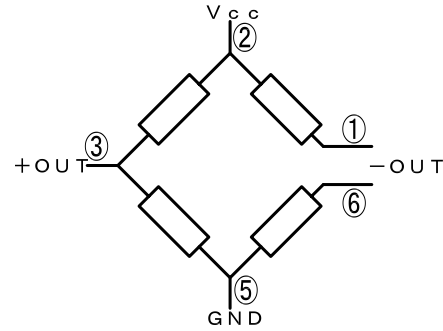
KOHDEN Co., Ltd.

<http://www.hkd.co.jp>

Dimension

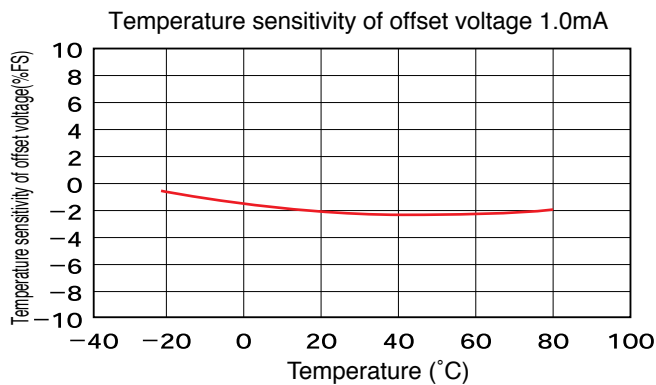
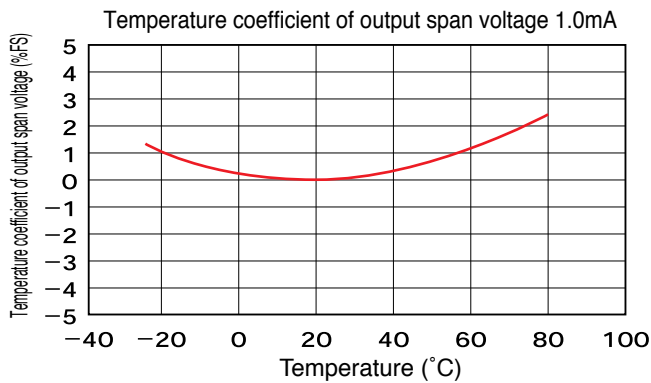
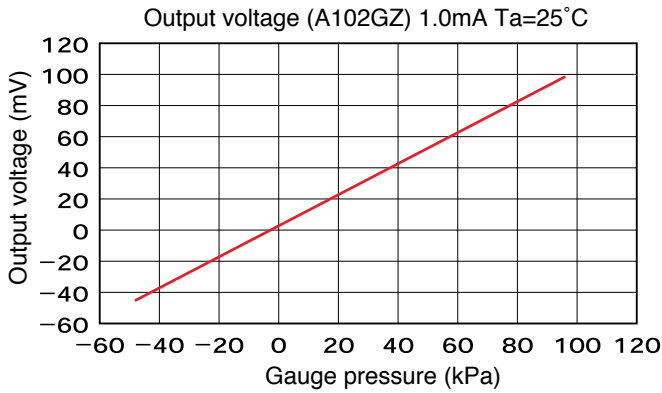


Connection

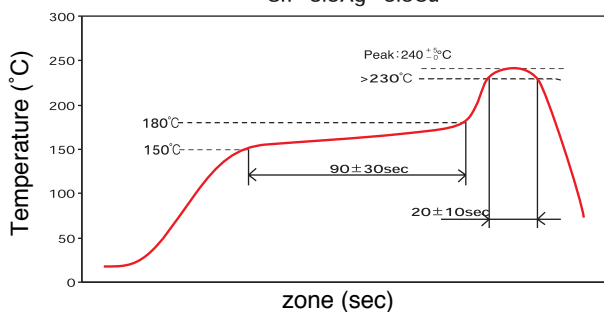


Output code because on into pressure port.
4 terminal is N/C, avoid to apply voltage.

Characteristics data (typ)



Recommended reflow profile
Sn - 3.0Ag - 0.5Cu



Attention

1. About handling

Use within the rated pressure range. The medium which may be used directly is non-corrosive gas. Don't add a foreign object such as a wire into the pressure port. Avoid the use to fill the vent hole. This sensor is not water resistance structure. Avoid to prevent condensation. Output value of sensor chip is changed by light irradiation.

2. About soldering

cf. recommended reflow profiles. Reflow works is used the twice as a limit.

3. About washing

Be careful that a washer entered into the inside, because sensor chip is used open-air.

4. About storage

Avoid use and storage in the place where such as corrosive gas which has a bad influence on the product.

5. Confirmation

These data are specification in the product simple substance. When it actually use, make sufficient performance and quality confirmation under the actual use to enhance reliability. be sure to confirm it in advance when you use for the machine and so on that concerned with the lifescience such as a medical machine, and high reliability are demanded.

It's sold in sensor. Furthermore, product included sensor circuit is recieved, too.

As for this product , export or offer to overseas may be restricted by Foreign Exchange and Foreign Trade Law.