

Piezo resistance diffusion type semiconductive pressure sensor

KP0504 series

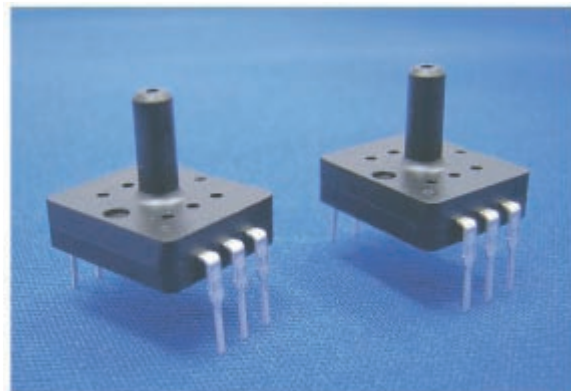
This sensor is used to the piezo electric effect of semiconductor. This sensor was realized the miniature, high sensitivity, high responsiveness and high reproductivity with semiconductive properties. A miniature and a low price were realized by the plastics package.

● Features

- High accuracy.
- Gauge pressure type.
- Superior temperature properties.
- High resistance to pressure.
- DIP for mount.
- Vacuum measurement.

● Main use

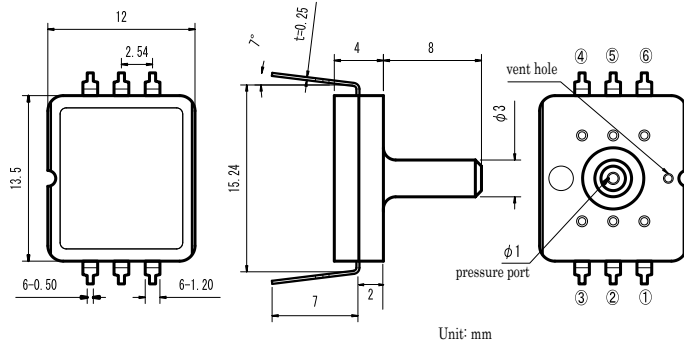
- Medical machine
- Electric tonometer
- Industrial air/water pressure machine
- Industrial measurement
- Cars



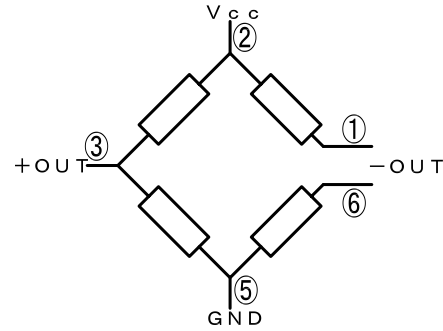
● Specification

parameter	A101G	A201G	A501G	A102G	A202G	A502G	A103G	Unit
Operating and recommended condition								
Measurable pressure range	-9.8~9.8	-19.6~19.6	-49.0~49.0	-98.1~98.1	-98.1~196.1	-98.1~490.3	-98.1~980.7	kPa
Rated pressure	9.8	19.6	49	98.1	196.1	490.3	980.7	kPa
Pressure type	Gauge pressure							
Pressure media	Non-corrosive gas							
Excitation current	1.5	1.0	1.0	1.0	1.0	1.0	1.0	mA DC
Absolute maximum rating								
Max. load pressure	8	8	10	10	5	3	3	Times of rated pressure
Max. excitation current	2	2	2	2	2	2	2	mA DC
Operating temp.	-20~100	-20~100	-20~100	-20~100	-20~100	-20~100	-20~100	°C
Storage temp.	-40~125	-40~125	-40~125	-40~125	-40~125	-40~125	-40~125	°C
Electrical properties Ta=25°C								
Full scale span	100±40	100±40	80±40	100±40	100±40	100±40	100±40	mV
Offset voltage	±30	±30	±25	±25	±25	±25	±25	mV
Bridge impedance	4000~6000	4000~6000	4000~6000	4000~6000	4000~6000	4000~6000	4000~6000	Ω
Accuracy								
Temp. sensitivity of offset voltage	±10.0	±10.0	±5.0	±5.0	±5.0	±5.0	±5.0	%FS(0~50°C)
Temp. coefficient of output span voltage	±5.0	±5.0	±2.5	±2.5	±2.5	±2.5	±2.5	%FS(0~50°C)
Linearity	±1.5	±1.5	±0.5	±0.3	±0.3	±0.3	±0.3	%FS
Pressure hysteresis	±0.5	±0.5	±0.4	±0.2	±0.2	±0.2	±0.2	%FS

Dimension

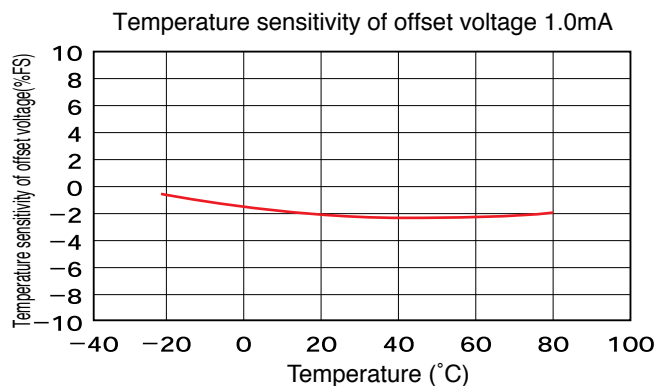
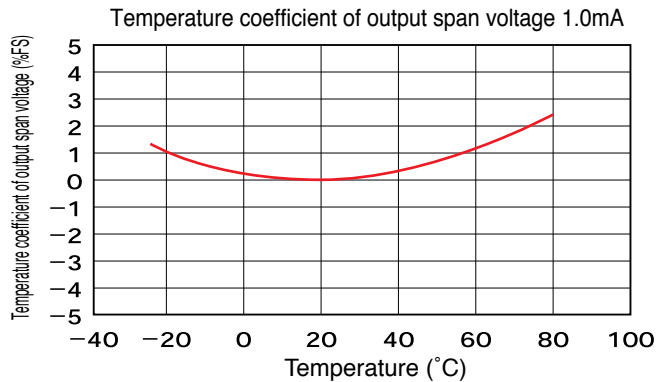
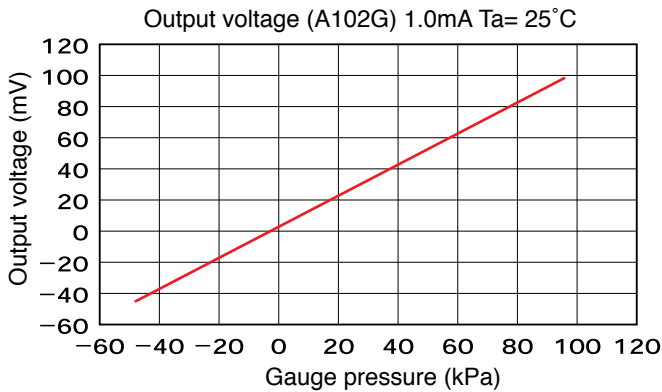


Connection



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

Charactristics data (typ)



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

Give careful consideration to decrease heat influence as much as possible. Soldering temperature is used in 260 to 300 °C and within 5 sec..

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.