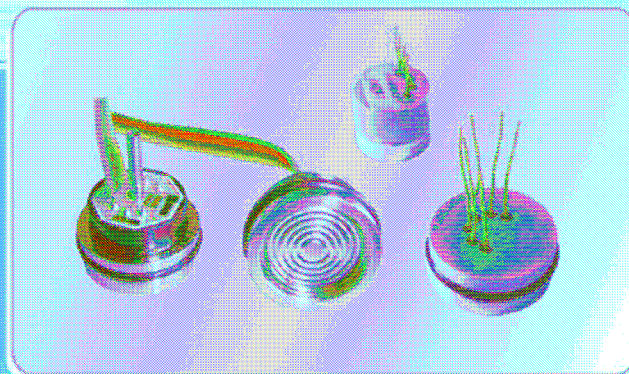


Piezoresistive Sensitive Series HB2119 Series Diffusion Silicon Low and Middle Pressure Sensors

Shenyang Academy of Instrumentation Science
National Engineering Research Center for Transducer

Features

- Self-design and manufacture micromachine sensitive chip
- Holding the patent, the isolation diaphragm encapsulation injection oil technology
- High stability and reliability
- Mass production line, low cost, high performance/price ratio
- Temperature compensation network is supplied with direct current and voltage
- Stainless steel package, conveniently assemble
- Application field, spaceflight, aviation, petroleum, water, electricity and metallurgy, architecture, food, aircondition, refrigeration equipment, water supply and sewage disposal



Performance Specs

No.	Item	Specifications
1	Nominal Scale	35KPa, 100KPa, 250KPa, 600KPa, 1MPa, 1.6MPa, 2.5MPa
2	Overload Capacity	2 times nominal scale
3	Zero Output	$\pm 1\text{mV}$
4	Full-scale Output	$\geq 30\text{mV}$ ($\leq 35\text{KPa}$); $\geq 50\text{mV}$
5	Accuracy	$\pm 0.1\%\text{F.S.}$, $\pm 0.25\%\text{F.S.}$, $\pm 0.5\%\text{F.S.}$
6	Electricity Characteristics	excitation: 1mADC, or 5VDC insulation resistance: $>100\text{M}\Omega$ (100VDC)
7	Bridge Resistance	5 ($1\pm 20\%$) K Ω
8	Long Term Stability	$\pm 0.2\%\text{F.S.}/\text{Y}$
9	Environmental	operating temperature: $-30\sim +100^\circ\text{C}$; compensated temperature: $0\sim 70^\circ\text{C}$
10	Zero Temperature Coefficient	$\pm 0.015\%\text{F.S.}/^\circ\text{C}$
11	Sensitivity Temperature Coefficient	$\pm 0.015\%\text{F.S.}/^\circ\text{C}$

Notes

1. Accuracy includes hysteresis, repeatability and nonlinearity (the Least Square Method)
2. Without other notices, all results are attained with the reference temperature 25°C , 1mA DC

HB-Sensor

Type Codes and Specifications

HB2119 Series Diffusion Silicon Low and Middle Pressure Sensors

Code	Type
A	absolute pressure
G	gauge pressure

Code	Nominal Scale
35	0~35KPa
101	0~100KPa
251	0~250KPa
601	0~600KPa
102	0~1MPa
162	0~1.6MPa
252	0~2.5MPa

Code	Accuracy Grade
B	±0.1%F.S.
C	±0.25%F.S.
D	±0.5%F.S.

Code	Compensated Temperature Mode
AT	constant current power
VT	constant voltage power

Code	Airproof Diaphragm
T	general(316L)
N	Tantalum fiaphragm,Hastello diaphragm,Monelk diaphragm
P	flat diaphragm

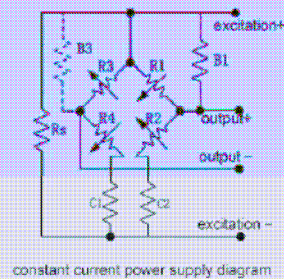
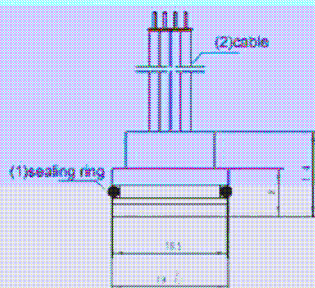
Number	production year and serial number

Sample

HB2119 G 102 C AT T 0600003

HB2119 series diffusion silicon low and middle pressure sensors, gauge, range 0~1MPa, accuracy ±0.25%F.S., constant current power compensated temperature mode, general assembly structure, produced in 2006, NO.00003

Dimensions and Electrical Connection Diagram



red cable-excitation +
brown cable-excitation-
orange cable-output+
yellow cable-output-

