MPS20N0040D-D pressure sensor 40kPa electronic sphygmomanometer air pressure water pressure negative pressure

Product Features

Measurement range -100kPa~0kPg --700kPa

MEMS technology

Gauge pressure form

SOP or DIP packaging form

Suitable for non corrosive gases

Chip back pressure chamber under pressure

Pin direction selectable

Application area

Electronic sphygmomanometer, ventilator, oxygen generator, monitor and other medical fields

Automotive electronic devices such as tire pressure gauges, MAP, steering assistance, and brake assistance

In the field of sports and fitness equipment such as massagers, massage chairs, and air cushioned beds

Vacuum packaging machines, vacuum mixers, vacuum wall breakers, vacuum preservation boxes, vacuum pumps and other vacuum negative pressure fields Washing machines, beer machines, coffee machines, vacuum cleaners, water purifiers, pressure instruments, pneumatic components

and other fields

Product Overview

The XGZP piezoresistive pressure sensing element is a pressure sensor suitable for biomedical, automotive electronics, and other fields. Its core part is a brick pressure sensing chip processed using MEMS technology. The pressure sensitive compensation chip consists of an elastic film and four resistors integrated on the film. The four pressure sensitive electrodes form a Wheatstone bridge structure. When pressure is applied to the elastic film, the bridge generates a voltage output signal that is linearly proportional to the applied pressure.

The XGZP pressure sensing element is a 0EM component packaged in standard SOP6 and DIP6 forms, which is convenient for users to install using surface mount or dual inline mounting

Good linearity, repeatability, and stability, high sensitivity, convenient for users to debug and compensate for output and temperature sources.

structure performance

Pressure sensitive chips, silicon materials

Lead wire: gold wire

External brightness of packaging: PPS material

Pin: Copper silver plated

Net weight: approximately 0.4 grams

Electrical performance

Power supply: S10V DC or S3.0mA 0C

Input positive impedance: 4kQ~6kQ

Zheng endure dark, noisy shore, eight confused impedance: 4kQ~6kQ

Insulation resistance: 100MQ.100DC

Permissible overload: 2 times full scale

Burst pressure:>3 times full scale

Benchmark conditions

Measurement medium: air

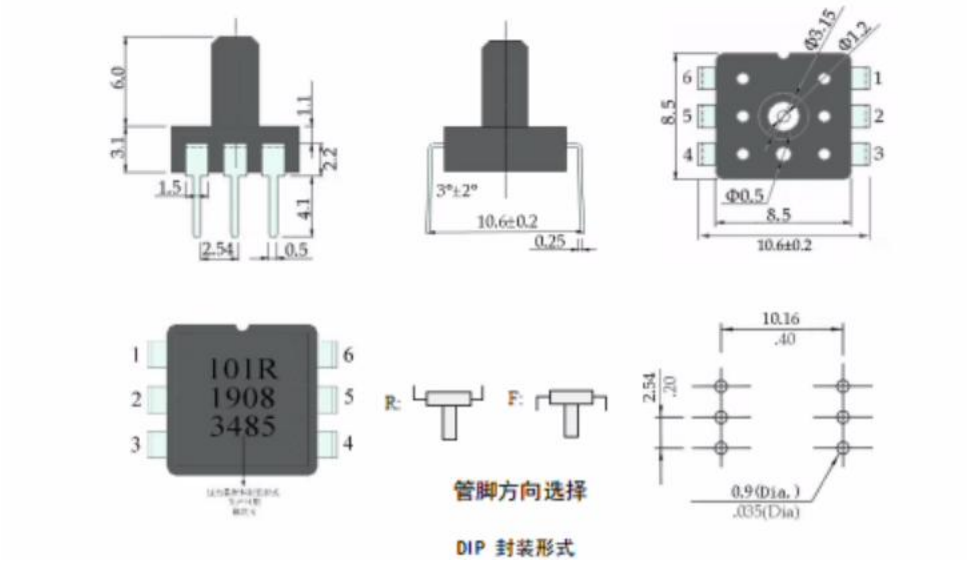
Medium temperature: (25 ± 1) C

Environmental temperature: (25 soil 1) C

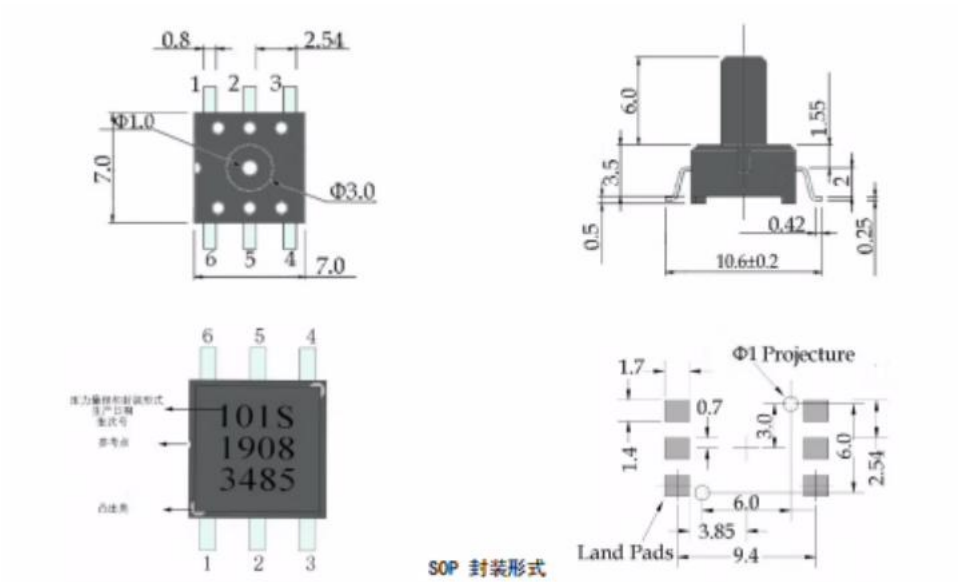
Vibration: 0.1g (1m/s') Max

Humidity: (50% ± 10%) RH

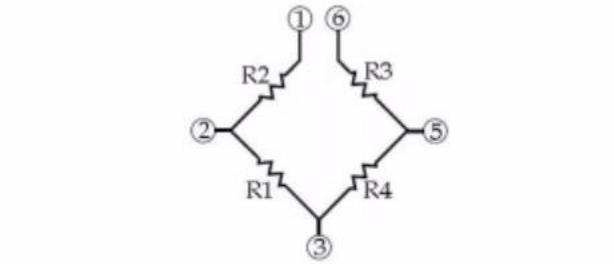
Power supply: (5 ± 0.005) V DC



DIP 封装形式



SOP 封装形式



1	2	3	4	5	6
Vo-	Vs+	Vo+	N/C	GND	Vo-
GND	Vo+	Vs+	N/C	Vo-	GND

Definition	Vs+	GND	Vo+	Vo-