

Absolute Pressure Sensor (0-1 BAR)



- 0 to 100kPa pressure range (1 bar or 1 PSI)
- Absolute pressure sensor
- Silicon/Glass Bonding wafer, high stability
- Miniature surface mount
- RoHS-compatible & Pb-free
- Provide the other gage pressure range sensor

DESCRIPTION

The Series of pressure sensor is a silicon micro-machined membrane, piezo-resistive sensor. They were designed for extremely cost sensitive applications where the sensing element is to be integral to the OEM equipment, and are intended for use with non-corrosive, non-ionic media. They also may be packaged with application specific sensor die so that the performance characteristics and output range also can be identified.

FEATURES

- Uncompensated pressure sensor
- Temperature Range -40°C ~ +125°C
- Linearity 1% (typical)
- Low Cost, High reliability

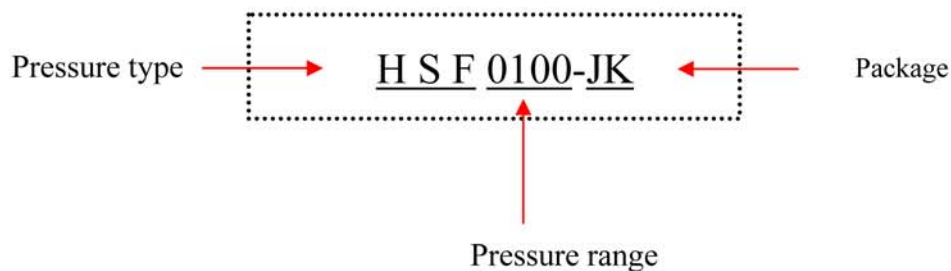
APPLICATION

- For high resolution absolute sensor systems
- Engine Controls
- Barometers, Altimeters, Variometers

Full Scale Pressure

| kPa | bar | mbar | PSI | atm | mmHg | mmH ₂ O | kg/cm ² |
|-----|-----|------|-----|-----|------|--------------------|--------------------|
| 100 | 1 | 1000 | 15 | 1 | 750 | 10207 | 1 |

Part number System



Characteristics

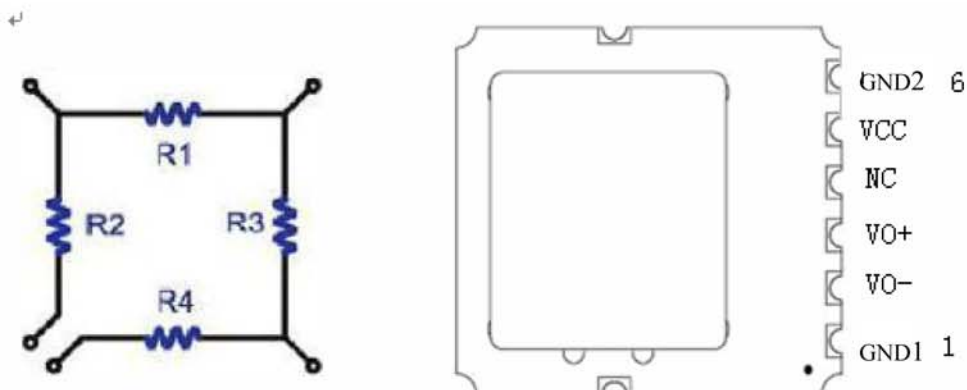
Working conditions: DC@5v, Pressure 100KP, temperature 25°C, humidity at 30% -90%

| Item | Min | Typical | Max. | Unit |
|---------------------------------|-----|---------|------|-----------|
| Pressure Range | | 15PSI | | |
| Supply voltage | 0 | 5.0 | 10.0 | Volts |
| currency | 0 | 1.5 | 3.0 | mA |
| Span | 60 | 100 | 150 | mV |
| Offset | -30 | 0 | 30 | mV |
| Temperature coefficient | -16 | -22 | -28 | %FS/100°C |
| Temperature coefficient of Zero | -8 | -4 | +8 | %FS/100°C |
| Nonlinearity | -1 | ±0.1 | +1 | %F.S |
| Bridge resistance | 4.0 | 5 | 6.0 | K Ω |
| Proof pressure | | | 2× | Rated FS |
| Operating temperature | -40 | | 125 | °C |
| Storage temperature | -40 | | 125 | °C |

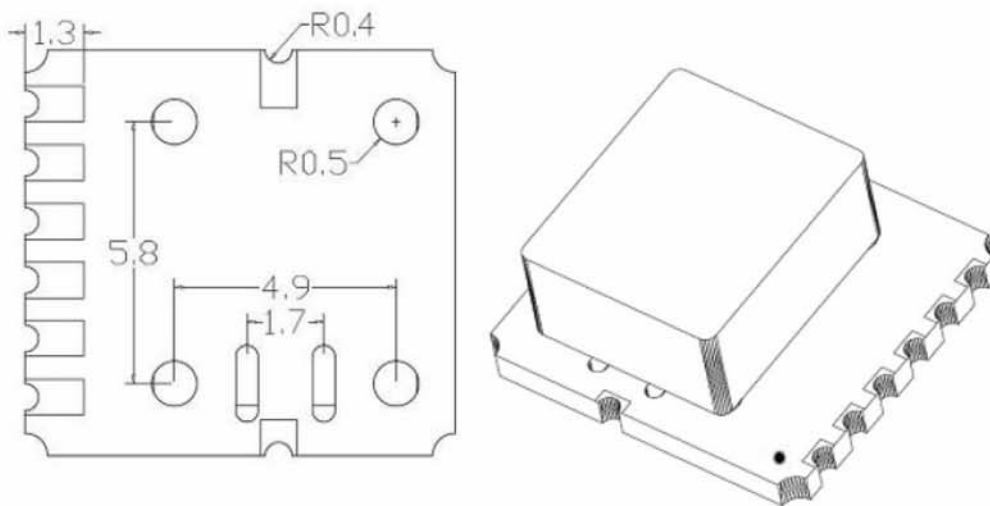
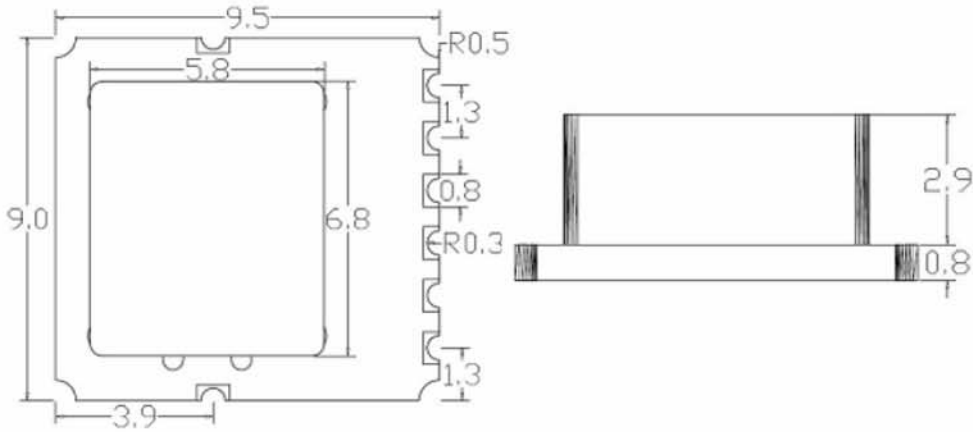
WAFER ELECTRICAL CONNECTIONS

1. Best fit straight line.
2. Coefficients are typical values between -10°C and 40°C.

Pin Configuration



| PAD | 1 | 2 | 3 | 4 | 5 | 6 |
|------------|------|-----|-----|----|-----|------|
| Definition | GND1 | VO- | VO+ | NC | VCC | GND2 |

FR4 Package Outlines**CROCE INC.**

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