# **HOPE RF**

# **Absolute Pressure Sensor (0-20 BAR)**



- 0 to 2000kPa pressure range 20bar or 300PSI)
- Absolute pressure sensor
- Silicon/Grass 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
- Low Cost, High reliability

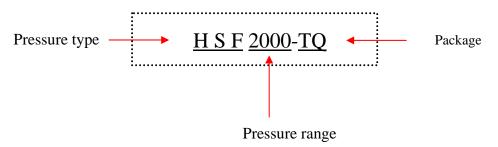
## **APPLICATION**

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

#### **Full Scale Pressure**

| kPa | bar | mbar | PSI | atm | mmHg | mmH <sub>2</sub> O | kg/cm2 |
|-----|-----|------|-----|-----|------|--------------------|--------|
| 100 | 1   | 1000 | 15  | 1   | 750  | 10207              | 1      |

#### Part number System



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#### **Characteristics**

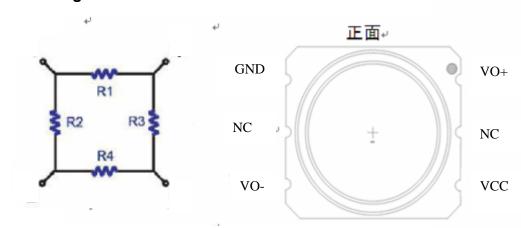
Workingconditions:

| Item                       | Min | Typical | Max.      | Unit       |
|----------------------------|-----|---------|-----------|------------|
| Pressure Range             |     | 300PSI  |           |            |
| Supply voltage             | 0   | 5.0     | 10.0      | Volts      |
| currency                   | 0   | 1.5     | 3.0       | mA         |
| Span                       | 60  | 100     | 140       | mV         |
| Offset                     | -30 | 0       | 30        | mV         |
| Temperature coefficient    | -16 | -22     | -28       | %FS/100℃   |
| Temperature coefficient of | -4  | -6      | -8        | %FS/100℃   |
| Zero                       |     |         |           |            |
| Nonlinearity               | -0  | 0.1     | 0.5       | %F.S       |
| Bridge resistance          | 4   | 5       | 6         | KΩ         |
| Proof pressure             |     |         | $2\times$ | Rated FS   |
| Operating temperature      | -40 |         | 125       | $^{\circ}$ |
| Storage temperature        | -40 |         | 125       | $^{\circ}$ |

# WAFER ELECTRICAL CONNECTIONS

- 1. Best fit straight line.
- 2. Coefficients are typical values between -10  $^{\circ}$ C and 40  $^{\circ}$ C.

## **Pin Configuration**

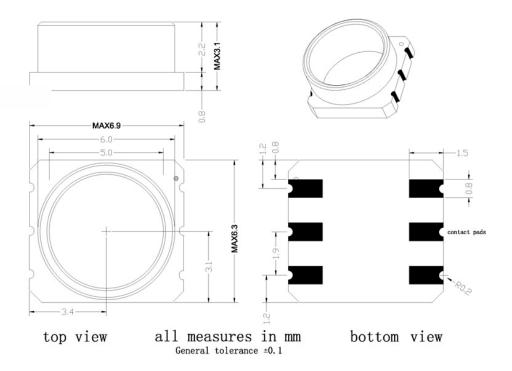


| PAD        | 1   | 2   | 3  | 4   | 5   | 6  |
|------------|-----|-----|----|-----|-----|----|
| Definition | Vo+ | Gnd | NC | VO- | VCC | NC |

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# **HOPE RF**

# FR4 Package Outlines



#### ORDERING INFORMATION

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