

## Absolute Pressure Sensor (0-20 BAR)



- 0 to 2000kPa pressure range 20bar or 300PSI)
- 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

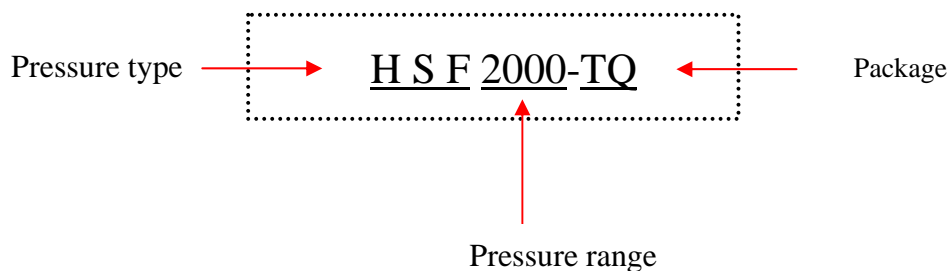
### APPLICATION

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

### Full Scale Pressure

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

### Part number System



## Characteristics

Working conditions:

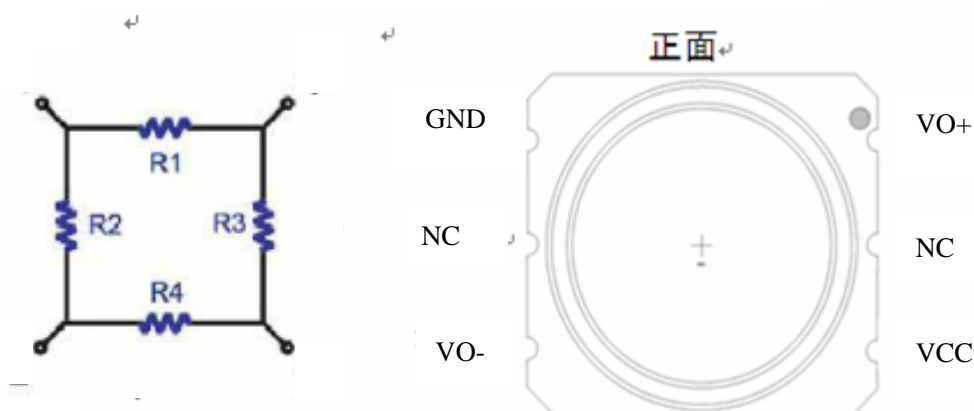
DC@5v, Pressure 2000KP, temperature 25 °C , humidity at 30%

Item	Min	Typical	Max.	Unit
Pressure Range		300PSI		
Supply voltage	0	5.0	10.0	Volts
currency	0	1.5	3.0	mA
Span	90		160	mV
Offset	-35	0	35	mV
Temperature coefficient	-12	-18	-24	%FS/100°C
Temperature coefficient of Zero	-8	0	+8	%FS/100°C
Nonlinearity	-0.3	±0.1	+0.3	%F.S
Bridge resistance	3.0	5	6.0	K Ω
Proof pressure			2×	Rated FS
Operating temperature	-40		125	°C
Storage temperature	-40		125	°C

## WAFER ELECTRICAL CONNECTIONS

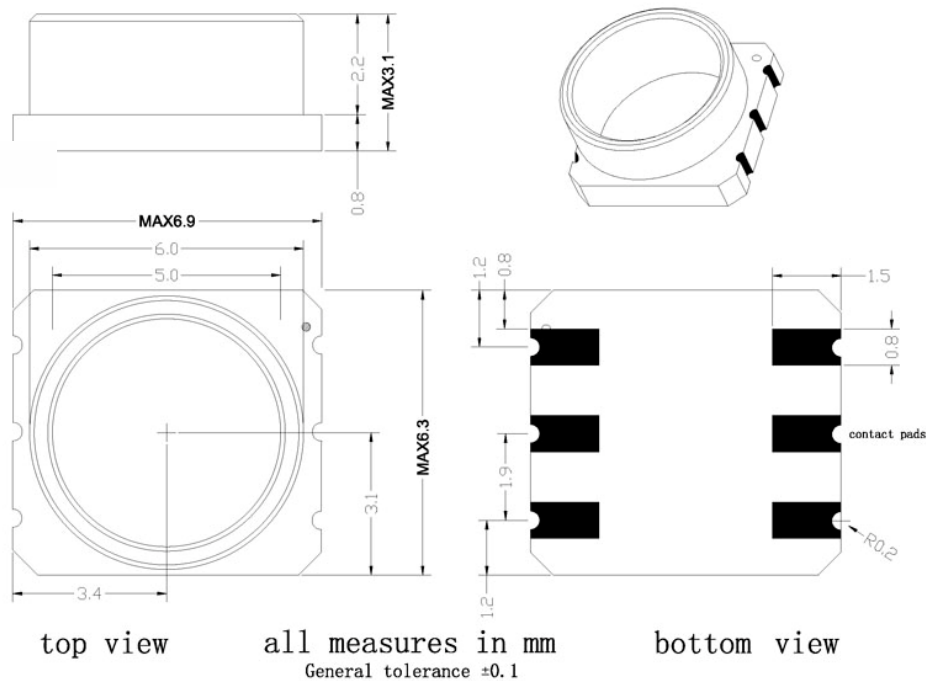
1. Best fit straight line.
2. Coefficients are typical values between -10°C and 40°C.

## Pin Configuration



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

## FR4 Package Outlines



## ORDERING INFORMATION

### HOPE MICROELECTRONICS CO.,LTD

4/F, Block B3, East Industrial Area,  
Huaqiaocheng, Shenzhen, Guangdong,  
China

Tel: 86-755-82973805

Fax: 86-755-82973550

Email: [sales@hoperf.com](mailto:sales@hoperf.com)

Website: <http://www.hoperf.com>

<http://www.hoperf.cn>

<http://hoperf.en.alibaba.com>

This document may contain preliminary information and is subject to change by Hope Microelectronics without notice. Hope Microelectronics assumes no responsibility or liability for any use of the information contained herein. Nothing in this document shall operate as an express or implied license or indemnity under the intellectual property rights of Hope Microelectronics or third parties. The products described in this document are not intended for use in implantation or other direct life support applications where malfunction may result in the direct physical harm or injury to persons. NO WARRANTIES OF ANY KIND, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MECHANICALITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE OFFERED IN THIS DOCUMENT.

©2006, HOPE MICROELECTRONICS CO.,LTD. All rights reserved.