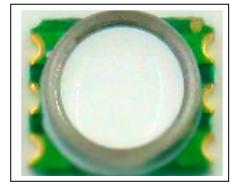


# Absolute Pressure Sensor (0-5 BAR)



- 0 to 500kPa pressure range (7bar or 72.5PSI)
- 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

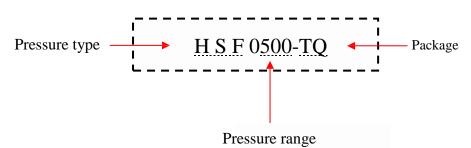
## **APPLICATION**

- For high resolution absolute sensor systems
- Engine Controls
- Tire pressure monitoring systems
- Contact with oils and LPG

#### **Full Scale Pressure**

kPa	bar	mbar	PSI	atm	mmHg	kg/cm2
500	5	5000	72.5	5	3750	5

## Part number System



## Characteristics

Working conditions: DC@5V, Pressure 500KPa ,temperature 25 °C, humidity at 30%

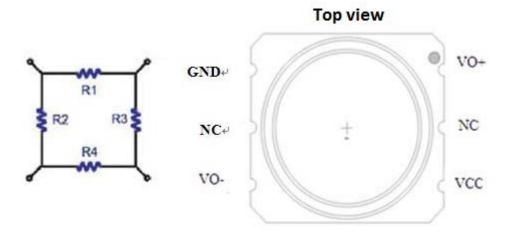
Item	Min	Typical	Max.	Unit	
Pressure Range		500		Кра	
Supply voltage	0	5.0	10.0	Volts	
Current	0	1.0	3.0	mA	
Span	50	70	100	mV	
Offset	-15		15	mV	
Temperature Coefficient – Span	-25	-19	-15	%FS/100°C	
Temperature Coefficient – Zero	-7		-7	%FS/100°C	
Nonlinearity	Nonlinearity $-0.2 \pm 0.1 = 0.2$		%F.S		
Bridge resistance	4.5	5	5.5	ΚΩ	
Proof pressure			3 <b>X</b>	Rated FS	
Operating temperature	-40		125	°C	
Storage temperature	-55		150	°C	

1. Best fit straight line.

2. Coefficients are typical values between -10°C and 40°C.

## **Pin Configuration**

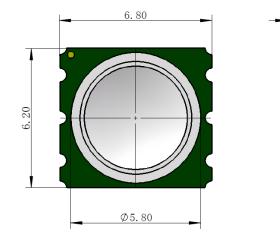
PAD	1	2	3	4	5	6
Definition	Vo+	NC	VCC	VO-	NC	GND

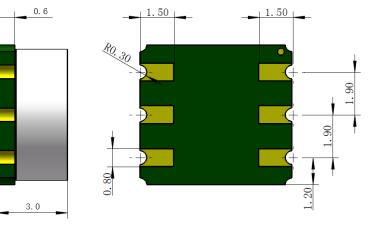




VER:2.0

## **Package Outlines**





Notes: Mechanical dimension is mm General tolerance  $\pm 0.10$ 

	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
HOPE MICROELECTRONICS CO., LTD	or implied license or indemnity under the intellectual property rights of
4/F, Block B3, East Industrial Area,	Hope Microelectronics or third parties. The products described in this
Huaqiaocheng, Shenzhen, Guangdong,	document are not intended for use in implantation or other direct life
China	support applications where malfunction may result in the direct physical
Tel: 86-755-82973805	harm or injury to persons. NO WARRANTIES OF ANY KIND,
Fax: 86-755-82973550	INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF
Email: sales@hoperf.com	MECHANTABILITY OR FITNESS FOR A ARTICULAR PURPOSE, ARE
Website: http://www.hoperf.com	OFFERED IN THIS DOCUMENT.
http://www.hoperf.cn	
http://hoperf.en.alibaba.com	©2006, HOPE MICROELECTRONICS CO., LTD. All rights reserved.