## DATASHEET SPD050SAhyb Pressure Sensor

## SPECIAL LOW PRESSURE RANGE DIFFERENTIAL SENSOR WITH ANALOGUE OUTPUT(single version)

This Smartec differential pressure sensor has an amplified analogue output. The sensor is compensated for offset, sensitivity, temperature drift and nonlinearity. The sensor has a range of 50 mm  $H_2O$  FS and the output is ratiometric to the power supply voltage. Other pressure ranges on request (0.3 – 100 PSI).

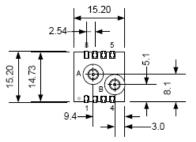
## **Electrical Characteristics**

Performance Characteristic at Vcc =5V excitation @ 25 °C

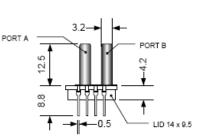
Parameter	Min	Тур	Max	Units
Supply Voltage	4.75	5.00	5.25	v
Supply Current	-		2.0	mA
Pressure range (fs)			50	mmH <sub>2</sub> O
Zero Output (Dif)	0.32	0.500	0.68	Vdc
Span Output (Dif)	3.8	4.0	4.2	Vdc
Response time		1	2	ms
Overall accuracy			4.5	%FS
Pressure overload			3X	rating
Temp compensation	0		50	°C
Operating Temp range	-10		70	°C
Storage temperature	-40		125	°C

It is advised to place a 100nF capacitor between Vcc and Gnd Wetted materials are: Pyrex glass, RTV, Ceramic, Nickel and Silicon The output is ratiometric to Vcc

## Dimension



Use of N.C. pins will cause malfunction Connect between Vss and Vdd a capacitor of 100 nF



 Pin
 Description

 1
 NC

 2
 Gnd

 3
 Out

 4
 Vcc

 5 - 8
 NC



NOTE: 1. Port A is used for positive differential 2. Port A is not used for absolute 3. Port B is not used for gage 4. All dimension in mm





<sup>reference</sup> spd050sahyb n

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