

DATASHEET

SPD050DAhyb (ver 4.0) Pressure Sensor

last update
september 28, 2016

reference
spd050dahyb n

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SPECIAL LOW PRESSURE RANGE DIFFERENTIAL SENSOR WITH ANALOGUE OUTPUT

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 H₂O FS and the output is ratiometric to the power supply voltage. Other pressure ranges on request (0.3 – 100 PSI).



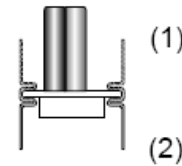
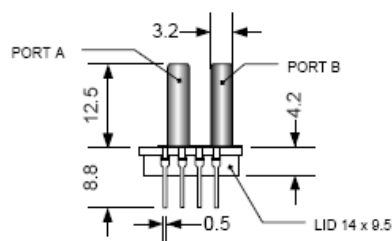
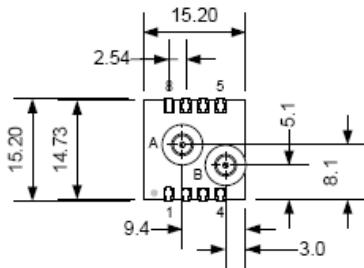
Electrical Characteristics

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

Parameter	Min	Typ	Max	Units
Supply Voltage	4.75	5.00	5.25	V
Supply Current	-		2.5	mA
Pressure range (fs)	-50		50	mmH ₂ O
Zero Output (Dif)	2.32	2.5	2.68	Vdc
Span Output (±50)		±2.00		Vdc
Response time		1	2	ms
Overall accuracy			4.5	%FS
Pressure overload			3X	rating
Temp compensation	0		50	°C
Operating Temp range	-20		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



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

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