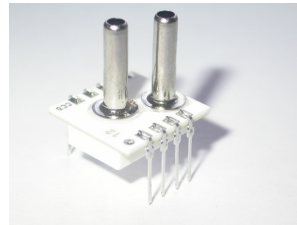


SPECIAL LOW PRESSURE RANGE DIFFERENTIAL SENSOR WITH ANALOGUE OUTPUT(single version)

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 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 V_{cc} =5V excitation @ 25 °C.

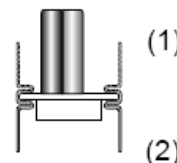
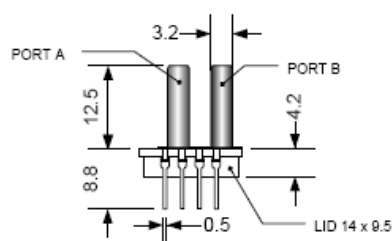
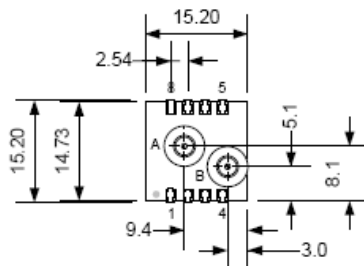
Parameter	Min	Typ	Max	Units.
Supply Voltage	4.75	5.00	5.25	V
Supply Current	-		2.0	mA
Pressure range (fs)			50	mmH ₂ O
Zero Output (Dif)	0.32	0.500	0.68	V _{dc}
Span Output (Dif)	3.8	4.0	4.2	V _{dc}
Response time		1	2	ms
Overall accuracy			4.5	%FS
Pressure overload			3X	rating
Temp compensation	0		50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

It is advised to place a 100nF capacitor between V_{cc} and Gnd

Wetted materials are: Pyrex glass, RTV, Ceramic, Nickel and Silicon

The output is ratiometric to V_{cc}

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 V_{ss} and V_{dd} a capacitor of 100 nF

Pin	Description
1	NC
2	Gnd
3	Out
4	V _{cc}
5 - 8	NC