reference spd102dahybn.doc

page 1/1

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 $102~\text{mm}~\text{H}_2\text{O}~\text{FS}$ and the output is ratiometric to the power supply voltage. Other pressure ranges on request (0.3-100~PSI).

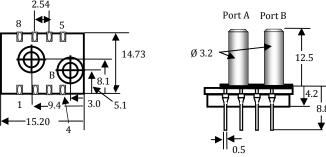


Electrical Characteristics

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)		±102		mmH2O
Zero Output (Dif)	2.45	2.5	2.55	Vdc@0mmH20
Span Output (Dif)		2.00		Vdc(pos)
Response time		25		ms
Linearity	-2.5		+2.5	%FS
Thermal Hysteresis	-0.1		+0.1	%FS
Temp coeff. Offset	-2.5		+2.5	%FS
Temp coeff. Span	-2		+2	%FS
Pressure overload			10X	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



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

Pin	Description
1	NC
2	Gnd
3	Out
4	Vcc
5 - 8	NC

