

DATASHEET

SPD102SAhyb Pressure Sensor

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SPD102SAhyb

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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 0.15 PSI FS and the output is ratiometric to the power supply voltage. Other pressure ranges on request (0.3 – 100 PSI). When no pressure is applied output Voltage is minimal; single type.

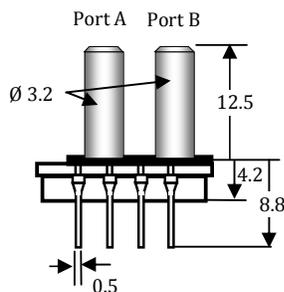
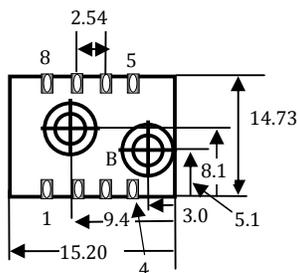


Electrical Characteristics

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)	0		0.15	psi
Zero Output	0.412	0.500	0.588	Vdc@0psi
Span Output (FS)		4.00		Vdc@0.15psi
Response time		1	2	ms
Linearity	-0.5		+0.5	%FS
Thermal Hysteresis	-0.15		+0.15	%FS
Accuracy			+2.2	%FS
Temp coeff. Span	-2		+2	%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



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