

DATASHEET

SPD030GAHyb Pressure Sensor

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reference
spd030gahyb n

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SPECIAL 30 PSI PRESSURE RANGE SENSOR WITH ANALOGUE OUTPUT

This Smartec gage pressure sensor has an amplified analogue output. The sensor is compensated for offset, sensitivity, temperature drift and nonlinearity. The sensor has a range of 30 PSI 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)	0		30	PSI
Zero Output (0 psi)	0.428	0.500	0.572	Vdc
Span Output (30 psi)		4.5		Vdc
Accuracy ¹⁾			1.8	%FS
Linearity	-0.5		+0.5	%FS
Thermal Hysteresis	-0.15		+0.15	%FS
Response time		1	2	ms
Pressure overload			1.5X	rating
Temp compensation	0		50	°C
Operating Temp range	-20		70	°C
Storage temperature	-40		125	°C

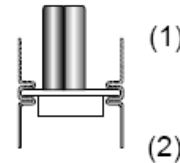
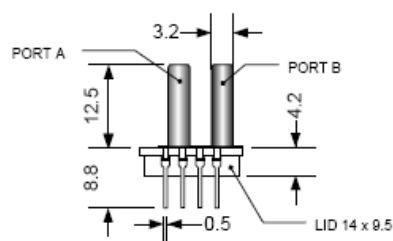
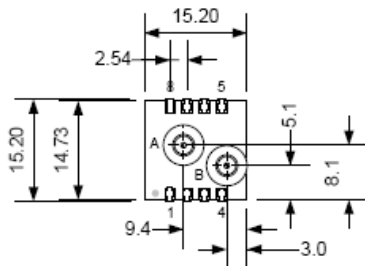
¹⁾ Accuracy includes non-linearity, hysteresis, TCS and TCO over 0 – 50 °C

It is advised to place a 100nF capacitor between Vss and Vdd

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	Vss
3	Out
4	Vdd
5 - 8	NC