

# DATASHEET

## SPD005DIHyb Pressure Sensor

last update  
July 5, 2017

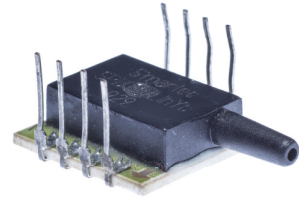
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### LIMITED PRESSURE RANGE DIFFERENTIAL SENSOR WITH I<sup>2</sup>C OUTPUT (300 mBar, 5 PSI)

This Smartec differential pressure sensor has an I<sup>2</sup>C output. The sensor is compensated for offset, sensitivity, temperature drift and nonlinearity.

The sensor has a range of 5 PSI FS. Other pressure ranges can be delivered on request (0.15 – 150 PSI).



### Electrical Characteristics

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

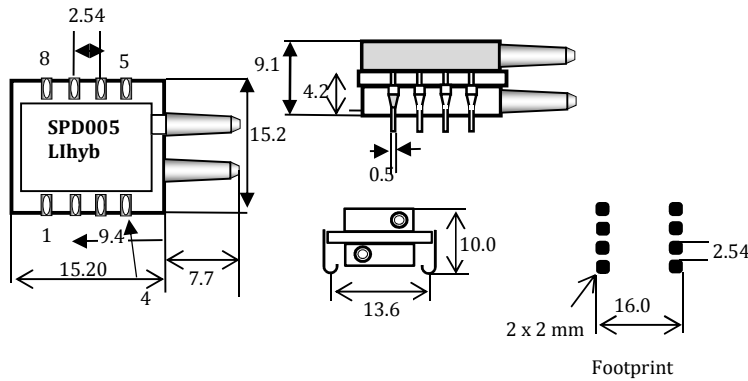
Parameter	Min	Typ	Max	Units
Supply Voltage	2.7	5.00	5.5	V
Supply Current		3		mA
Pressure range (fs)	-5		5	PSI
Resolution		12		Bits
Accuracy 1)		1.8		%FS, 1 LSB
Zero output		2000		Hex
Span output (-5, +5 PSI)	666		3999	Hex
I <sup>2</sup> C output:				
SClock	100		400	KHz
Update rate		0.5		ms
Address (slave)		0x28		Hex
Pressure overload			3x	rating
Temp compensation	0		50	°C
Operating Temp range	-20		85	°C
Storage temperature	-40		125	°C

- 1) combined accuracy over 0-50 °C with auto zero
- It is advised to place a 100nF capacitor between Vcc and Gnd
- Wetted materials are: PA46, RTV, Pyrex glass, Silicon, Ceramic

# SPD005DIhyb Pressure Sensor

## Dimensions

(all sizes in mm)



Pin	Description
1	NC
2	Vcc
3	INT
4	SDA
5	SCL
6	NC
7	NC
8	GND

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

## Ordering Code:

**SPD005DIhyb** 5 psi differential pressure sensor with I<sup>2</sup>C output

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