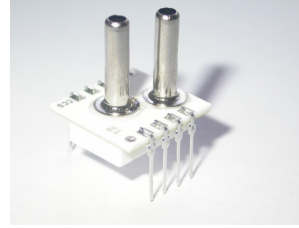


## SPECIAL ABSOLUTE SENSOR WITH ANALOGUE OUTPUT

This Smartec absolute pressure sensor has an amplified analogue output. The sensor is compensated for offset, 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). The pinout is compatible to the analogue version of the SMI5812 series



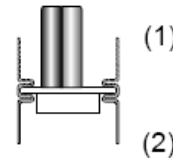
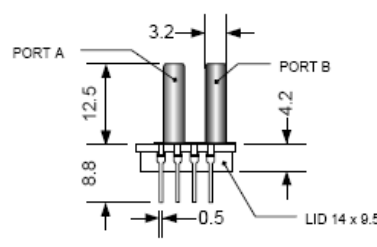
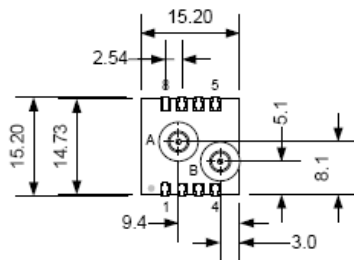
### Electrical Characteristics

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

Parameter	Min	Typ	Max	Unit
Supply Voltage	4.75	5.00	5.25	V
Supply Current	-	2.5		mA
Pressure range (fs)	0		30	PSI
Zero Output (0 psi)	0.42	0.50	0.58	Vdc
Span Output		4.00		Vdc
Response time			2	ms
Accuracy			2	%FS
Thermal Hysteresis	-0.15		+0.15	%FS
Linearity	-0.5		+0.5	%FS
Pressure overload			3X	rating
Temp compensation	0		70	°C
Operating Temp range	-20		70	°C
Storage temperature	-40		125	°C

- Accuracy includes non-linearity, hysteresis,RCS and TCO over the range of 0 – 50 °C, the best fit line
- It is advised to place a 100nF capacitor between Gnd and Vdd
- Wetted materials are: Pyrex glass, RTV, Ceramic, Nickel and Silicon

### 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	GND
3	NC
4	NC
5	NC
6	NC
7	Vcc
8	Analogue out

