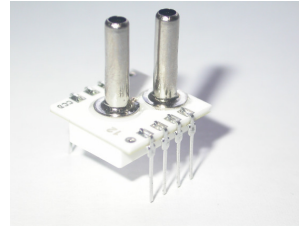


Preliminary

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 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



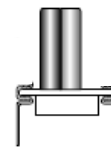
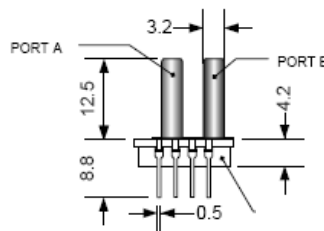
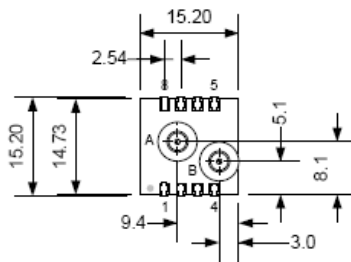
Electrical Characteristics

Performance Characteristic at $V_{cc} = 5V$ excitation @ 25 °C.

Parameter	Min	Typ	Max	Units.
Supply Voltage	4.75	5.00	5.25	V
Supply Current	-		2.0	mA
Pressure range (fs)		30		PSI
Zero Output (Dif)	2.45	2.50	2.55	Vdc
Span Output (Dif)	1.95	2.00	2.05	Vdc
Response time		2		ms
Linearity	-0.5		+0.5	%FS
Thermal Hysteresis	-0.1		+0.1	%FS
Temp coeff. Offset	-1		+1	%FS
Temp coeff. Span	-2		+2	%FS
Pressure overload			3X	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 GND and V_{cc}
 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 V_{ss} and V_{dd} a capacitor of 100 nF

1	NC	5	NC
2	GND	6	NC
3	NC	7	V_{cc}
4	NC	8	Analogue out

