

## Analog Output Smart Pressure Transducer



## **PRODUCT DESCRIPTION:**

SCL developed MEMS based Pressure sensors are in the form of Bridge of four peizo-resistors to give differential output proportional to applied pressure. Absolute pressure sensor has an internal vacuum reference.

Pressure Transducer is fully calibrated and temperature compensated for sensor offset, sensitivity, temperature effects using an on-board application specific integrated circuit (ASIC). Calibrated output values for pressure are updated at approximately 1 kHz.

Transducer is temperature compensated & calibrated. Transducer comes with pre programmed calibration coefficients, loaded into EEPROM. Transducer provides corrected output voltage.

## FEATURES:

- Operating Voltage 5V ± 0.5V
- Ratiometric Voltage Output
- Absolute Pressure Range 2.2, 5.0 Bar
- Operating Temperature: -20°C to 85°C
- Tight accuracy of 0.25% of FSS (BFSL)
- Total Error Band (TEB) of 1% FSS
- Enhanced sensor interchange ability
- PCB mountable 8-Pin DIP Package
- Customized Package Options



Product Specifications		
S.No.	Parameters	Specification
1	Operating Pressure Range <sup>1</sup>	2.2 Bar, 5.0 Bar
2	Pressure Reference <sup>2</sup>	Absolute
3	Proof Pressure	> 1.5 Times Operating Pressure
4	Burst Pressure	>3 Times Operating Pressure
5	Operating Supply Voltage VDD	5.0V
6	Supply Current	3 mA
7	Output Voltage Range	0.25V to 4.75V
8	Accuracy	0.25%FSS BFSL
9	Total Error Band (TEB) <sup>3</sup>	0.5% Full Scale Span
10	Operating Temperature range <sup>4</sup>	-20°C to 85°C
11	Media Compatibility <sup>5</sup>	Clean, dry gases only

<sup>1</sup> Higher pressure ranges are also available.

<sup>2</sup> Differential & Gauge measurement mode transducers are also available.

<sup>3</sup> Transducers are fully temperature compensated & calibrated, TEB < 0.5% Full Scale.

- <sup>4</sup> Operating Range can be extended by custom package as per requirement.
- <sup>5</sup> Media isolated (Oil Filled) transducers are also available.