

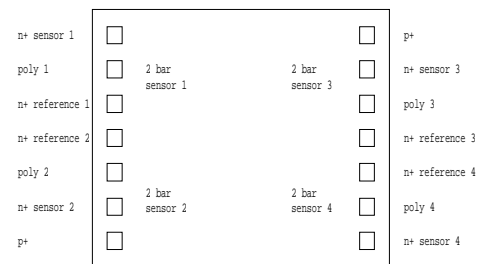


# Fraunhofer Institut Mikroelektronische Schaltungen und Systeme

## Non – Integrated Pressure Sensor with a Range of 2 bar

For simple sensor testing and its characterization non - integrated pressure sensors are fabricated. These sensorchips only contain four capacitive pressure sensor arrays without any integrated circuit or readout electronics.

One sensor array consists of a sensor element and a reference element to eliminate variations wich can occur during fabrication. To detect any pressure, the capacitive difference between the sensor and the reference elements have to be measured.



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### Sensor Data

Pressure range: up to 2 bar

Temp. range: -40 - 125° C

Overpressure limit: > 10 FS

Temp. coeff.: < 200 ppm/K  
(without compensation)

Dimensions: 1.4 x 2.4 mm<sup>2</sup>  
1.8 x 3.0 mm<sup>2</sup>

### Connecting the sensor

For testing or characterization you should connect the sensor as shown in the following picture:

