

# BMP085

Digital, barometric pressure sensor

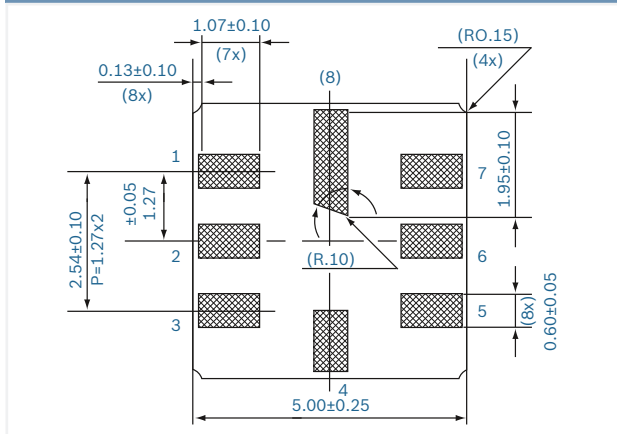
Bosch Sensortec



**BOSCH**

Invented for life

Pin configuration (top view, pads shown transparently)



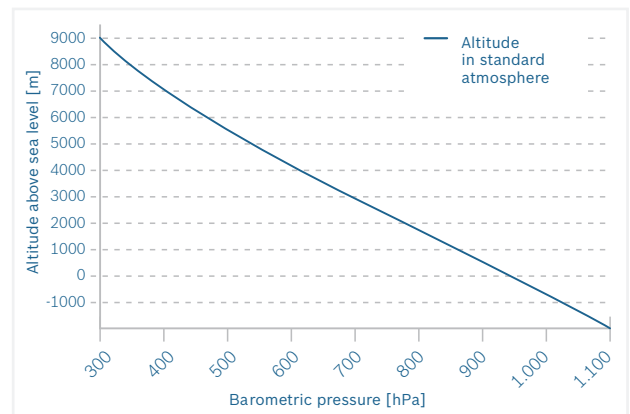
Package dimensions in mm

Pin	Name	Function
1	GND	Ground
2	EOC	End of conversion output
3	V <sub>DDA</sub>	Power supply analog
4	V <sub>DDD</sub>	Power supply digital
5	NC	Not connected
6	SCL	I <sup>2</sup> C serial bus clock input
7	SDA	I <sup>2</sup> C serial bus data
8	XCLR	Master clear input

## Sensor operation

The BMP085 comes as fully calibrated, ready-to-use sensor module without the need for additional external circuitry. Pressure and temperature data are provided as 16 bit values via the I<sup>2</sup>C interface, together with calibration data for temperature compensation.

The below figure describes the so-called barometric formula by means of which the absolute altitude can be calculated from the measured barometric pressure.



Bosch is the world market leader in MEMS sensors. The BMP085 offers this high experience and reliability for consumer applications. Bosch Sensortec is a subsidiary of Bosch that focuses on micromechanical components for the non-automotive markets.

Please contact us for further details. We are happy to provide you with more information.

## Headquarters

### Bosch Sensortec GmbH

Gerhard-Kindler-Strasse 8  
 72770 Reutlingen · Germany  
 Telephone +49 7121 3535 900  
 Fax +49 7121 3535 909  
[contact@bosch-sensortec.com](mailto:contact@bosch-sensortec.com)  
[www.bosch-sensortec.com](http://www.bosch-sensortec.com)