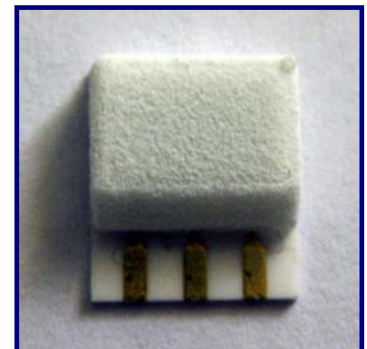
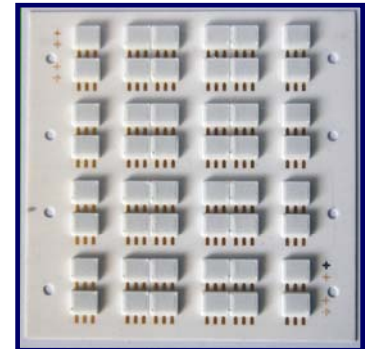


## SEC Gas Sensor

### OXYGEN SECS Technical Specification

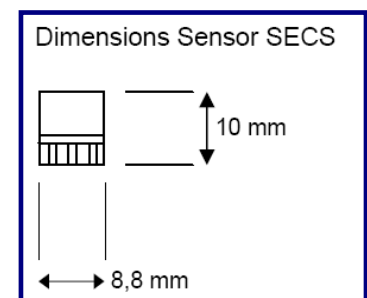
Sensor Type	O <sub>2</sub> Sensor SECS
Detectable Gases	Oxygen
PN wafer à 48 sensors	01-01-30-01
PN single sensor	01-02-30-01
Measuring Principle	Amperometric 3-electrode sensor
Contact	3 gold pads * non solderable
Standard Range	0.0 – 30.0 Vol. %
Lower Detectable Limit (LDL)	0.1 Vol. %
Maximum Range	50 Vol. %
Bias Voltage	- 400 to -600 mV
Long Term Sensitivity Drift	< 0.1 Vol. % / 6 month
Linearity at standard range	linear
Repeatability	> 98 % of signal
Current at 21 Vol. % Oxygen	7 – 11 µA
Sensitivity	~ 0,04 nA/ppm
Response time at target level	
T50	< 5 s
T90	< 15 s
Sensor warm up time typically (Pre-powered)	15 s (10) s
Operating conditions	- 20°C ... +50°C 10 ... 95 % r. h.
Pressure dependence	linear
Expected life time	> 3 years



### OXYGEN SECS Dimensional Drawing

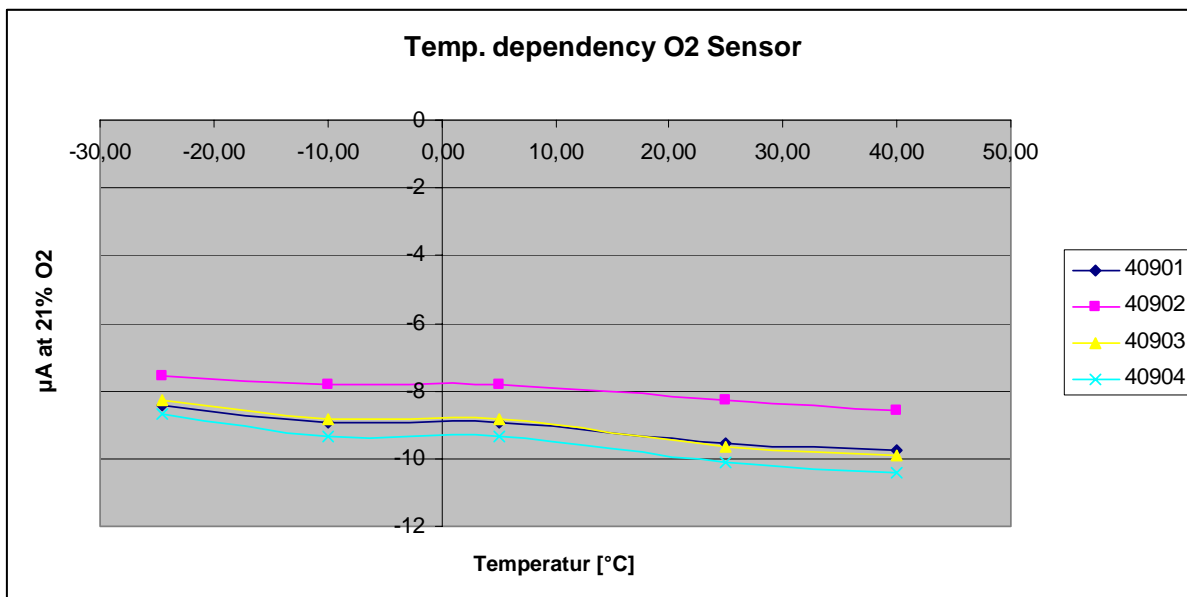
Sensor dimensions without pins 10 mm x 8,8 mm x 3 mm  
± 0,15 mm tolerance

\* soldering to the pads will damage the sensor



## SEC Gas Sensor

### OXYGEN SECS Temperature Dependence



### OXYGEN SECS Cross Sensitivity

N.A.

### Note:

The sensor can be used in applications of high CO<sub>2</sub> level due to the fact that it contains an acid electrolyte.

Test conditions at 20°C/ 1013 hPa, Flow Rate > 500 qcm/min  
 Cross sensitivity gases are not target gases. Relation can change with aging.

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