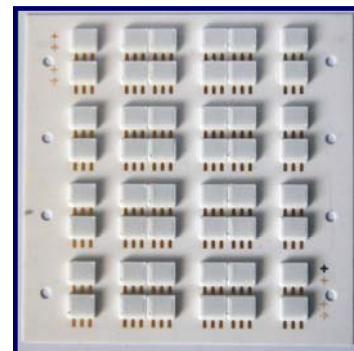


## SEC Gas Sensor

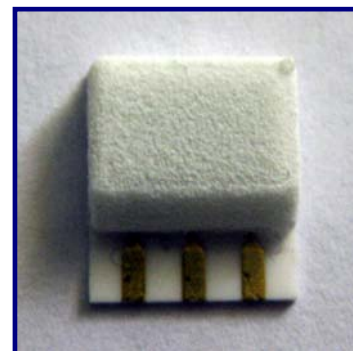
### NITROGEN DIOXIDE 100 SECS

### Technical Specification

Sensor Type	NO <sub>2</sub> Sensor SCES
Detectable Gases	Nitrogen Dioxide
PN wafer à 48 sensors	01-01-50-01
PN single sensor	01-02-50-01
Measuring Principle	Amperometric 3-electrode sensor
Contact	3 gold pads * non solderable



Standard Range	0 – 100 ppm
Lower Detectable Limit (LDL)	200 ppb
Maximum Range	500 ppm
MAK/TLV	3 ppm
Long Term Sensitivity Drift	< 1 % / month
Linearity at standard range	linear
Repeatability	> 98 % of signal
Zero current at normal conditions	+/- 2 nA
Sensitivity	10 ... 30 nA/ppm
Response time at target level	
T50	< 10 s
T90	< 30 s
Sensor warm up time typically	60 s
Operating conditions	- 20°C ... +60°C 10 ... 95 % r. h.
Expected sensor life time	5 years

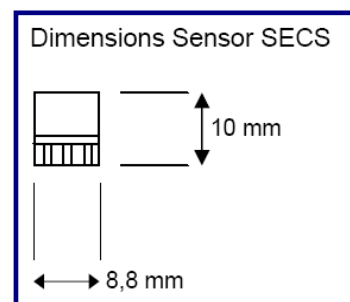


### NITROGEN DIOXIDE 100 SECS

### Dimensional Drawing

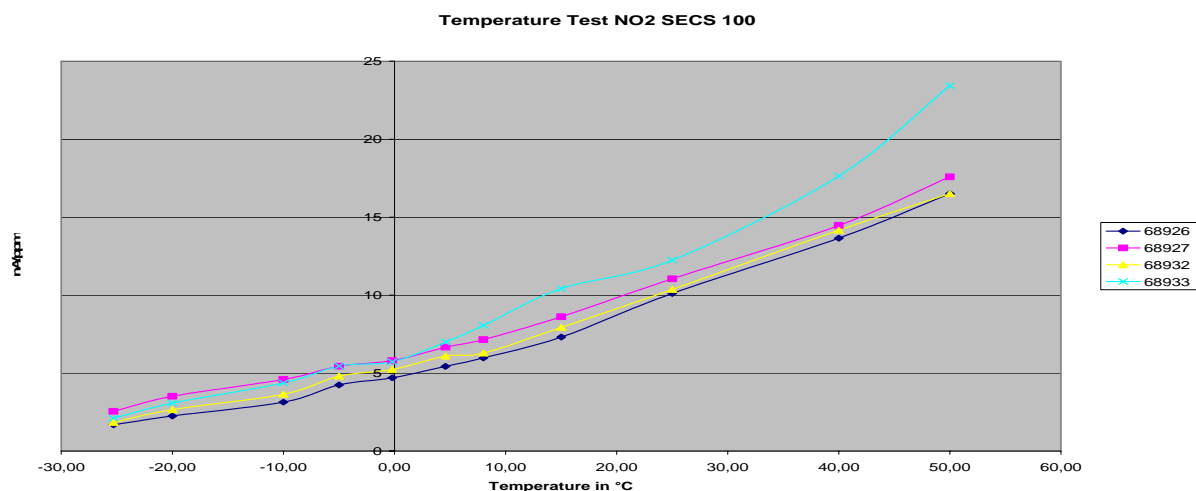
Sensor dimensions 10 mm x 8,8 mm x 3 mm

\* Soldering to the pads will damage the sensor



## SEC Gas Sensor

### NITROGEN DIOXIDE 100 SECS Temperature Dependency



### NITROGEN DIOXIDE 100 SECS Cross Sensitivity

Gas	Formula	Test Gas Concentration	Reading in ppm
Ammonia	NH <sub>3</sub>	25 ppm	0
Carbon Dioxide	CO <sub>2</sub>	5000 ppm	0
Carbon Monoxide	CO	30 ppm	0
Chlorine	Cl <sub>2</sub>	1.0 ppm	1.0
Hydrocarbons unsaturated	-	1 %	0
Hydrogen	H <sub>2</sub>	3800 ppm	0
Hydrogen Sulphide	H <sub>2</sub> S	10 ppm	-7
Isopropanol	C <sub>3</sub> H <sub>7</sub> OH	1000 ppm	0
Nitric Oxide	NO	20 ppm	0
Chlorine Dioxide	ClO <sub>2</sub>	1 ppm	1
Ozone	O <sub>3</sub>	0.5 ppm	n/a
Sulphur Dioxide	SO <sub>2</sub>	20 ppm	n/a

#### Note:

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

SolidSense GmbH believes the data contained herein are factual, and the opinions expressed are of qualified experts regarding the results of tests conducted, the data are not to be taken as warranty or representation which SolidSense assumes legal responsibility. The data are offered solely for consideration, investigation, and verification. Any use of these data and information must be determined by the user to be in accordance with federal, state, and local laws and regulations. Specifications are subject to change without notice.

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