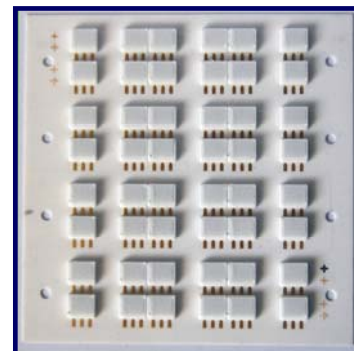


SEC Gas Sensor

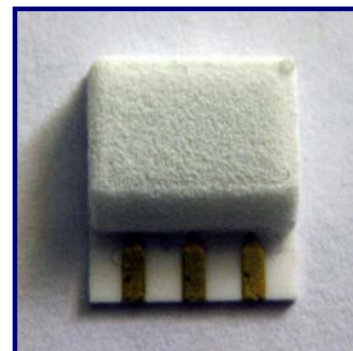
HYDROGEN SECS 1000

Technical Specification

Sensor Type	H ₂ 1000 SECS
Detectable Gases	Hydrogen
PN wafer à 48 sensors	01-01-10-01
PN single sensor	01-02-10-01
Measuring Principle	Amperometric 3-electrode sensor
Contact	3 gold pads * non solderable



Standard Range	0 – 20.000 ppm
Lower Detectable Limit (LDL)	10 ppm
Maximum Range	40.000 ppm
LEL	40.000 ppm
Long Term Sensitivity Drift	< 10 % / year
Linearity at standard range	< 10 % FS
Repeatability	> 98 % of signal
Zero current at normal conditions	+/- 100 nA
Sensitivity	0,4 ... 10,0 nA/ppm
Response time at target level	
T50	< 10 s
T90	< 30 s
Sensor warm up time typically	20 s
Operating conditions	- 20°C ... + 80°C 10 ... 95 % r. h.
Expected life time	5 years

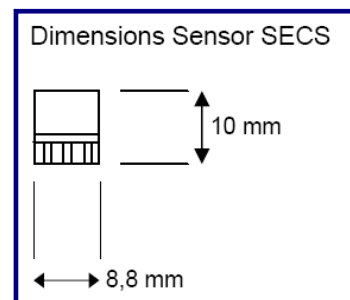


HYDROGEN SECS 1000

Dimensional Drawing

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

* Soldering to the pads will damage the sensor



SEC Gas Sensor**HYDROGEN SECS 1000****Temperature Dependence**

0,5 %/°C (October 2010)

HYDROGEN SECS 1000**Cross Sensitivity**

Gas	Formula	Test Gas Concentration	Reading in ppm
Ammonia	NH ₃	25 ppm	0
Carbon Dioxide	CO ₂	5000 ppm	0
Carbon Monoxide	CO	50 ppm	37
Chlorine	Cl ₂	1.0 ppm	0
Hydrocarbons unsaturated	-	1 %	0.0
Hydrogen Sulphide	H ₂ S	10 ppm	440
Isopropanol	C ₃ H ₇ OH	1000 ppm	nA
Nitric Oxide	NO	20 ppm	0
Nitrogen Dioxide	NO ₂	10 ppm	nA
Ozone	O ₃	0.5 ppm	0
Sulphur Dioxide	SO ₂	20 ppm	0

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.

Solidsense GmbH - Felix-Wankel-Str. 5 - 82152 Krailling, Germany

Tel: +49 89 893 255 21 – Fax: +49 89 850 9374 – info@solidsense.de – www.solidsense.de