

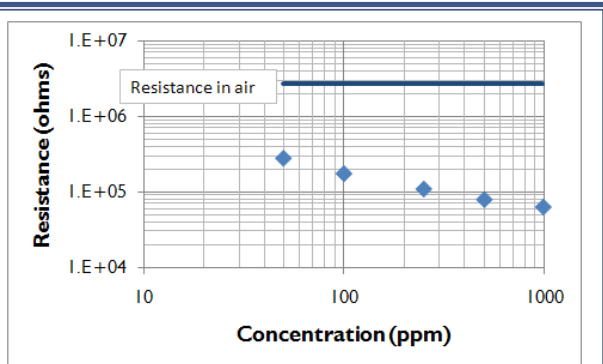
SENSOR FEATURES:

- High sensitivity to hydrogen
- Fast response time ($T_{90} < 15$ seconds at 100 ppm)
- Environmental temperature range of -20 to 50°C
- Thermistor heater allows active control of sensor temperature based on environmental temperature
- Environmental humidity range of 0 to 95% RH, non-condensing

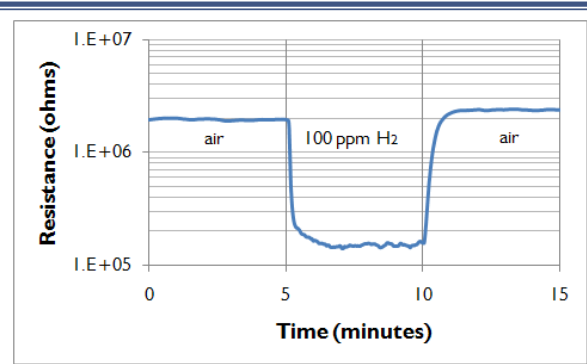


SENSOR RESPONSE CHARACTERISTICS:

The information below represents typical behavior for sensors operated in clean, dry gas.



Sensor resistance versus hydrogen (H₂) concentration.



Sensor response to 100 ppm H₂ in humid air. H₂ applied at 5 min and removed at 10 min.

Cross sensitivity – ppm H₂ equivalents.

Vapor	ppm H ₂	Vapor	ppm H ₂
Methane – 1000 ppm	1	Nitrogen Dioxide – 5 ppm	negative response
Carbon Monoxide – 100 ppm	2	Chlorine – 1 ppm	0
Ethanol – 50 ppm	25	Sulfur Dioxide – 5 ppm	0
Hydrogen Sulfide – 15 ppm	70		

ELECTRICAL CHARACTERISTICS:

The properties below are typical for MikroKera 4L Hydrogen Sensors. Circuits are available that are preset to the appropriate values.

Property	Symbol	Value	Remarks
Heater Power Consumption	P_H	~ 125 mW	Continuous at $V_H = 1.45$
Heater Voltage	V_H	1.45 VDC	$T_{\text{sensor}} \sim 190^{\circ}\text{C}$
Heater Resistance	R_H	$10\Omega \pm 0.5\Omega$	At room temperature
Sensing Voltage	V_C	2.0 VDC	Recommended

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- For information on warranty, please refer to Synkera Technologies, Inc. Standard Terms and Conditions.
- Information on this data sheet represents typical values. Actual values from sensor to sensor can vary slightly.