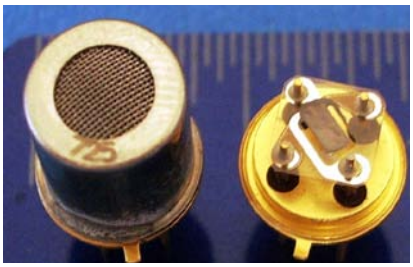
MikroKera 4L VOC Sensor (P/N 725)

Synkera Technologies, Inc.
2605 Trade Centre Ave., Ste. C
Longmont, CO 80503

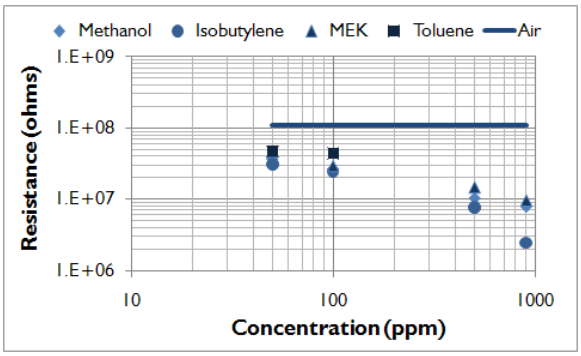
SENSOR FEATURES:

- Strong response to a wide range of VOCs
- Fast response time (T_{90} <15 seconds at 100 ppm ethanol)
- 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

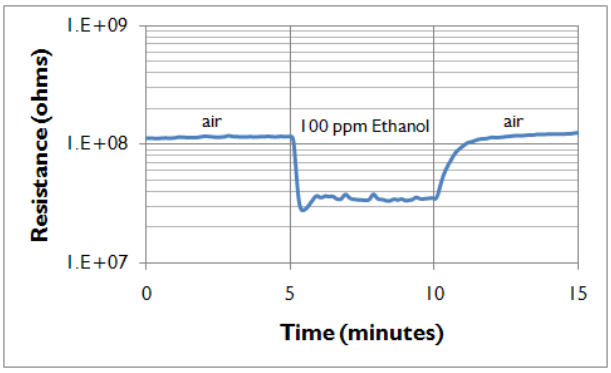


SENSOR RESPONSE CHARACTERISTICS:

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



Sensor resistance vs. concentration for various VOCs.



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

CROSS SENSITIVITY – PPM ISOBUTYLENE EQUIVALENTS

Vapor	ppm Isobutylene	Vapor	ppm Isobutylene
Methane – 1000 ppm	1	Nitrogen Dioxide – 5 ppm	negative response
Chlorine – 1 ppm	0	Sulfur Dioxide – 5 ppm	negative response
Hydrogen Sulfide–15 ppm	940	Carbon Monoxide - 100 ppm	0

ELECTRICAL CHARACTERISTICS:

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

PROPERTY	*SYMBOL*	*VALUE*	*REMARKS*
Heater Power Consumption	P_H	~ 100 mW	Continuous at V_H = 1.25
Heater Voltage	V_H	1.25 VDC	T_{sensor} ~160°C
Heater Resistance	R_H	10Ω ± 1.0 Ω	At room temperature
Sensing Voltage	V_C	2.0 VDC	Recommended
Resistance in Air	R_a	20 MΩ/2000 MΩ	Min/Max
Resistance in 500 ppm EtOH	R_{500}	500 kΩ/50 MΩ	Min/Max
Sensitivity	R_a/R_{500}	10	Min

**Note that all measurements were made in dry gas, at room temperature*

720-494-8401 e-mail: info@synkera.com www.synkera.com 720-494-8402 (fax)

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