UltraKera™ TO
Carbon Monoxide (CO) Sensor
P/N 730

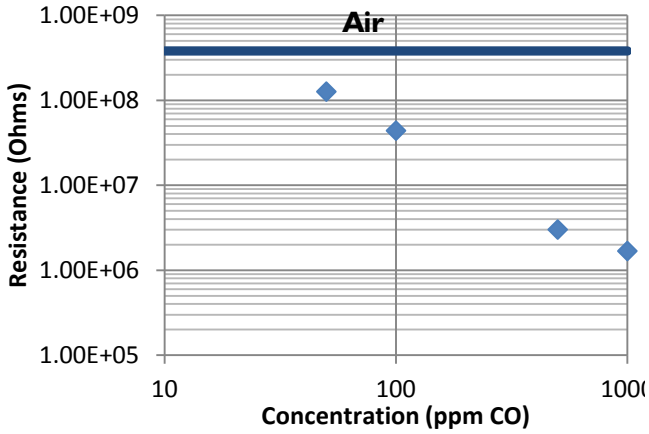
Synkera Technologies, Inc.
2605 Trade Centre Ave., Ste. C
Longmont, CO 80503

SENSOR FEATURES:

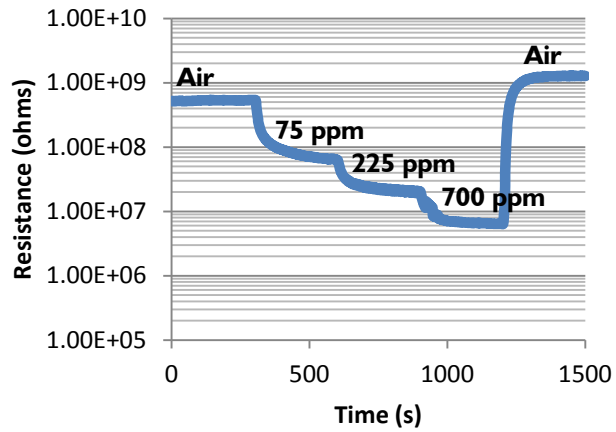
- New low power design
- Environmental temperature range of –40 to 60°C with appropriate heater control
- Thermistor heater allows active control of sensor temperature based on environmental temperature
- Environmental humidity range of 0 to 95% RH, non-condensing
- Sensor packaged on low profile TO-46 header

SENSOR RESPONSE CHARACTERISTICS:

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



(Log) Sensor Resistance vs. (Log) ppm CO



Sensor response to step change in concentration: 75, 225, 700 ppm CO in dry air.

CROSS SENSITIVITY – CO EQUIVALENTS

Vapor	Concentration CO	Vapor	Concentration CO
Methane – 1000 ppm	No Response	NO_2 – 5 ppm	Negative Response
Ethanol – 50 ppm	4 ppm	SO_2 – 5 ppm	No Response
H_2S- 10 ppm	TBD	Hydrogen- 100 ppm	150 ppm

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.

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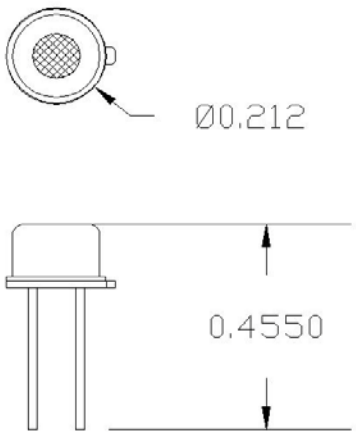
ELECTRICAL CHARACTERISTICS:

The properties below are typical for UltraKera™ TO Carbon Monoxide Sensors.

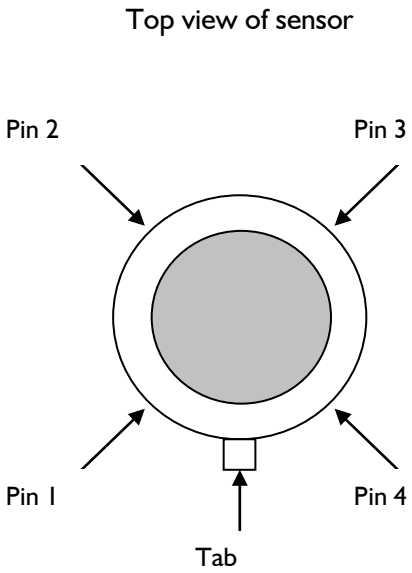
PROPERTY	*SYMBOL*	*VALUE*	*REMARKS*
Heater Power Consumption	P_H	~ 20 mW	Continuous at V_H = 0.65V
Heater Voltage	V_H	0.65 VDC	T_{sensor} ~100°C
Heater Resistance	R_H	15 to 17 Ohms	At room temperature
Sensing Voltage	V_C	2.5 VDC	Typical
Typical Resistance in Air	R_a	2 MΩ/2000 MΩ*	Min/Max
Typical Resistance in 500 ppm CO	R_{500}	100 kΩ/10 MΩ*	Min/Max
Repeatability		+/-5% Full Scale/ +/- 10% Reading	Whichever is Greater
Accuracy		+/- 5% of Full Scale	0-5% CO

**Note that all measurements were in dry gas, at room temperature. Specifications based on preliminary data and are subject to change*

SENSOR DIMENSIONS:



SENSOR PIN OUT:



1- Heater +
2 - Sensor +
3 - Common
4 - No Connect

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