

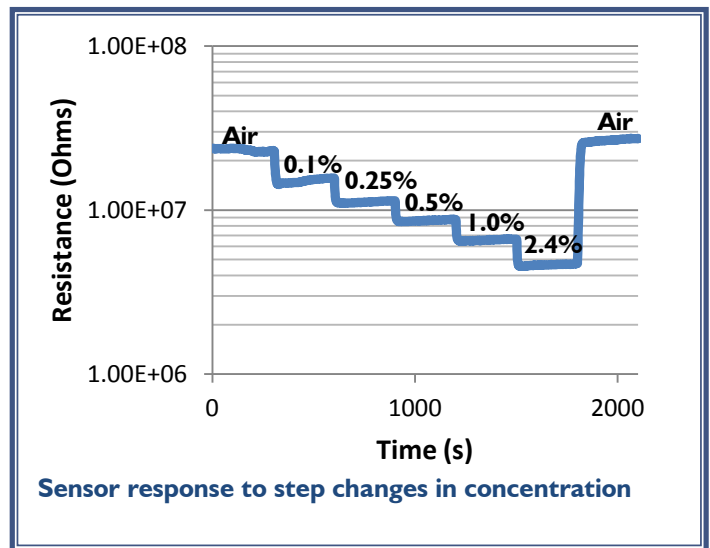
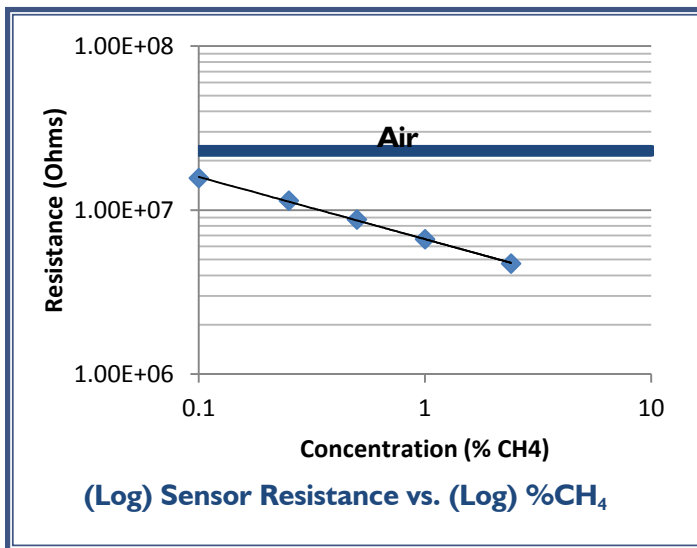


SENSOR FEATURES:

- New low power design: 42 mA @ 1.18V
- Innovative chemiresistor technology with possibility of integration into intrinsically safe devices
- 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.



CROSS SENSITIVITY – CH₄ EQUIVALENTS

Vapor	Concentration CH ₄	Vapor	Concentration CH ₄
Hexane- 0.05%	0.4%	CO – 100 ppm	350 ppm
Ethanol- 50 ppm	500 ppm	Hydrogen Sulfide- 10 ppm	200 ppm
Propane- 2500 ppm	3%	Hydrogen- 100 ppm	5%

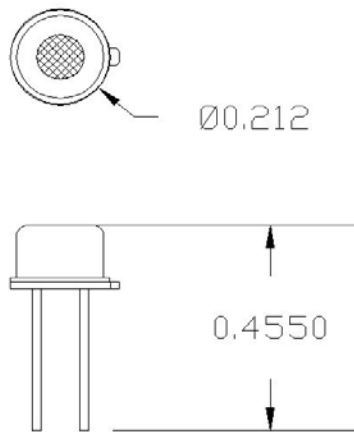
ELECTRICAL CHARACTERISTICS:

The properties below are typical for UltraKera™ TO Methane Sensors.

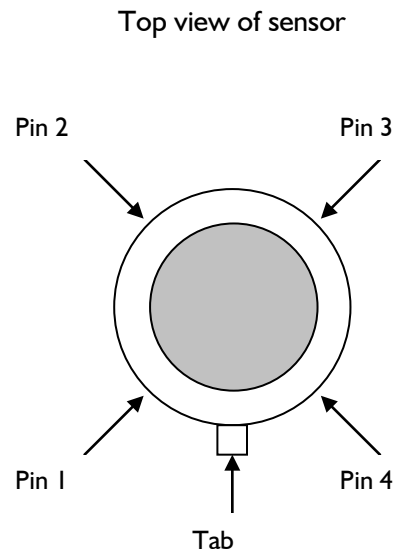
PROPERTY	SYMBOL	VALUE	REMARKS
Heater Power Consumption	P_H	~ 50 mW	Continuous at $V_H = 1.18$
Heater Voltage	V_H	1.18 VDC	$T_{sensor} \sim 230^{\circ}C$
Heater Resistance	R_H	15 to 17 Ohms	At room temperature
Sensing Voltage	V_C	2.5 VDC	Typical
Typical Resistance in Air	R_a	1 M Ω /20 M Ω *	Min/Max
Typical Resistance in 1.0% CH ₄	$R_{1.0}$	50 k Ω /800 k Ω *	Min/Max
Repeatability		$\pm 5\%$ Full Scale/ $\pm 10\%$ Reading	Whichever is Greater
Accuracy		$\pm 5\%$ of Full Scale	0-5% CH ₄

*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