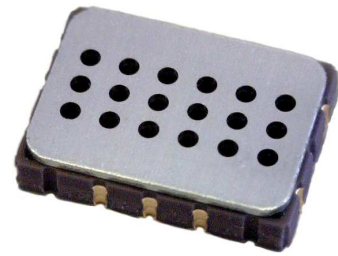# The MiCS-5524 is a compact MOS sensor.

The MiCS-5524 is a robust MEMS sensor for indoor carbon monoxide and natural gas leakage detection; suitable also for indoor air quality monitoring; breath checker and early fire detection.
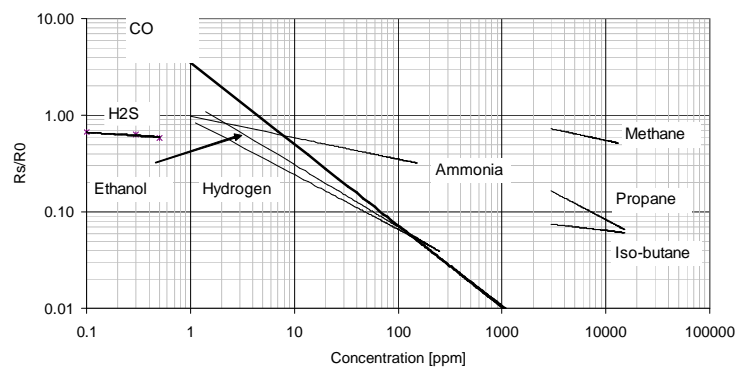
Features

- Smallest footprint for compact designs (5 x 7 x 1.55 mm)
- Robust MEMS sensor for harsh environments
- High-volume manufacturing for low-cost applications
- Short lead-times

Continuous power ON, 25°C, 50% RH

Detectable gases

- Carbon monoxide CO   1 – 1000ppm
- Ethanol C_2H_5OH 10 – 500ppm
- Hydrogen H_2 1 – 1000ppm
- Ammonia NH_3 1 – 500ppm
- Methane CH_4 >1000ppm

For more information please contact:

info.em@sgxsensortech.com

SGX Sensortech, Courtils 1
CH-2035 Corcelles-Cormondrèche
Switzerland

www.sgxsensortech.com

Performance sensor

Characteristic RED sensor	Symbol	Typ	Min	Max	Unit
Sensing resistance in air (see note 1)	R_0	-	100	1500	kΩ
Typical CO detection range	FS		1	1000	ppm
Sensitivity factor (see note 2)	S_{60}	-	1.2	50	-

Notes:
1. Sensing resistance in air R_0 is measured under controlled ambient conditions, i.e. synthetic air at 23 ±5°C and 50 ± 10% RH. Sampling test.

2. Sensitivity factor is defined as Rs in air divided by Rs at 60 ppm CO. Test conditions are 23 ± 5°C and 50 ± 10% RH. Indicative values only. Sampling test.

IMPORTANT PRECAUTIONS:
Read the following instructions carefully before using the MiCS-5524 described here to avoid erroneous readings and to prevent the device from permanent damage.
- The sensor must be reflow soldered in a neutral atmosphere, without soldering flux vapours.
- The sensor must not be exposed to high concentrations of organic solvents, silicone vapours or cigarette-smoke in order to avoid poisoning the sensitive layer.
- Heater voltage above the specified maximum rating will destroy the sensor due to overheating.
- This sensor is to be placed in a filtered package that protects it against water and dust projections.
- SGX sensortech strongly recommends using ESD protection equipment to handle the sensor.