

# 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**

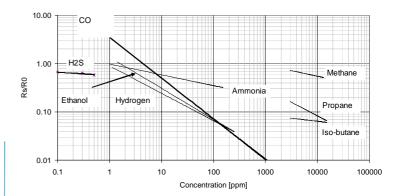
- Smallest footprint for compact designs (5 x 7 x 1.55 mm)
- Robust MEMS sensor for harsh environments
- High-volume manufacturing for low-cost applications
- Short lead-times

## **Detectable gases**

• Carbon monoxide CO 1 – 1000ppm Ethanol  $C_2H_5OH$ 10 - 500ppm Hydrogen 1 – 1000ppm

1 – 500ppm • Ammonia NH<sub>3</sub>

 Methane  $CH_{4}$ >1000ppm



Continuous power ON, 25°C, 50% RH

## For more information please contact:

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## Performance sensor

Characteristic RED sensor	Symbol	Тур	Min	Max	Unit
Sensing resistance in air (see note 1)	R <sub>0</sub>	-	100	1500	kΩ
Typical CO detection range	FS		1	1000	ppm
Sensitivity factor (see note 2)	S <sub>60</sub>	-	1.2	50	-

#### Notes:

- 1. Sensing resistance in air  $R_0$  is measured under controlled ambient conditions, i.e. synthetic air at 23  $\pm 5^{\circ}$ C and 50  $\pm$  10% RH. Sampling test.
- 2. Sensitivity factor is defined as Rs in air divided by Rs at 60 ppm CO. Test conditions are  $23 \pm 5$ °C and  $50 \pm 10$ % 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.