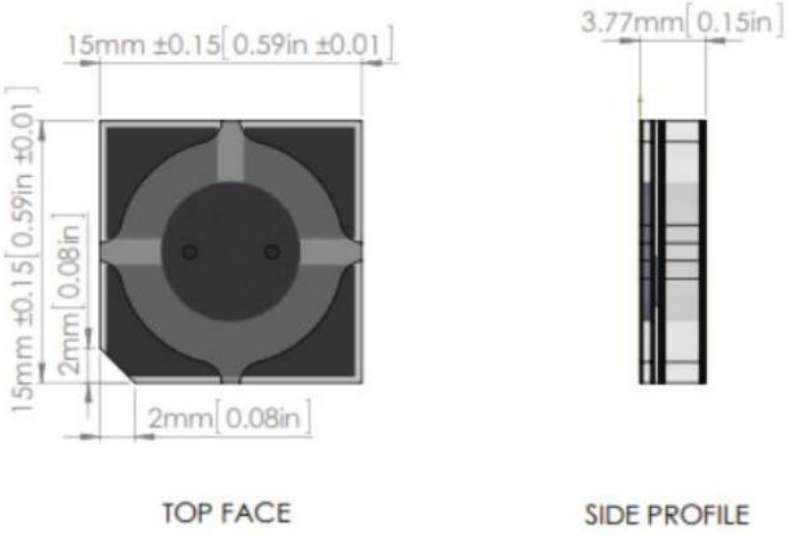
3SP_SO2_20

Screen Printed Sulfur Dioxide Sensor 20 PPM



merit

- Small size, low profile (15x15x3.8mm)
- Long life (10 years life expectancy)
- Quick response (typically 15 seconds)
- Long-term stability (overload 50 ppm)
- Low power consumption (0 mW @ 0 mV bias)
- Individual calibration
- accord with ROHS

apply

- Air quality monitoring
- industrial safety
- Air purification monitoring

Brief Introduction

The Screen Printed Electrochemical Sensor Technology (SPEC Sensor™) revolutionizes the industry by enabling innovative applications in safety monitoring for both industrial and consumer sectors. These sensors deliver the performance of premium electrochemical components at a fraction of the cost. Their ultra-thin profile and compact design allow seamless integration into wireless, portable, and IoT-enabled solutions. Combining high performance, cost efficiency, and space-saving advantages, SPEC sensors are ideal for healthcare monitoring, environmental surveillance, industrial processes, and residential safety systems.

range	0~20 ppm
consistency	<3% Readings
response time	<30s (generally 15
sensitivity	s) 30+/-5nA/ppm
Maximum overload (1 hour, reference EN20291-1)	50 ppm
life expectancy	> 5 years (10 years @ 23±3°C; 40±10% RH)
working temperature	-40~50℃ (recommended-20~40℃)
Working humidity (non-condensing)	0~100%RH (recommended 15~95%RH)

Temperature Effect

Temperature fluctuations can be predicted and compensated for with ease. The figure below illustrates the typical temperature characteristics of the 3SP_CO_1000 sensor under sustained relative humidity conditions of 40-50%. As evidenced by the consistent and repeatable effects observed, implementing appropriate thermistors or firmware compensation proves straightforward.

Note: *Variations in sulfur dioxide sensors are different from this, but they can be easily compensated.*