

Ozone Gas Sensor

Product Data Sheet Model #SB-403-1

2025. Ver 1.0

Applications & Features

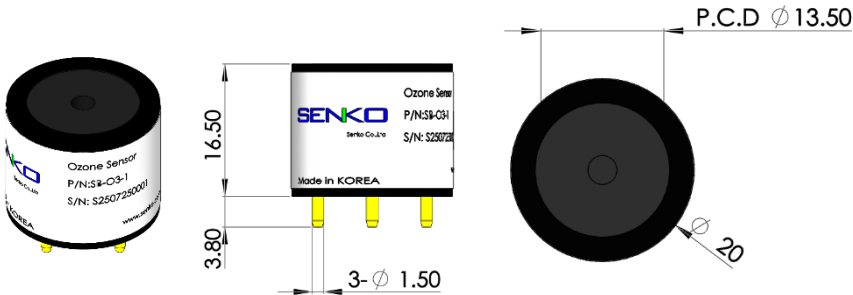
- Portable and fixed gas detectors
- Semiconductor industry
- High sensitivity
- Fast response and recovery



Specifications

Performance Characteristics	
Output Signal	2500 ± 1000 nA / ppm
Typical Baseline Range (pure air, @ 20 °C)	≤ ±0.03 ppm O ₃ equivalent
Baseline Shift (-20 °C ~50 °C)	≤ ±0.1 ppm Typical
Response Time (T90)	< 25 seconds
Measurement Range	0 - 1 ppm
Maximum Overload	5 ppm
Linearity	Linear
Repeatability	< ±5 % of signal
Recommended Load Resistor	10 ohms
Resolution (Electronics Dependent)	< 0.02 ppm typical
Bias Voltage	Not required
Environmental	
Temperature Range Continuous	-20 °C to +40 °C
Pressure Range	800 to 1200 mbar
Operating Humidity Range	15 % to 90 % RH
Lifetime	
Long Term Output Drift	< 5 % per annum
Recommended Storage Temp	0 °C to 20 °C
Expected Operating Life	> 24 months in air
Standard Warranty	12 months from date of dispatch
Intrinsic Safety Data	
Maximum at 10 ppm	35 µA
Maximum o/c Voltage	<1.0 V
Maximum s/c Current	<0.1 A

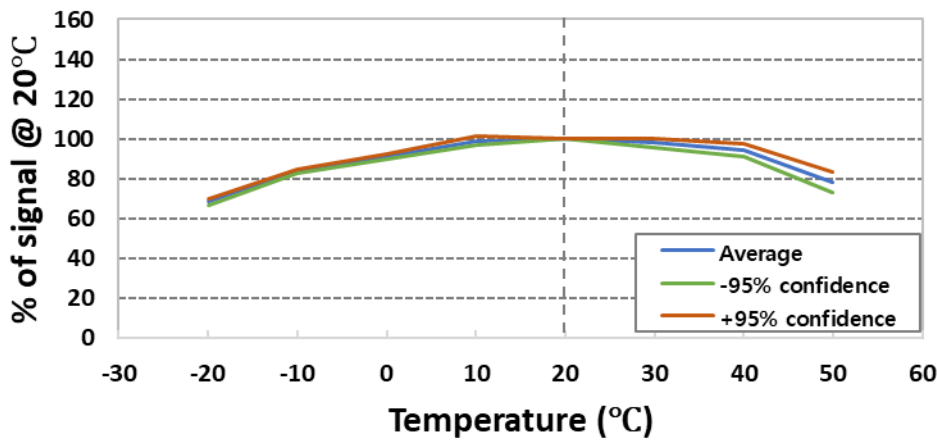
Dimension



Due to ongoing research and product improvement, specifications are subject to change without notice

Temperature Effects

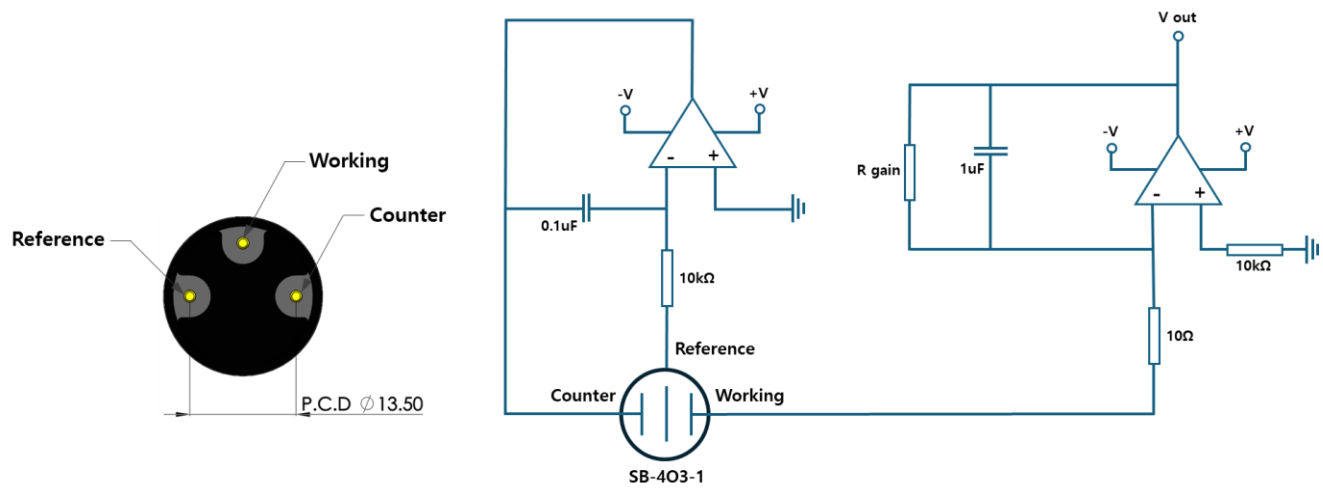
Output Temperature Coefficient Data



Cross Sensitivity

Gas	Concentration [ppm]	Reading [ppm]	Gas	Concentration [ppm]	Reading [ppm]
Carbon monoxide	100	0.0	Nitric dioxide	10	< 6.2
Hydrogen	500	0.0	Hydrogen cyanide	10	< 0.3
Carbon dioxide	5000	0.0	Nitric oxide	100	0.0
Isopropyl alcohol	20	0.0	Sulfur dioxide	20	0.0
Hydrogen chloride	10	< -5.7	Hydrogen sulfide	50	< -6.1
Chlorine	10	< 0.2	Ammonia	100	0.0
Hydrogen fluoride	10	0.0	Ethanol	200	0.0

Standard Operating Circuit



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