

Sulfur Dioxide Gas Sensor

Product Data Sheet Model #SE-4SO2-20-F

2025. Ver 1.1

Applications & Features

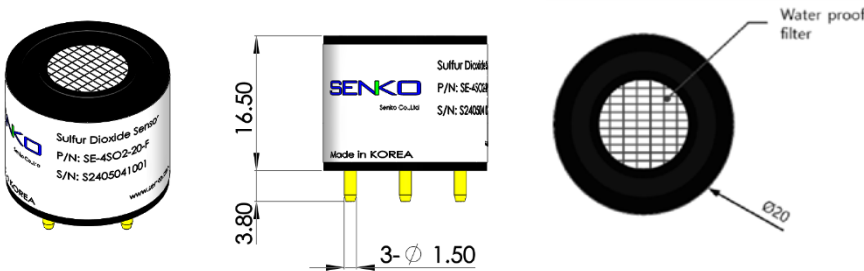
- Ideal for portable and fixed gas detector
- Industrial safety (ambient air monitoring applications)
- Automotive
- Filter for removing H₂S interference



Specifications

Performance Characteristics	
Output Signal	250±100 nA / ppm
Typical Baseline Range (pure air, @ 20°C)	≤ ±0.5 ppm SO ₂ equivalent
Response Time (T90)	< 60 seconds
Filter	1000 ppm·hours capacity for removing H ₂ S
Measurement Range	0-20 ppm
Maximum Overload	100 ppm
Linearity	Linear
Repeatability	< ±10% of signal
Recommended Load Resistor	10 ohms
Resolution (Electronics Dependent)	< 0.1 ppm typical
Bias Voltage	Not required
Environmental	
Temperature Range Continuous	-20°C to +50°C
Pressure Range	800 to 1200 mbar
Operating Humidity Range	15% to 90% RH
Lifetime	
Long Term Output Drift	< 10% per annum
Recommended Storage Temp	0°C to 20°C
Expected Operating Life	> 24 months in air
Standard Warranty	24 months from date of dispatch
Intrinsic Safety Data	
Maximum at 100 ppm	30 µA
Maximum o/c Voltage	< 1.0 V
Maximum s/c Current	< 0.1 A

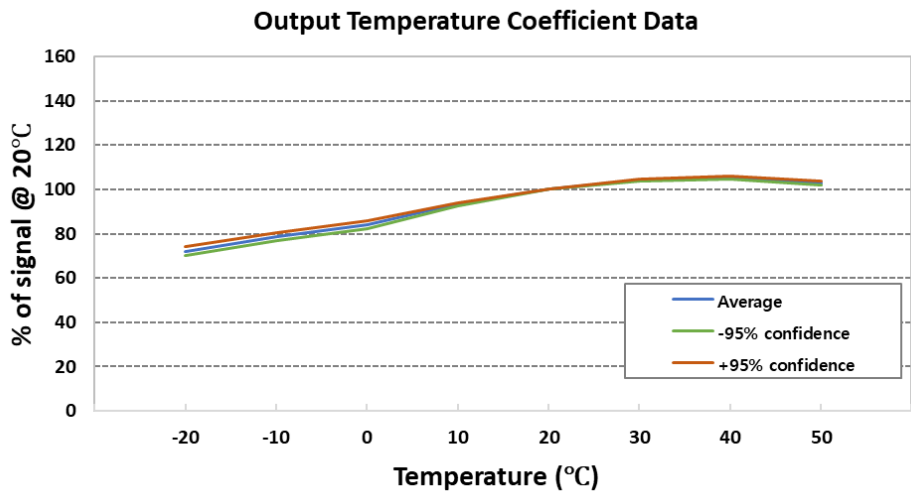
Dimension



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

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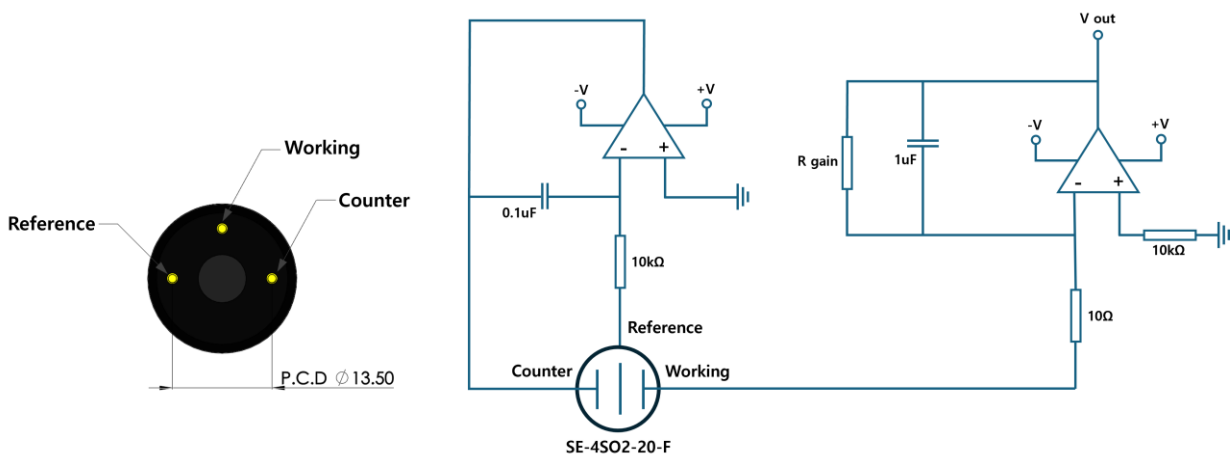
Temperature Effects



Cross Sensitivity

Gas	Concentration [ppm]	Reading [ppm]	Gas	Concentration [ppm]	Reading [ppm]
Sulfur Dioxide	20	20	Carbon Monoxide	100	-0.1
Nitric Dioxide	50	-70	Hydrogen	500	0
Hydrogen Sulfide	25	0	Hydrogen Cyanide	10	6
Ethylene	67.5	0.1	Ammonia	50	0
Chlorine	10	0.1	Nitric Oxide	100	-0.1
Acetylene	60	8			

Standard Operating Circuit



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