

Hydrogen Chloride Gas Sensor

Product Data Sheet
Model #SS2188

2024. Ver 1.0

Applications & Features

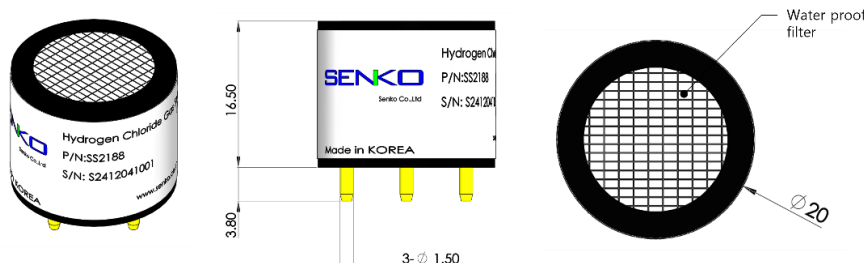
- Portable and fixed gas detectors
- Leakage and TLV-monitoring
- Semiconductor industry
- Fast response and stable baseline



Specifications

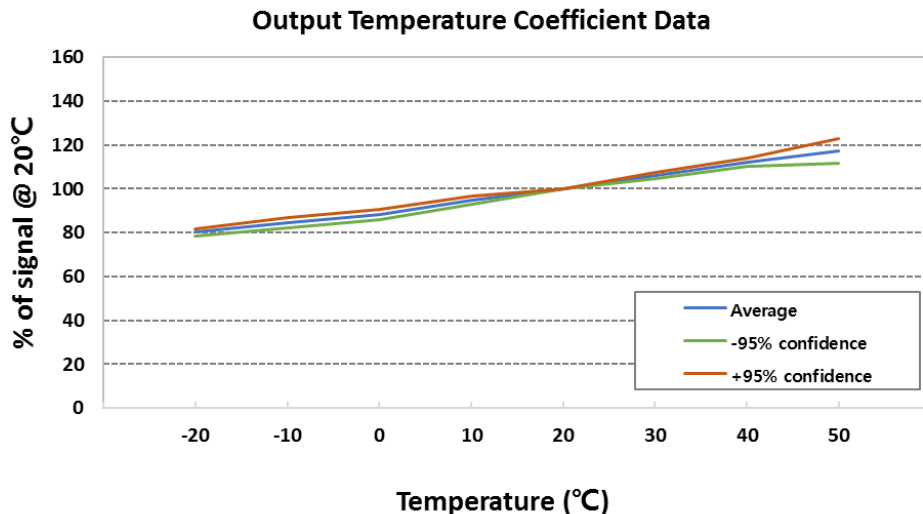
Performance Characteristics	
Output Signal	200±50 nA / ppm
Typical Baseline Range (pure air, @ 20°C)	≤ ±0.5 ppm HCl equivalent
Baseline Shift (-20°C ~50°C)	≤ ±2 ppm typical
Response Time (T90)	< 50 seconds
Filter	None
Measurement Range	0-20 ppm
Maximum Overload	40 ppm
Linearity	Linear
Repeatability	< ±2% of signal
Recommended Load Resistor	10 ohms
Resolution (Electronics Dependent)	< 0.5 ppm typical
Bias Voltage	0 mV
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	< 5% 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 40 ppm	10 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.

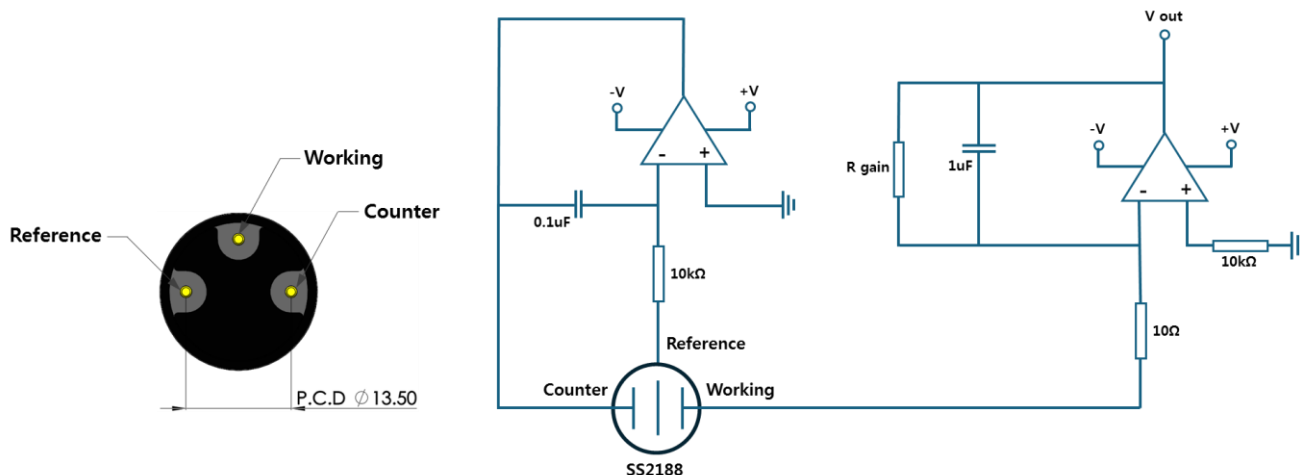
Temperature Effects



Cross Sensitivity

Gas	Concentration [ppm]	Reading [ppm]	Gas	Concentration [ppm]	Reading [ppm]
Hydrogen Chloride	10	10	Nitric oxide	100	< 0.4
Carbon Monoxide	100	< 0.8	Chlorine	10	< -0.8
Hydrogen	500	< 0.7	Nitric Dioxide	50	< -80
Ammonia	100	< 0.8	Phosgene	5	< 1.0
Sulfur Dioxide	20	< 0.9	Hydrogen Sulfide	50	< 108

Standard Operating Circuit



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