

Oxygen Sensor(O₂) Gas Sensor

Product Data Sheet
Model #SS2118

Applications

- Ideal for portable & fixed gas detectors
- Industry safety (ambient air monitoring applications)
- Etc.



Specification

PERFORMANCE	Output	μA @ 20.9% O ₂	80 to 120
	Response time	t ₉₀ (s) from 20.9% to 0% O ₂	< 15
	Zero current	μA in N ₂	< 2
	Linearity	% O ₂ deviation @ 10% O ₂	0.6

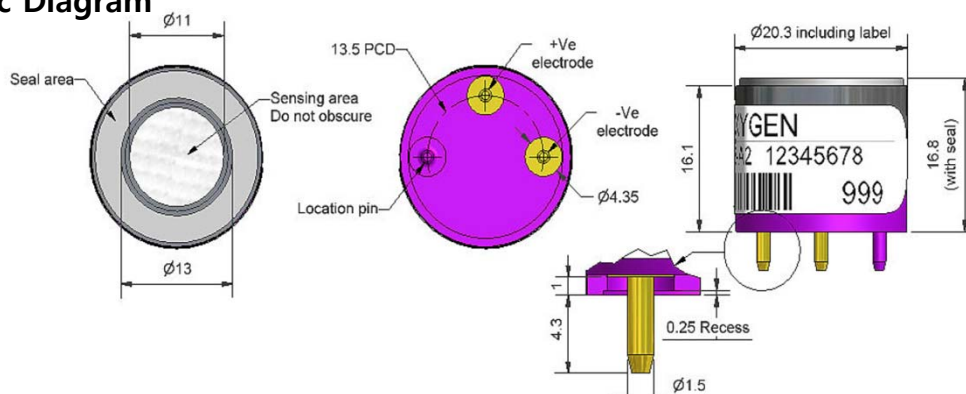
LIFETIME	Output drift	% change in output @ 3 months	< 1
	Operating life	months until 85% original output of 20.9% O ₂	> 24

ENVIRONMENTAL	Humidity Sensitivity	% O ₂ change: 0% to 95% rh @ 40°C	< 0.7
	CO ₂ sensitivity	% (change O ₂ reading) / % CO ₂ @ 5% CO ₂	0.1
	Pressure sensitivity	(% change of output)/(% change of pressure) @ 20kPa	< 0.1

KEY SPECIFICATIONS

Temperature range	°C	-30 to 55
Pressure range	kPa	80 to 120
Humidity range	% rh continuous (0 to 99% rh short term)	5 to 95
Storage period	months @ 3 to 20°C (store in sealed pot, open circuit)	6
Load resistor	Ω (recommended)	47 to 100
Diameter	mm (including label)	20.0
Height	mm (including foam ring)	16.8
Weight	g	< 16

Schematic Diagram



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

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Temperature effects

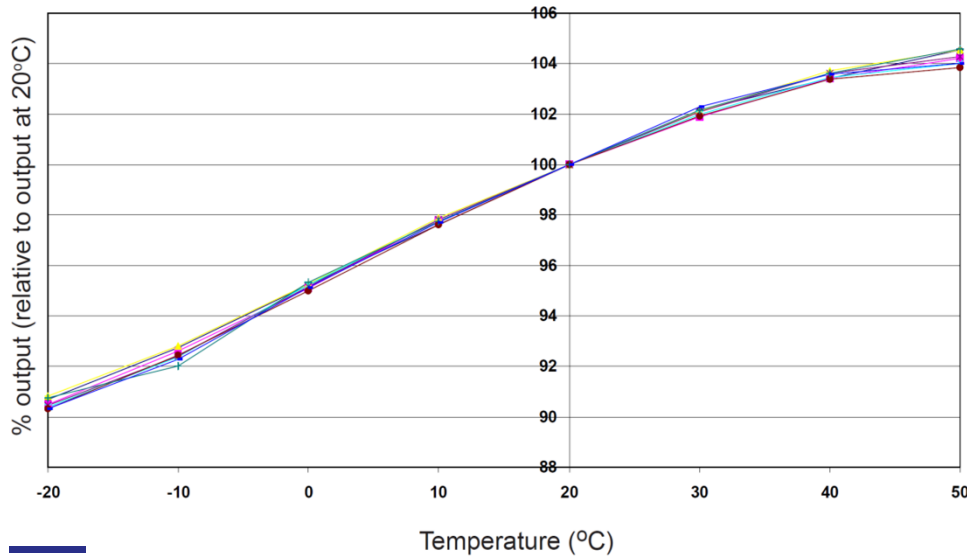
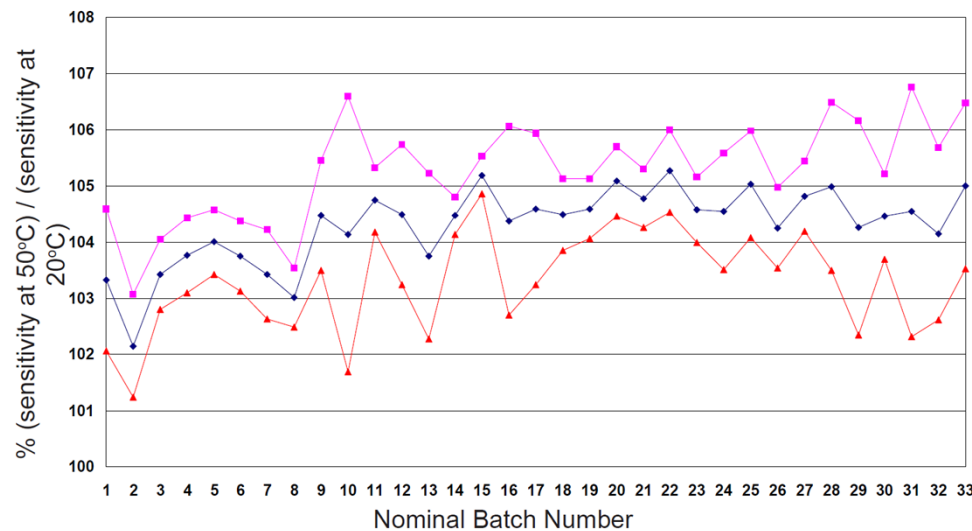


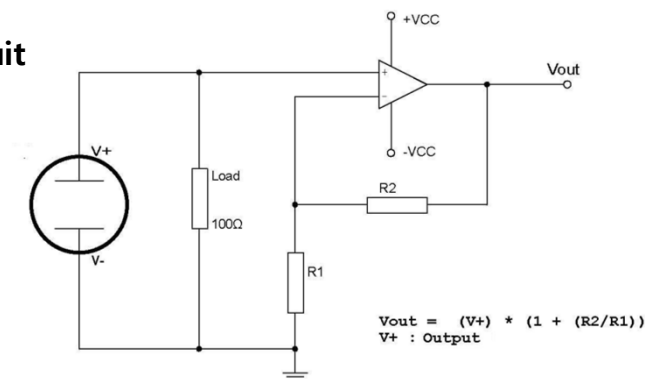
Figure 2 shows the variation in sensitivity caused by changes in temperature.

Sensitivity at 50 °C



This plot of the mean and $\pm 95\%$ confidence intervals for 34 batches shows superior repeatability of the sensitivity dependence from batch to batch, giving confidence when setting temperature compensation in your gas detector.

Standard operation circuit



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