Classic Line 4-ClO_2-50 Sensor

SolidsenSe Gas Sensors

Chlorine Dioxide Sensor 0-50 ppm

Performance Characteristics

Part Number	CLE-0851-400
Nominal Range	0 to 50 ppm
Sensitivity	0.40 ± 0.18 µA/ppm
Baseline (20°C)	< ± 0.02 µA
Baseline Drift (-20 to 40 °C)	0 to -0.3 ppm equivalent
Resolution	0.05 ppm
Response Time (T_{90})	≤ 60 seconds
Linearity	Linear
Long Term Output Drift	< 2% signal/month

Operation Conditions

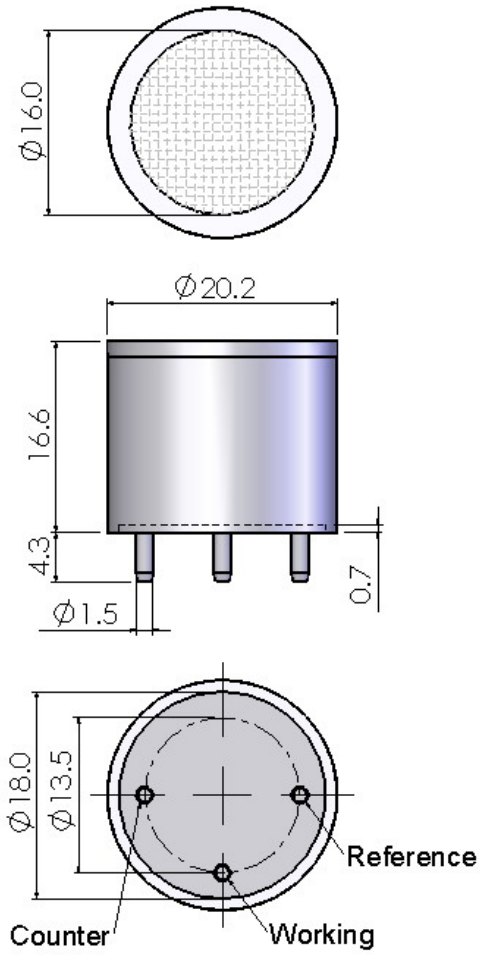
Temperature Range	-20 °C to 50 °C
Operating Humidity	15 to 90%RH condensing
Pressure Range	90 to 110 kPa
Bias Potential	0 mV
Storage Life	6 months in sealed container
Storage Temperature	0 to 20°C
Expected Operating Life	2 years in air
Warranty	12 months from date of despatch

Physical Characteristics

Weight	5 g (approx)
Orientation Sensitivity	None

Note: All performance specifications are based upon the following environment conditions: 20 °C, 50% relative humidity and 1 atm (1013 mBar or ambient pressure).

Outline Dimensions



All dimensions are in millimeters.
All tolerances are ±0.2mm.

Note: PCB sockets are recommended for the sensor pin connection. Soldering to the sensor should be avoided.

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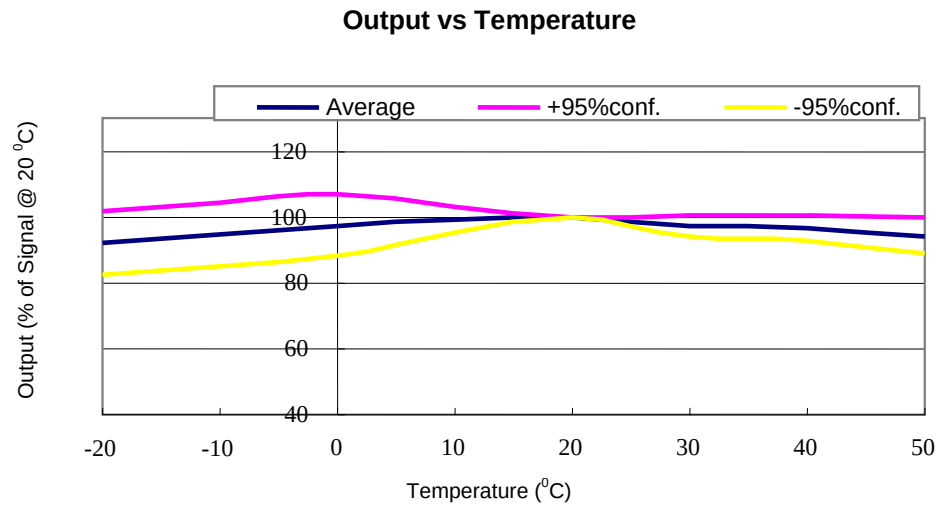
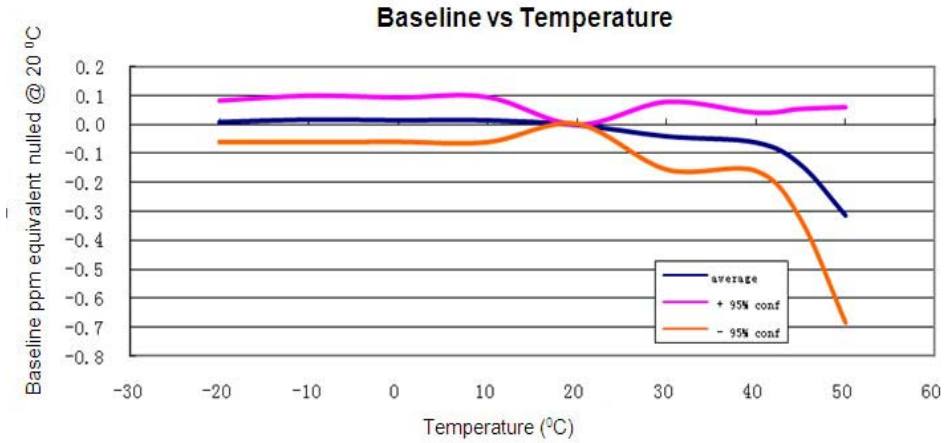
Temperature Dependence





Cross-sensitivity Data

Gas	Concentration (ppm)	Output Signal (ppm ClO_2 equivalent)
Hydrogen Sulfide	20	-4.5
Isobutylene	5000	0
Nitrogen Dioxide	10	13.5
Hydrogen	3000	0
Carbon Monoxide	100	0
Carbon Dioxide	5000	0
Chlorine	10	12

Notes:
1. Calibration with cross sensitivity gas is not recommended.
2. The cross sensitivity may fluctuate between +/- 30% and may differ from batch to batch or from sensor's life time.
3. The cross sensitivities are including but not limited to the above gases . It may also respond to other gases.

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