



## Electrochemical Ozone Sensor

# O3-MD-900H



### Specifications

#### Sensitivity Characteristics

Detection Gas	Ozone
Detection Range	0 ~ 10 ppm
Maximum Overload	50 ppm
Output Signal	900 ± 350 nA/ppm
Repeatability	± 2 %
Resolution	0.03ppm (typical)
Typical Baseline Range (pure air)	< ± 0.1ppm
Typical Response Time (t90)	< 60 sec
Baseline Shift (20 ~ 40 degree C)	< 0.07ppm
Long Term Output Drift	< 2% / month
Expected Life Time	2 years

Performance data conditions: 20°C, 50%RH and 1013mBar, using MGK SENSOR recommended circuitry.

#### Operating Conditions

Operating Temperature	- 20 ~ 50°C
Operating Humidity	15 ~ 90 % RH
Operating Pressure Range	1atm ± 10 %
Recommended Load Resistor	33 Ω
Bias Voltage	Not required
Position Sensitivity	None
Recommended Storage Temp.	0 ~ 20°C
Storage Life	Less than 6 months

#### Physical Characteristics

Cap Color	Dark green
Weight	4.5 g (approx.)

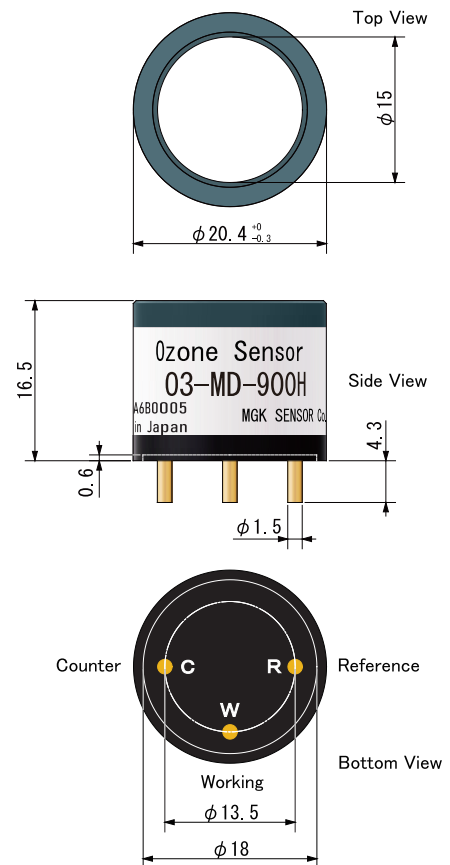
#### Typical Cross Sensitivities

Gas	Concentration (ppm)	Typical Nitrogen Dioxide Concentration (ppm) Equivalent
Ozone	5	5
Hydrogen	500	0
Carbon Monoxide	300	0
Carbon Dioxide	5,000	0
Sulphur Dioxide	5	0
Hydrogen Sulfide	10	-2
Nitrogen Dioxide	10	10
Nitric Oxide	30	0
Ethanol	100	0
Chlorine	1	1
Ethylene	100	0

### Design Features

- High Sensitivity
- Excellent Selectivity
- Linearity
- Stability
- High Reliability
- Perfect Leak-proof Structure

### Appearance and Dimensions



All dimensions in mm

All tolerance  $\pm 0.1$  mm unless otherwise stated

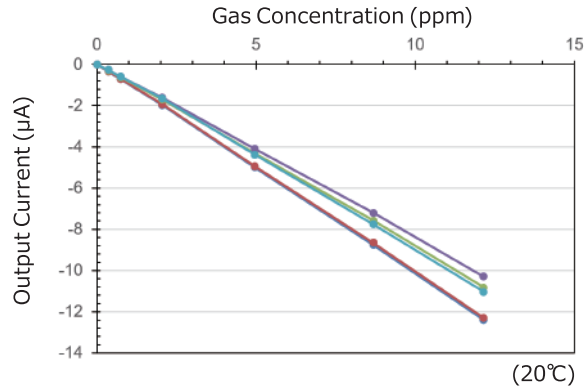
NOTE: Do not solder to electrode pins. Use exclusive sockets. Do not blow organic solvents, paints, chemical agents, oils or high concentration gases onto sensor.

#### NOTE: O3-MD-900H DN201002-01

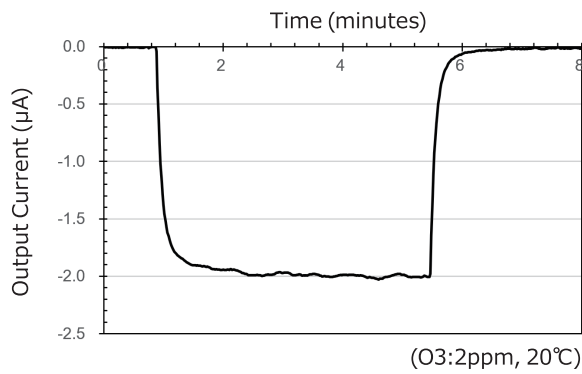
As the products may be use outside control of MGK SENSOR, the information provided is given without legal responsibility. Customer should test under their own conditions, to ensure that the sensors are suitable for their own requirements. In accordance with the company' s policy of continued product improvement, MGK SENSOR reserves the right to make product changes without notice.

# Typical Characteristics

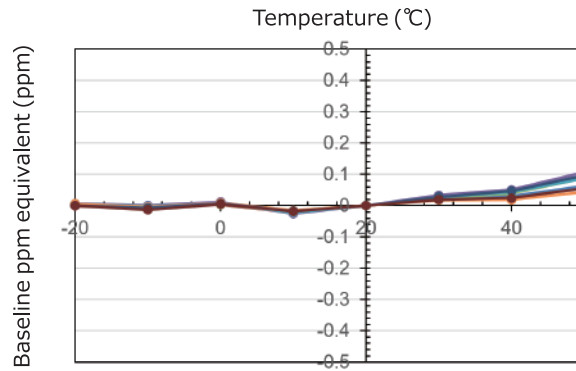
## Linearity



## Response and Recovery



## Baseline Shift



## Temperature Dependency

