



# Electrochemical Sulfur Dioxide Sensor

## SO2-MD-200



### Design Features

- Measurement for High Concentration
- Excellent Selectivity
- Linearity
- Stability
- High Reliability
- Perfect Leak-proof Structure

### Specifications

#### Sensitivity Characteristics

Detection Gas	Sulfur Dioxide
Detection Range	0 ~ 100ppm
Maximum Overload	500ppm
Output Signal	200 ± 50 nA/ppm
Repeatability	± 2%
Resolution	0.2ppm
Typical Baseline Range (pure air)	-0.5ppm to +1.5ppm
Typical Response Time (t90)	< 30seconds
Baseline Shift (-20 ~ 40°C)	< 0.5ppm
Long Term Output Drift	< 2% / month
Expected Life Time	> 2years

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

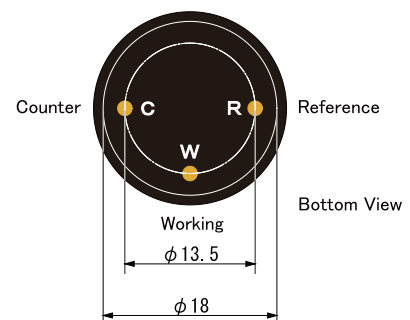
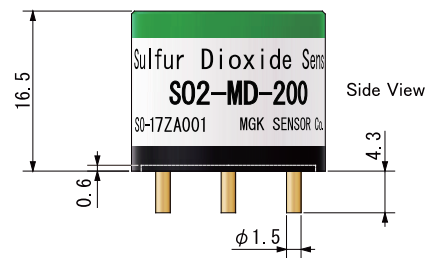
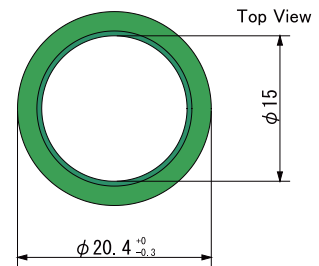
### Operating Conditions

Operating Temperature	-30 ~ 50°C
Operating Humidity	15 ~ 90% RH
Operating Pressure Range	Atmospheric ± 10%
Recommended Load Resistor	10Ω
Bias Voltage	0mV
Position Sensitivity	None
Recommended Storage Temp.	0 ~ 20°C
Storage Life	6months

### Physical Characteristics

Cap Color	Green
Weight	4.5 g (approx.)

### Appearance and Dimensions



All dimensions in mm

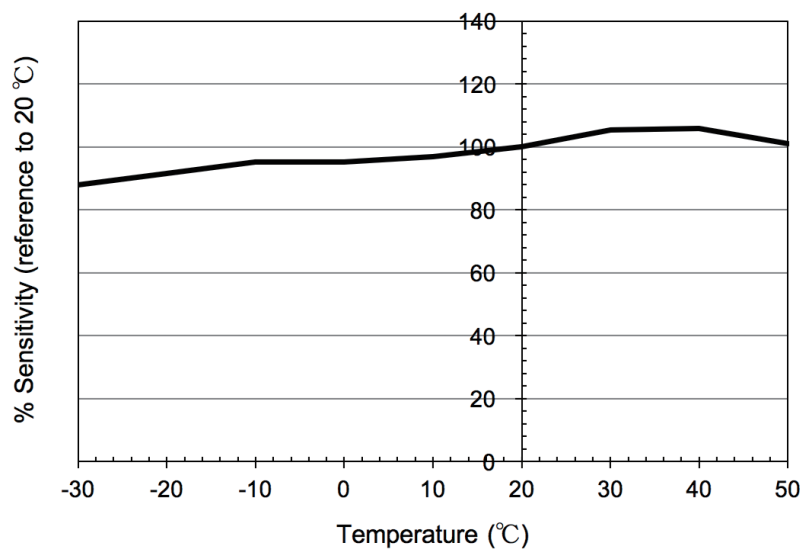
All tolerance +/-0.1 mm unless otherwise stated

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.

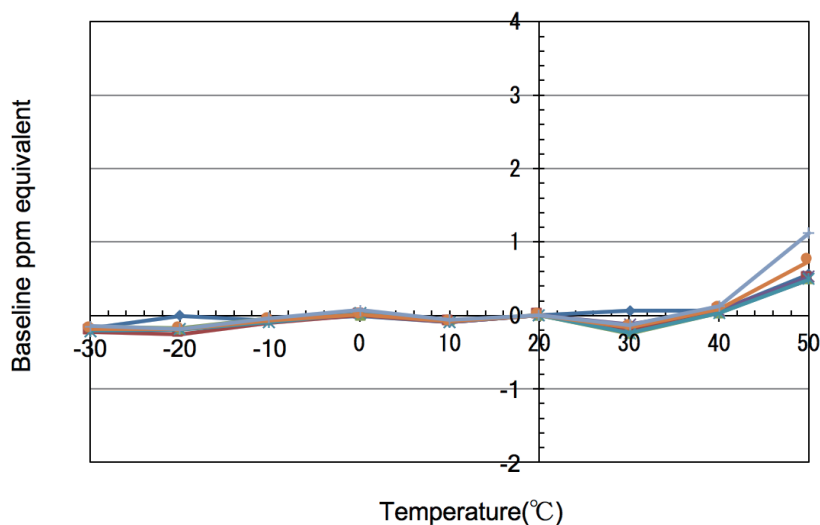
## Typical Cross Sensitivities

Gas	Concentration (ppm)	Typical Sulfur Dioxide Concentration (ppm) Equivalent
Sulfur Dioxide	100	100
Carbon Monoxide	300	< 1.5
Carbon Dioxide	5000	0
Hydrogen	400	< 1
Hydrogen Sulfide	15	0
Nitric Oxide	50	0
Nitrogen Dioxide	10	-10
Ammonia	20	0
Chlorine	5	-2

## Temperature Dependency



## Baseline Shift



**NOTE:** SO2-MD-200 DN-2062 Jun. 2015

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.

