

### • Description

This Sulfur Dioxide (SO<sub>2</sub>) sensor has a fast response time T<sub>90</sub> that is less than 20 seconds. It can be used as a pin-to-pin replacement for the standard 7-series electrochemical Sulfur Dioxide sensors made by other manufacturers.

### • Performance Characteristics

Nominal Range:	0 ~ 100 ppm
Maximum Overload:	500 ppm
Sensitivity (20°C):	0.37 ± 0.07 µA/ppm
Response Time (T <sub>90</sub> ):	≤ 20 s
Zero Signal (20°C):	< ±0.4 µA
Baseline Shift (-20°C ~ 50°C):	< 3 ppm
Resolution:	0.05 ppm
Linearity:	Linear up to 100 ppm
Bias Voltage:	0 mV

### • Environmental

Temperature Range:	-20°C ~ 50°C
Pressure Range:	1 ± 0.1 atm
Humidity Range:	15% ~ 90%RH non-condensing

### • Life Time

Long Time Output Drift:	< 2% signal/month
Recommended Storage Temp:	10°C ~ 30°C
Expected Operating Life:	2 years in clean air
Storage Life:	6 months in original packaging
Warranty:	12 months

### • Intrinsic Safety Data

Max. Current at 500ppm SO <sub>2</sub> :	< 0.2 mA
Max. O/C Voltage:	1.3 V
Max. S/C Current:	< 1.0 A

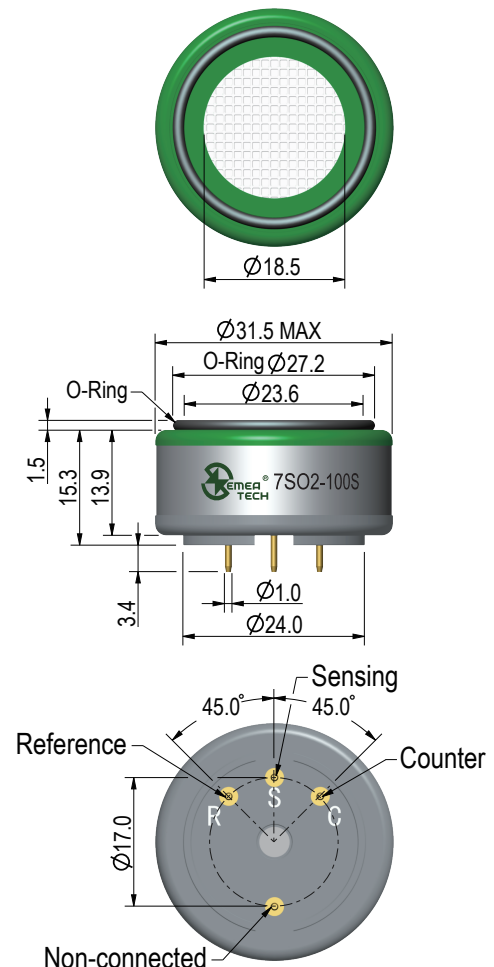
### • Physical Characteristics

Housing Material:	ABS
Weight (Nominal):	8 g
RoHS Compliance	

### • Installation

Output signals from the sensor pins are different. Inappropriate use of the pins in product design will affect the sensor functionality. Exposure to high concentrations of solvent vapors should be avoided under any condition. Mechanical overstress may cause deformation or cracks of the plastic enclosure of the sensor. If the sensor is used in extreme environmental conditions, please contact us for more details.

### • Product Dimensions



All dimensions in mm  
All tolerances ±0.20mm unless otherwise stated

### • Note

The performance data in this document are conducted by using SemeaTech recommended test circuitry and test environment at 20°C, 50%RH and 1 atm. Sensor performance varies under different environmental conditions. Please contact us if you need more details.

