

TGS821 hydrogen gas sensor

characteristic :

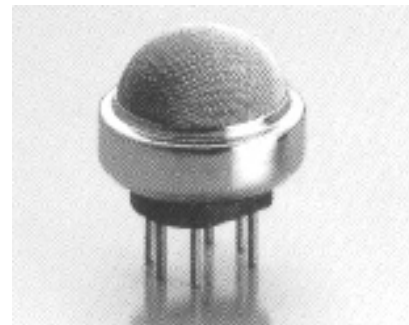
- * High sensitivity and selectivity to hydrogen
- * Good repeatability of detection
- * Simple application circuit
- * Ceramic base can adapt to harsh environment

apply :

- * Hydrogen detection for the following purposes
 - Transformer maintenance
 - cell
 - iron and steel industry
 - other

The Faguo sensor's sensitive element is constructed from tin dioxide (SnO_2) semiconductor. In clean air, it exhibits low conductivity. When detecting gases in the air, the gas concentration increases proportionally with the sensor's conductivity. Through a simple circuit design, these conductivity changes can be converted into corresponding signal outputs that indicate the gas concentration.

TGS821 has high sensitivity and selectivity to hydrogen, which can detect hydrogen concentration as low as 50ppm, and can be widely used in various industrial needs.

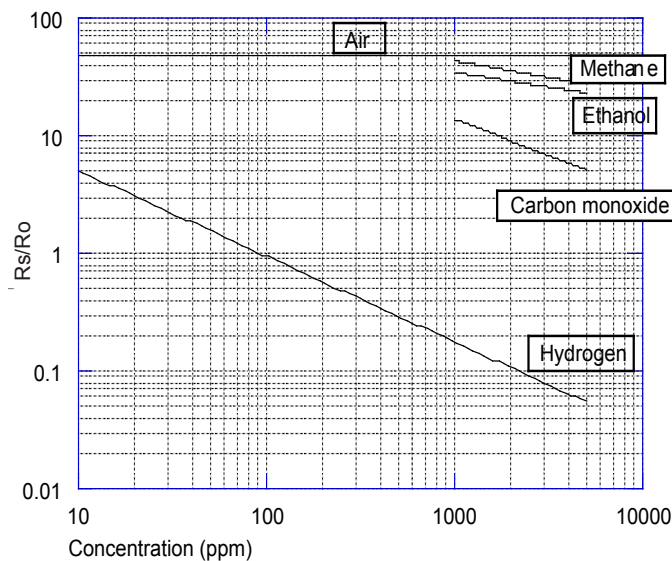


Sensitivity characteristics:

The following figure shows the typical sensitivity characteristic curve, which was measured under our company's standard test conditions (see back).

The vertical axis shows the sensor resistance ratio R_s / R_o , where R_s and R_o are defined as follows:

R_s = Sensor resistance in various gas concentrations
 R_o = 100ppm hydrogen sensor resistance



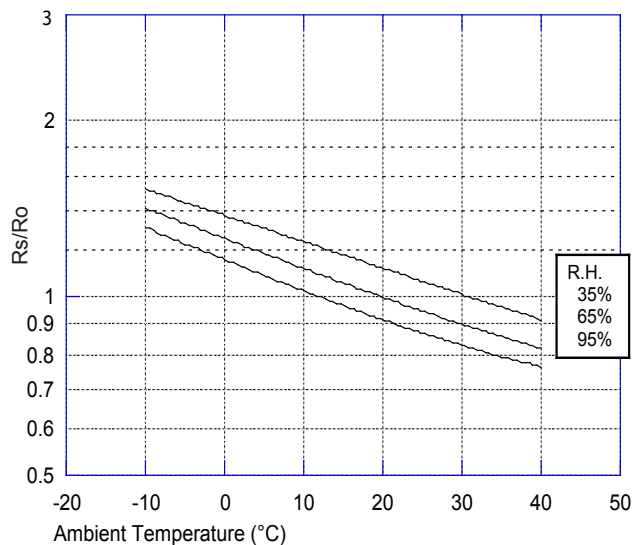
Temperature and humidity characteristics:

The following figure shows the representative characteristic curve affected by temperature and humidity.

The vertical axis shows the sensor resistance ratio R_s / R_o , where R_s and R_o are defined as follows:

R_s = Resistance value of the sensor at various temperature and humidity in 100ppm hydrogen

R_o = resistance value of the sensor in 100ppm hydrogen, temperature and humidity of 20°C, 65% R.H



Important Notice: The application conditions for Feigaro sensors may vary depending on specific customer requirements. Feigaro strongly recommends consulting our technical team prior to use, particularly when the detected gas is not listed. Feigaro assumes no liability for any usage that has not undergone professional testing by Feigaro.

