

# TGS822TF

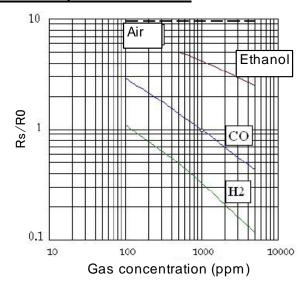
## **Specifications**

Model No.			TGS822TF	
Туре			8 type	
Target gas			Coal gas which includes H2 and CO	
Test gas			H2	
Detection range			200 to 5,000ppm	
Standard circuit conditions	Heater voltage	VH	5.0+/-0.2V DC/AC	
	Circuit voltage	VC	MAX 24V	Ps<15mW
	Load resistance	RL	Variable	Ps<15mW
	Heater resistance	RH	$38+/-3.0\Omega$ at room temp.	
Electrical characteristics under standard test conditions	Heater power	PH	660+/-55mW	
	consumption		at VH=5.0V	
	Sensor resistance	Rs	1 to 12kΩ in 300ppm H2	
	Sensitivity (change ratio of Rs)		0.4 to 0.63	Rs(H2: 300ppm)
				Rs(H2:100ppm)
Standard test conditions	Test conditions		20+/-2°C, 65+/-5%RH	
	Circuit conditions		VC=10.0+/-0.1V DC/AC	
			VH=5.0+/-0.05V DC/AC	
	Conditioning period before test		7 days or more	

#### **Appearance**

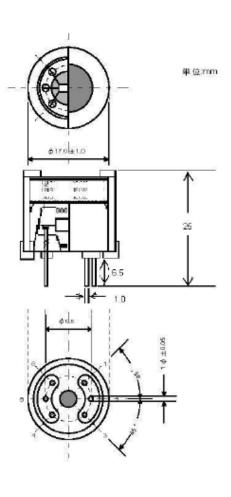


## **Sensitivity characteristics**



Rs = Sensor resistance in displayed gases at various concentrations Ro = Sensor resistance in 1000ppm of CO

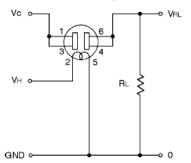
### Structure and dimensions



#### Pin Connection and Basic Measuring Circuit:

The numbers shown around the sensor symbol in the circuit diagram at the right correspond with the pin numbers shown in the sensor's structure drawing (above). When the sensor is connected as shown in the basic circuit, output across the Load Resistor ( $V_{RL}$ ) increases as the sensor's resistance (Rs) decreases, depending on gas concentration.

#### Basic Measuring Circuit:



Figaro Engineering Inc. www.figaro.co.jp

1-5-11 Senba-nishi, Mino, Osaka 562-8505 JAPAN Tel: (81)-72-728-2561 Fax: (81)-72-728-0467

E-mail: figaro@figaro.co.jp

Dec. 2012