

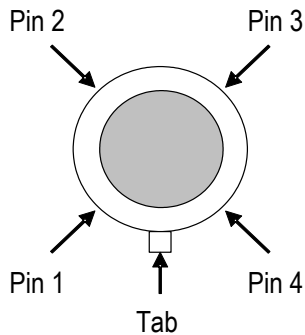
---

## List of Tables

Table 1.	Pin Descriptions.....	4
Table 2.	Electrical Specifications.....	4
Table 3.	Temperature Specifications.....	5
Table 4.	Maximum ESD Ratings .....	13
Table 5.	Mechanical Stress Test Conditions .....	13

## 1. Pin Assignments

**Figure 2. Pin Assignments for SGAS711 – Top View**



## 2. Pin Descriptions

**Table 1. Pin Descriptions**

Note: See Figure 4 for the connections described below.

Pin Number	Name	Description
1	Heater +	Positive input for $V_H$ heater voltage supply
2	Sensor +	High-side of resistive sensor element; positive input for sensing voltage $V_C$
3	Heater –	Negative input for $V_H$ heater voltage supply (ground)
4	Sensor –	Low-side of resistive sensor element; connects to middle of resistor divider circuit to produce sensing voltage output ( $V_{OUT}$ )

## 3. Sensor Specifications

Note: All measurements were made in dry gas at room temperature. Specifications are subject to change.

**Table 2. Electrical Specifications**

Symbol	Parameter	Conditions	Minimum	Typical	Maximum	Units
$P_H$	Heater Power Consumption	$V_H = 7.0V$		900		mW
$V_H$	Recommended Heater Voltage	$T_{SENSOR} = 300^{\circ}C$		7.0		VDC
$R_H$	Heater Resistance	At room temperature	28	30	32	$\Omega$
$V_C$	Recommended Sensing Voltage		2.5		5.0	VDC
$R_{1000}$	Resistance at 1000ppm Methane ( $CH_4$ )		10		1000	k $\Omega$
$R_{1000}/R_{2500}$	Resolution: Resistance in 1000ppm/ Resistance in 2500ppm		1.2			