

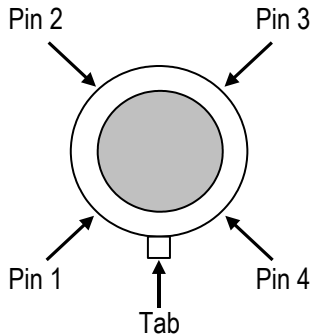
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## 1. Pin Assignments

**Figure 2. Pin Assignments for SGAS701 – Top View**



## 2. Pin Descriptions

**Table 1. Pin Descriptions**

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 (ground) input for $V_H$ heater voltage supply
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	$V_H = 5.4V$		600		mW
$V_H$	Recommended heater voltage	$T_{SENSOR} = 240^{\circ}C$		5.4		VDC
$R_H$	Heater resistance	At room temperature	28	30	32	$\Omega$
$V_C$	Recommended sensing voltage		2.5		5.0	VDC
$R_{10}$	Resistance in 10ppm $H_2$		30		3000	k $\Omega$
$R_{100}$	Resistance in 100ppm $H_2$		10		1000	k $\Omega$
$R_{50} / R_{100}$	Resolution: Resistance in 50 ppm / Resistance in 100 ppm		> 1.2			