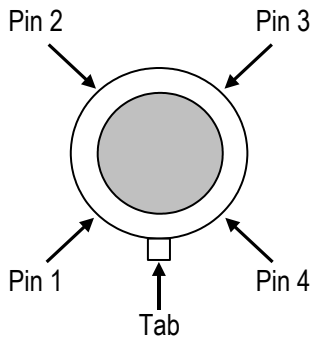

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1. Pin Assignments

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 | Ω |
| V_C | Recommended sensing voltage | | 2.5 | | 5.0 | VDC |
| R_{10} | Resistance in 10ppm H_2 | | 30 | | 3000 | k Ω |
| R_{100} | Resistance in 100ppm H_2 | | 10 | | 1000 | k Ω |
| R_{50} / R_{100} | Resolution: Resistance in 50 ppm / Resistance in 100 ppm | | > 1.2 | | | |