# Model 621: Temperature Manifold Air Pressure(TMAP)

## FEATURES

- 0.2 to 1.0 bar,0.2 to 2.0 bar, 0.2 to 3.0 bar
- 1.5％FS Static Accuracy
- MEMS technology
- Programmable ASIC to meet customer specifications
- Low part count enhances reliability
- Amplified and temperature compensated
- EMI protection
- Combination of pressure and temperature sensor(MAP/MAT)

—MAP sensor precision with reliable thermistor output

—Two-in-one sensor yields cost reduction and space savings w/one fewer component, wire and connector

## DESCRIPTIONS

621 incorporates MEMS technology and custom Application Specific Integrated Circuit (ASIC)technology in the design. It is specifically designed for tough automotive application.

The Temperature Manifold Air Pressure sensors in Model 621 provide tow separate outputs critical to air/fuel ratio optimization:

One voltage output proportional to engine intake manifold pressure

One resistance output proportional to manifold air temperature

Model 621 is designed to perform in the underhood harsh environment such as temperature extremes,vibration, thermal and mechanical shock, and corrosive chemical. Please contact us for special design to meet your requirements.

## SENSOR SPECIFICATIONS

**Electrical:**

| | |
|---|---|
| Supply Voltage | 5.0 ± 0.5VDC |
| Supply Current | 10 mA max |
| Maximum Output Current | Sink 1 mA |
| | Source 0.1 mA |
| Output Impedance | 10 ohms max |
| Output Type | ratiometric |
| Output Voltage | 0.51 to 4.85 VDC at 5VDC excitation |

**Sensor Operating Characteristics:**

| | |
|---|---|
| Range | 0.2 to 1.0 bar;<br>0.2 to 2.0 bar ;<br>0.2 to 3.0 bar |
| Proof Pressure | 200%FS |
| Static Accuracy(%FS) 1 | 1.5typ. |
| Temperature Measurement Accuracy | ±1℃ at 25℃ |

**Environmental Effects:**

| | |
|---|---|
| Compensated Temperature Range | -40℃ to +135℃ |
| Storage Temperature Range | -50℃ to +165℃ |

**Mechanical:**

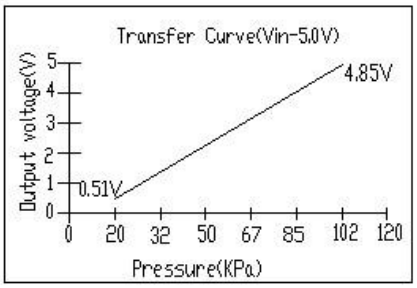
Media Compatibility Media Compatible with Silicon

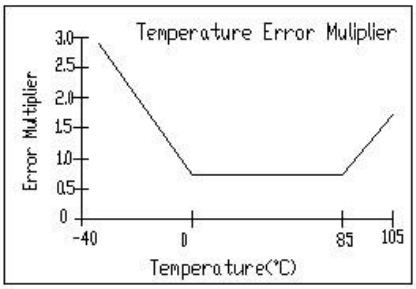
**Temperature sensor specification :**

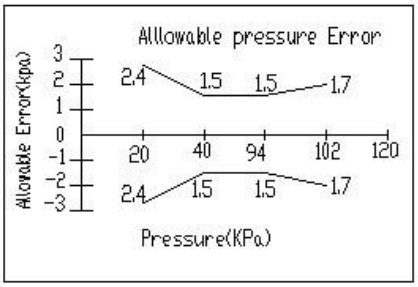
| | |
|---|---|
| R25℃ | 2000 Ω |
| Temperature Measurement Accuracy | ±1℃ at 25℃ |

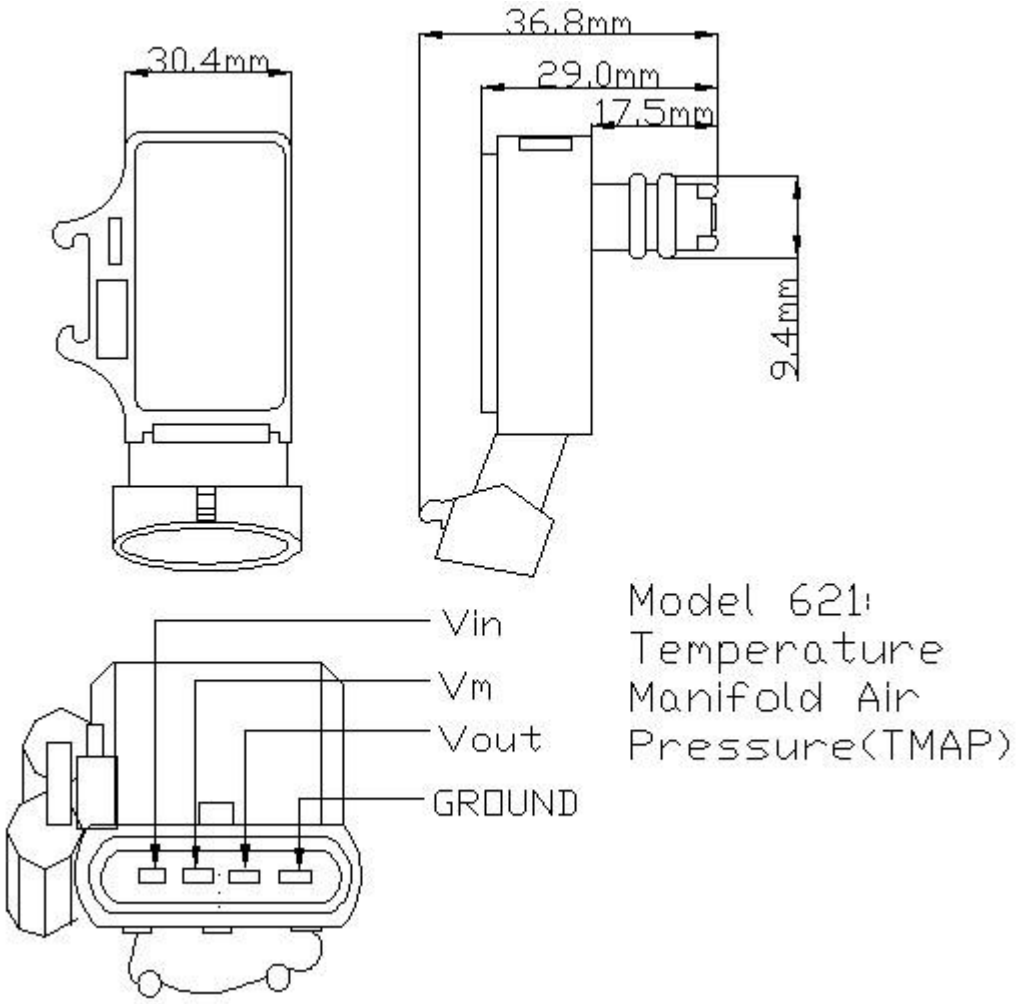
## Notes:

1. Static accuracy is the RSS of non-linearity, hysteresis, and non-repeatability.






**Application:**

Mitsubishi、Flyer 12232201