Description

Manifold Absolute Pressure Sensor (MAPS) is a speed-density type sensor installed on the surge tank. It senses absolute pressure of the surge tank and transfers the analog signal proportional to the pressure to the ECM.

By using this signal, the ECM calculates the intake air quantity and engine speed.

The MAPS consists of a piezo-electric element and a hybrid IC amplifying the element output signal. The element is made of silicon diaphragm, which has the pressure sensitive variable resistor effect of semi-conductor.

Because one side of the silicon diaphragm is 100% vacuum and the other is affected by the manifold pressure, this sensor can output analog signal by using the silicon variation proportional to pressure change.