

Integrated Silicon Pressure Sensor for Manifold Absolute Pressure Applications On-Chip Signal Conditioned, Temperature Compensated and Calibrated

The Freescale MPX4200A series Manifold Absolute Pressure (MAP) sensor for turbo boost engine control is designed to sense absolute air pressure within the intake manifold. This measurement can be used to compute the amount of fuel required for each cylinder.

The MPX4200A series sensor integrates on-chip, bipolar op amp circuitry and thin film resistor networks to provide a high level analog output signal and temperature compensation. The small form factor and reliability of on-chip integration make the Freescale MAP sensor a logical and economical choice for automotive system designers.

Features

- Specifically Designed for Intake Manifold Absolute Pressure Sensing in Engine Control Systems
- Patented Silicon Shear Stress Strain Gauge
- Temperature Compensated Over -40° to $+125^{\circ}\text{C}$
- Offers Reduction in Weight and Volume Compared to Existing Hybrid Modules
- Durable Epoxy Unibody Element

Typical Applications

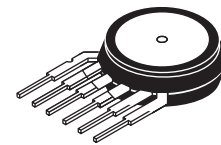
- Manifold Sensing for Automotive Systems
- Ideally suited for Microprocessor or Microcontroller-Based Systems
- Also ideal for Non-Automotive Applications

ORDERING INFORMATION				
Device Type	Options	Case No.	MPX Series Order No.	Device Marking
UNIBODY PACKAGE (MPX4200A SERIES)				
Basic Element	Absolute, Element	867	MPX4200A	MPX4200A

MPX4200A SERIES

INTEGRATED
 PRESSURE SENSOR
 20 to 200 kPa (2.9 to 29 psi)
 0.3 to 4.9 V OUTPUT

UNIBODY PACKAGE



MPX4200A
 CASE 867-08

PIN NUMBERS⁽¹⁾

1	V_{out}	4	N/C
2	GND	5	N/C
3	V_S	6	N/C

1. Pins 4, 5, and 6 are internal device connections. Do not connect to external circuitry or ground. Pin 1 is noted by the notch in the lead.