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40PC500G2A



Actual product appearance may vary.

**Pressure Sensors: Measurement Type: Gage; Signal Conditioning: Amplified; Pressure Range: 0 psi to 500 psi; Port Style: Straight O-ring interface**

Features

- Smallest amplified sensor package
- Minimal PCB space
- Fully signal conditioned
- Operating temperature range from-45 °C to 125 °C [49 °F to 257 °F]
- Silicon piezoresistive technology
- Monolithic design
- 6 Pin DIP package
- Port designed for O-ring interface

Potential Applications

- Medical**
- Oxygen and nitrogen gas distribution in hospitals
  - Dental chairs
  - CPAP (Continuous Positive Airway Pressure) equipment
  - Respirators and ventilators
  - Blood glucose monitors
  - Oxygen conservers
  - Oxygen concentrators
  - Nebulizers
  - Kidney dialysis machines
  - Blood cell separators
  - Hospital beds
- Environmental**
- Water control valves
  - Instrumentation
  - Irrigation equipment
  - Filter monitoring equipment
- Industrial Instrumentation**
- Robotics
  - Pressure valves
  - Leak detection
  - Air compressors
- Analytical Instrumentation**
- Gas chromatography
  - Chemical Analyzers
- Transportation**
- Electronic brake systems
  - Engine oil level
  - Transmission fluid level
  - Air conditioning system
  - Fuel injection systems

Description

The cost-effective 40PC Series miniature pressure sensor is the smallest amplified pressure sensor manufactured by Honeywell. The fully calibrated and temperature-compensated sensor is very robust, covering a wide range of temperature extremes. Additionally, the 40PC Series is compatible with a broad array of media, from dry air and water to refrigerant coolants and engine fuel. The 0.5 Vdc to 4.5 Vdc analog output voltage signal is linearly proportional to input pressure. These devices operate on a single end supply voltage of 5.0 Vdc.

Supporting Documentation

-  [Output Performance Characteristics](#)
-  [Circuit Diagrams](#)
-  [Engineering Drawing](#)

Product Specifications	
Measurement Type	Gage
Signal Conditioning	Amplified
Pressure Range	0 psi to 500 psi
Maximum Overpressure	1000 psi
Supply Voltage	5.0 Vdc ± 0.25 Vdc
Compensated	Yes
Output Calibration	Yes
Response Time	1 ms max.
Termination	PCB; Leads formed away from port
Port Style	Straight for O - ring interface
Package Style	Honeywell - Monolithic
Linearity	0.20% span max.
Typical Sensitivity	8 mV/psi
Full Scale Span	4.0 Vdc typ.
Null Offset	0.50 Vdc typ.
Repeatability & Hysteresis Error	± 0.15 % span typ.
Shock	Qualification tested to 150 g
Vibration	MIL - STD - 202 Method 213 (150 g half sine 11 ms)
Operating Temperature Range	-45 °C to 125 °C [ -49 °F to 257 °F]
Compensated Temperature Range	-45 °C to 125 °C [ -49 °F to 257 °F]
Storage Temperature Range	-55 °C to 125 °C [ -67 °F to 257 °F]
Media Compatibility	Port 1: Dry gases only. Port 2: Wetted materials. Polyester housing, epoxy adhesive, silicon, borosilicate glass and silicon - to - glass bond.
UNSPSC Code	411121
UNSPSC Commodity	411121 Transducers
Availability	Global
Series Name	40PC

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