



SCCP30ASMTP



Actual product appearance may vary.

Pressure Sensors: Measurement Type: Absolute; 0 psia to 30 psia Operating Pressure, "SMT" package - Straight Port

Features

- Low Cost
- Small Size
- Internal Temperature Compensation
- Absolute or Gauge Pressures
- High-Impedance Bridge
- Low Power Consumption

Potential Applications

- Pneumatic Controls
- Automotive Diagnostics
- Medical Equipment/Instrumentation
- Dental Equipment
- Environmental Controls
- Barometric Pressure Measurement
- Altimeters
- Pneumatic Controls
- Battery Powered Equipment

Description

The SCC series sensors offer an extremely low cost sensor element with a temperature stable output when driven with a constant current source. These integrated circuit sensors were designed for extremely cost sensitive applications where precise accuracy over a wide temperature range is not required.

The SCC series SMT offers a standard surface mount package and is offered with an optional ported lid to fit in a variety of application. This series of sensors are designed for measuring absolute and gage pressure ranges from 0 psi to 5 psi through 0 psi to 300 psi. The absolute devices have an internal vacuum reference and an output voltage proportional to absolute pressure. Differential devices allow application of pressure to either side of the sensing diaphragm and can be used for gauge or differential measurements.

The SCC series SMT sensors offer a 4-pin closed bridge configuration for electrical connection with additional pads provided for mechanical support. Pulsed power is recommended to achieve maximum accuracy and conserve battery power in portable applications.

| Product Specifications | |
|------------------------|-------------------|
| Measurement Type | Absolute |
| Signal Conditioning | Unamplified |
| Pressure Range | 0 psia to 30 psia |
| Maximum Overpressure | 60 psia |
| Supply Current | 1.5 mA max. |
| Compensated | Yes |
| Output Calibration | No |
| Response Time | 0.1 ms typ. |

| | |
|---|---|
| Termination | PCB |
| Port Style | Straight |
| Package Style | Standard SMT |
| Typical Sensitivity | 2.9 mV/mA/psi \pm .57 mV/mA/psi |
| Null Offset | -10 mV typ. |
| Null Shift over Temperature | 0.5 % FSS typ. |
| Span Shift Over Temperature | 0.25% FSS typ. |
| Zero Pressure Offset | -30.0 mV min., -10.0 mV typ., 20.0 mV max. |
| Linearity, Repeatability & Hysteresis Error | - 0.1 min., 0.2 typ., 1.0 max. % Full Scale Span |
| Input Resistance | 4.0 kOhm min., 5.0 kOhm typ., 6.5 kOhm max. |
| Output Resistance | 4.0 kOhm min., 5.0 kOhm typ., 6.5 kOhm max. |
| Operating Temperature Range | -40 °C to 125 °C [-40 °F to 257 °F] |
| Compensated Temperature Range | 0 °C to 50 °C [32 °F to 122 °F] |
| Storage Temperature Range | -55 °C to 125 °C [-67 °F to 257 °F] |
| Media Compatibility | Clean, dry gases only. |
| UNSPSC Code | 411121 |
| UNSPSC Commodity | 411121 Transducers |
| Comment | Lead Temperature Soldering 2 s to 4 s at 250 °C [482 °F] |
| Availability | Global |
| Series Name | SCC |