## Honeywell



Representative photograph, actual product appearance may vary.

Due to regional agency approval requirements, some products may not be available in your area. Please contact your regional Honeywell office regarding your product of choice.

#### SX100GSMT

Pressure Sensors: Measurement Type: Gage; 0 psig to 100 psig Operating Pressure, "SMT" package - No Port

#### **Features**

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

#### Typical Applications

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

#### **Description**

The SX Series surface mount sensors provide the most cost effective method of measuring absolute and gage pressures in a fully packaged sensor. The unique package design allows measurement of both gage and absolute pressure and a ported package option in a true surface mount sensor. Convenient pressure rages are available to measure gage and absolute pressures for 0 psi to 1 psi to 0 psi to 150 psi.

The SX series of SMT sensors feature the standard SX chip in a ceramic surface mount package. The standard version features a low profile plastic lid to better withstand high temperatures. The optional ported device offers a tube attachment port that is particularly useful in gage applications.

The SX SMT series sensors are designed primarily for use with clean dry gases such as air, nitrogen, and other like gasses. They 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.

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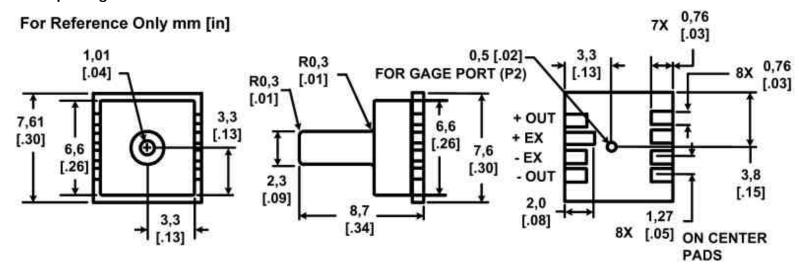
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| Product Specifications      |  |
|-----------------------------|--|
| Measurement Type            | Gage   |
| Signal Conditioning         | Unamplified  |
| Pressure Range              | 0 psig to 100 psig                                       |
| Maximum Overpressure        | 150 psi  |
| Supply Voltage              | 5.0 Vdc typ., 12.0 Vdc max.                              |
| Compensated                 | No   |
| Output Calibration          | No   |
| Response Time               | .1 ms typ.   |
| Termination                 | PCB  |
| Port Style                  | No Port  |
| Package Style               | Standard SMT Package                                     |
| Typical Sensitivity         | 0.3 mV/mA/psi ±.05 mV/mA/psi                             |
| Zero Pressure Offset        | -35.0 mV min., -20.0 mV typ., 0.0 mV max.                |
| Linearity, Hysteresis Error | 0.2 typ. 0.5 max. %FS                                    |
| Repeatability               | 0.5 typ. % span  |
| Input Resistance            | 4.1 kOhms typ.   |
| Output Resistance           | 4.1 kOhms typ.   |
| Operating Temperature Range | -40 °C to 125 °C [-40 °F to 257 °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                 | SX Series  |

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[Electrical Connections]

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[Equivalent circuit]

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### **A** WARNING

#### PERSONAL INJURY

DO NOT USE these products as safety or emergency stop devices, or in any other application where failure of the product could result in personal injury.

Failure to comply with these instructions could result in death or serious injury.

### **A** WARNING

#### MISUSE OF DOCUMENTATION

- The information presented in this product sheet (or catalog) is for reference only. DO NOT USE this document as product installation information.
- Complete installation, operation and maintenance information is provided in the instructions supplied with each product.

Failure to comply with these instructions could result in death or serious injury.

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