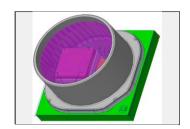
MPR Pressure Sensor

X214676MPR

- Fully calibrated and temperature compensated
- Calibrated from 0 to 60 PSI Absolute
- ±3%FSS " Total Error Band after customer zero adjust")
- I2C Output
- 3.3 Vdc Operating voltage
- Low power consumption (<10 mW typ.), energy efficient
- REACH and RoHS compliant
- Compatible with liquid media
- Meets IPC/JEDEC J-STD020E Moisture Sensitivity Level 1



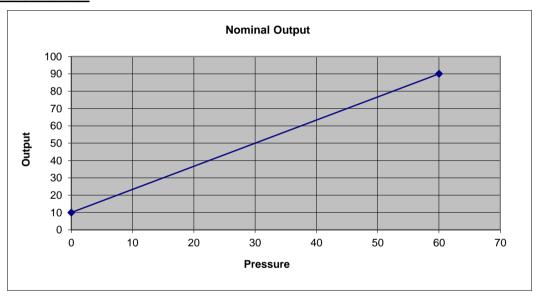
Honeywell

X214676MPR pressure sensors are designed to measure absolute pressures for air, non-corrosive gases and liquids and are specially calibrated to optimize performance over the specified pressure range.

The internal components are protected by a fluorosilicone gel.

ASIC calibrated 240hZ typical update rate

Nominal Transfer Function



Low Calibration Pressure 0 PSI
Output at Low Calibration Pressure 10 % 2²⁴
High Calibration Pressure 60 PSI
Output at High Calibration Pressure 90 % 2²⁴

Absolute Maximum Ratings

Burst pressure

Supply voltage $\begin{array}{ccc} \text{Supply voltage} & -0.3 \text{ V to } 3.6 \text{ V} \\ \text{Minimum Operating voltage} & 1.8 \text{ V} \\ \text{Voltage on output pin} & -0.3 \text{ V to V}_{\text{supply}} + 0.3 \text{ V} \\ \text{Lead soldering temperature} & 250 ^{\circ}\text{C}, 15 \text{ seconds max.} \\ \text{Maximum reflow cycles} & 2 \\ \text{Storage temperature range} & -40 ^{\circ}\text{C to } 85 ^{\circ}\text{C} \\ \text{Overpressure} & 250 ^{\circ}\text{PSI} \end{array}$

PRELIMINARY

275

Datasheet creation date:

12/3/2019

Created by MPR Configurator 2.7

MPR Pressure Sensor

Preliminary



Operating Specifications

Compensated Supply voltage 3.3 V

Supply current in standby mode 0.0005 mA Typical Supply current in active mode 1.7 mA Typical

Compensated temperature range 0°C to 50°C
Operating temperature range -40°C to 85°C

Total Error Band after Customer Auto-Zero ±3 %FSS
Combined error from calibration, accuracy and temperature effects after Customer zero adjust.

Accuracy ±0.25% FSS Best Fit Straight Line

Includes non-linearity, hysteresis and non-repeatability at 25°C.

Response Time 4.166 ms Typical

Digital Interface Standard I2C Output (Address0x28)

Resolution 14 Bit

Environmental Specifications

Humidity

all extrnal surfaces 0% to 95% RH, non-condensing internal surfaces 0% to 100% RH, condensing

Vibration MIL-STD-202G, Method 204D, Condition B (10 g, 10 Hz to 2 kHz)
Shock MIL-STD-202G, Method 213B, Condition C (50 g, 6 ms duration)

ESD 4kV, Human Body Model

For for more information, including dimensions and pinout information, please refer to the MPR platform datasheet.

Except as shown on this document, specifications for MPRSL0030PA00002A Apply

PRELIMINARY

Specifications subject to change

Datasheet creation date: 12/3/2019 Created by MPR Configurator 2.7

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Honeywell: X214676MPR