

Piezoresistive MEMS pressure sensor

Performance

Pressure range(FS)	2~300 psi
Accuracy(BFSL typical)	±0.3% FS
Pressure Hysteresis	±0.1% FS
Span stability(typical)	±0.5% FS/1000H
Response time	<0.5ms
Output resistance	3~6KΩ

Electrical

Excitation	5±0.25Vdc
Supply current(@5Vdc typical)	<1.5mA
Offset(@5Vdc)	±50mV
Warm up	<10ms
FSO(@5Vdc, 25°C)	60~180mV

Environmental

Operation temperature	-40 to 125°C
Temperature zero shift	±0.08% FSO/°C
Temperature sensitivity shift	-0.2% FS/°C
Solder temperature	5s Max. at 250°C
Reflow peak temperature	10s Max. at 250°C
Pressure cycles	>1 million FS cycles
Overload(2/5 psi)	>4 * FS
Overload(15/100/250/300 psi)	>3 * FS
Vibration	<10 g@20~2000Hz
Shock	<100 g, 11ms pulse
Media	Ceramic,Silicon,Glass,Silicone epoxy compatible
Cover	Polyamide
Substrate	Ceramic
Weight	<1gram
Sealing	Silicone epoxy
Pressure port	Refer to drawing
Electrical connection	SMT pads

Features

- Piezoresistive MEMS element
- Analog voltage output
- Gas and non-corrosive fluids
- Low cost OEM
- Range: 2 to 300 psi
- Various package
- Small size
- Energy efficient
- Excellent long-term stability
- RoHS compliant.

Application

- Breath tester
 - Consumer electronics
 - Blood pressure meter
 - Flow velocity
 - Vacuum controller
 - Fuel tank level
 - HVAC transmitters
 - Heating liquid level
 - Clogged HVAC filter detection
- HVAC=Heating, Ventilation, Air Conditioning

Ordering Information

P2105-30G-TM

Range in psi:
2/5/15/30/50/100/250/300
2/5 for gauge only

Solder type:
M= SMT

Reference type:
G= Gauge pressure
A= Absolute pressure

Port type:
T= Top tube
H= Narrow hole
W= Wide hole with gel fill

Schematic & Dimension:

