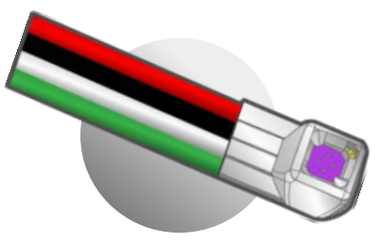
SENSORADE

Miniaturized aerodynamic flow measurement

Ultra small pressure sensor for harsh environment High Temperature - Flat

1,25 mm up to 185C° **MP-1.25-WOT-YYY-A-HT-FLAT**



OVERVIEW

- L x W : 2.45mm x 1.25mm
- From 2 to 7 bar Absolute pressure sensor
- Burst pressure 7 bar
- Wide temperature range up to 185C°
- Harsh environment
- Customized solution possible
- mVolt output
- Highest resonance frequency on the market
- Amplification can be done for a special request

APPLICATIONS

- Instrumentation (ie: Automotive, ...)
- Aerodynamic testing (ie: wind tunnel)
- Industrial process monitoring
- Pumps
- Biomedical
- Oil and gas
- ...

MODEL DEFINITION

WOT : without tube is the standard product
YYY: pressure range in bar (002, 004, 007) Or in PSI (030, 060, 100)
A: absolute pressure measurement
HT : high temperature up to 185C°
FLAT : flat shape

Resonance frequency

- Highest resonance frequency of 2.7 MHz of the market
- The tests have been done on a Polytec MSA-500 using Scanning laser-Doppler vibrometry.

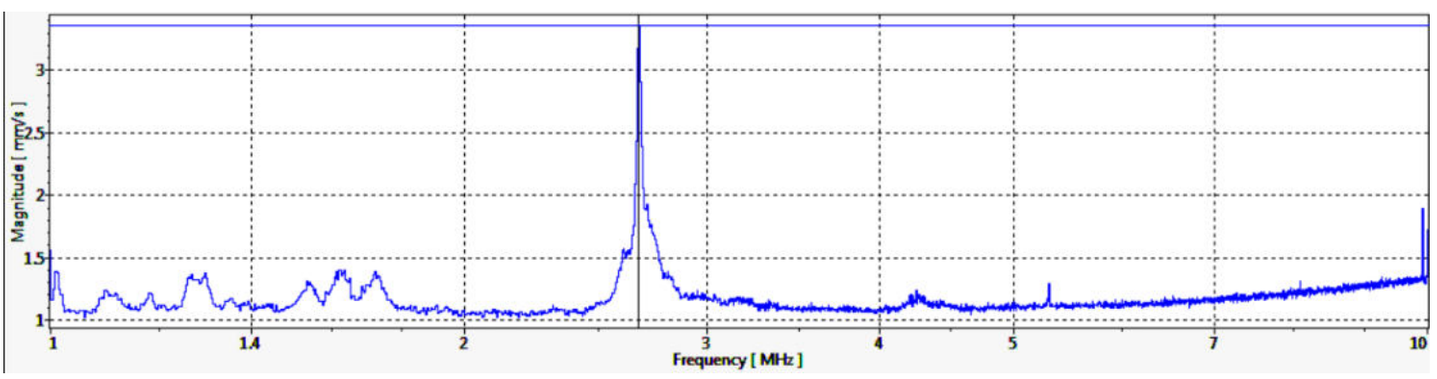


Figure 1: Result for the 30 PSI MEMS absolute pressure sensors

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PART NUMBER	MP-1.25-WOT-YYY-A-HT-FLAT
L x W	2.45 mm x 1.25 mm
Pressure range[1]	0-2 bar 0-4 bar 0-7 bar 0-30 psi 0-60 psi 0-100 psi
Max nominal pressure	2 bar 4 bar 7 bar 30 psi 60 psi 100 psi
Proof pressure[1]	3 * nominal
Burst pressure[1]	5 * nominal
Bridge resistance	6.2 kΩ typical / (5-7 kΩ)
Vout span[4]	100 mV typical / (65-135mV)
Excitation voltage	5V
Tmax[2]	185 Celsius
Accuracy[3]	0.25% @ FS
Signal amplification	None

Remark:

- All sensors are provided with a control sheet given pressure level versus mVolt @ 25C° under a supply voltage of 5 Volt.
- Temperature measurement/compensation available. See our tutorial on our website.

1 | Absolute pressure

2 | TMCL qualification tests – JEDEC JESD22-A104 « temperature cycling » @ Tmax

3 | Accuracy @25 Celsius

4 | Amplification can be done for a special request

CONTACT

Operational Headquarter: The Labs, Liège Science Park, Rue Bois Saint-Jean 15/1, B-4102 Seraing, BELGIUM

TEL: +32 4 353 30 14

Email: sales@sensorade.be