



bar

MP-1.55 ULTRA MINIATURE PRESSURE SENSOR

1,55 MM UP TO 185C°

Very small pressure sensor for harsh environment High Temperature

SENORADE
Miniaturized aerodynamic flow measurement

FEATURES

- Outer diameter 1.55 mm
- From 18 to 100 PSI Absolute pressure sensor
- 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



MODEL DEFINITION

XXX: TIG: Inconel tube with grid is the standard product
 TSG: Stainless steel tube with grid
 TIO: Inconel tube (open configuration)
 TSO: Stainless steel (open configuration)
 YYY: pressure range in PSI (018, 030, 060, 100)
 A: absolute pressure measurement
 ZZ: ST: standard temperature up to 100C°
 HT: high temperature up to 185C°
 Options: special tube length, material and grid shape also available on request

APPLICATIONS

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

WIRE COLOR CODE

BLACK	Input -
RED	Input +
WHITE	Output -
GREEN	Output +

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

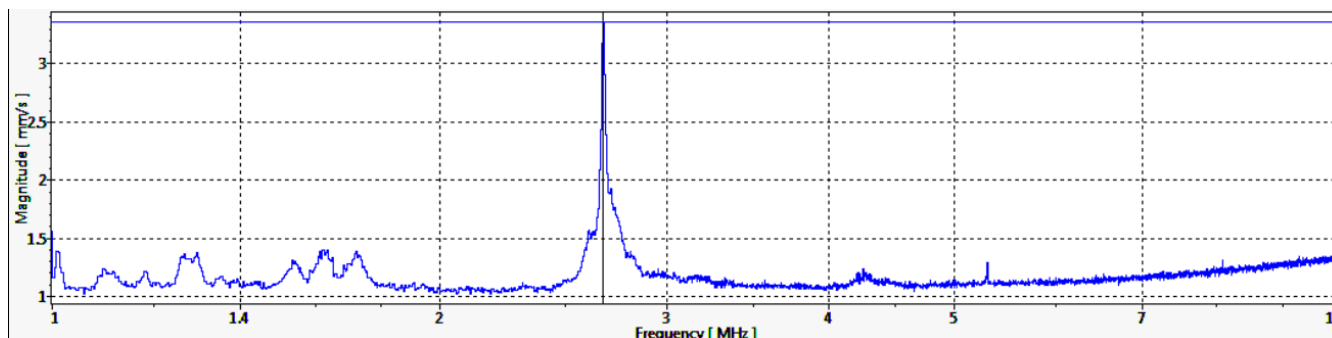


Figure 1: Result for the 30 PSI MEMS absolute pressure sensors



SPECIFICATIONS

PART NUMBER

MP-1.55 - XXX- YYY- A - ZZ

Outer diameter	1.55 mm			
Pressure range ¹	0-1.2 bar	0-2 bar	0-4 bar	0-7 bar
	0-18psi	0-30 psi	0-60 psi	0-100 psi
Max nominal pressure	1.2 bar	2 bar	4 bar	7 bar
	18 psi	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	100 Celsius (ST) - 185 Celsius (HT)			
Accuracy ³	0.5% @ FS			
Signal amplification	None			

REMARK

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