MEMS-PIRANI

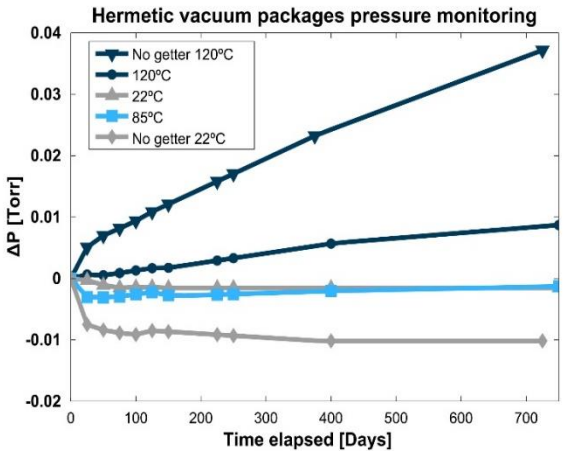
PRESSURE MICROSENSOR AND CONTROL SOFTWARE

The INO MEMS-Pirani sensor uses a technology derived from the advanced INO uncooled microbolometer developed for IR imaging. INO's patented measurement method is embedded in a commercially available software.

APPLICATIONS

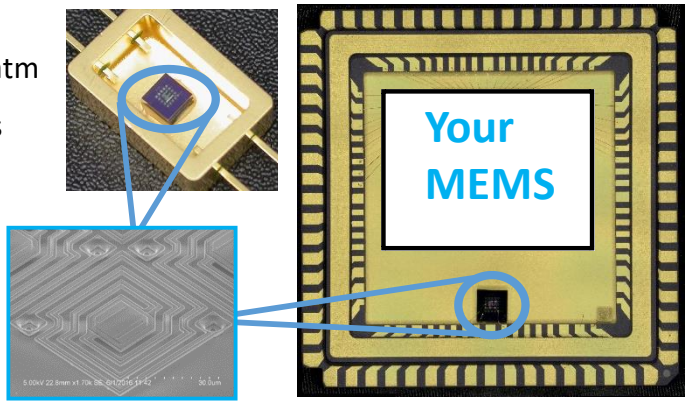
The MEMS-Pirani has proven an invaluable tool in vacuum packaging process development and performance assessment. This internal cavity pressure measurement over time is a non-destructive method with leak rate detection limit lower than conventional helium tests.

- Pressure monitoring in hermetic vacuum packages
- Reliability testing and accelerated life testing
- General vacuum control
- Vacuum pressure measurement in semiconductor and coating industries



FEATURES AND BENEFITS

- Extended measuring range from 1 x 10^{-3} Torr to 1 atm
- Ultra-compact design: easy integration in packages
- Low ambient temperature sensitivity
- User-friendly software for direct pressure measurement
- Quick hermeticity test

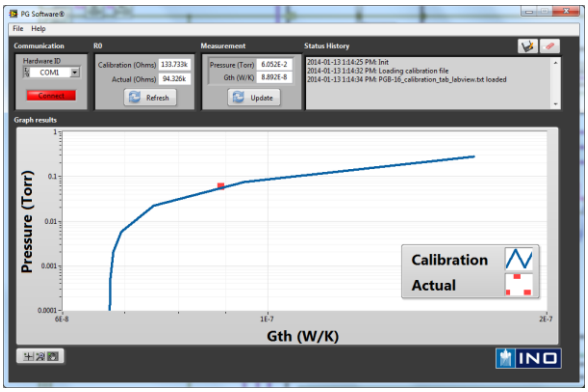


MEMS-PIRANI

PRESSURE MICROSENSOR AND CONTROL SOFTWARE

SOFTWARE

- A turnkey software provides direct pressure measurements based on calibrated sensor data.
- Requirements: precision sourcemeter*, ex. Keithley 2400; Keithley 2635A
- Measurement time: approx. 1 minute



SPECIFICATIONS**

SENSOR TYPE	MEMS -Pirani
MEASUREMENT RANGE	1 X 10^{-3} Torr to 1 atm
ACCURACY (typical)	± 5% of reading from 3 mTorr to 10 mTorr ± 2% of reading from 10 mTorr to 760 Torr A high pressure sensor model is also available ranging from 1 to 5 atm
REPEATABILITY (typical)	± 1.5% of reading from 1 mTorr to 760 Torr
CALIBRATION STABILITY WITH TEMPERATURE	± 0.7%/°C (± 0.4%/°F) from 5 mTorr to 40 Torr
BAKEOUT TEMPERATURE	300°C (572°F) maximum
RESPONSE TIME	< 100 ms
CHIP SIZE (typical)	2 mm x 2 mm

* Other source meter versions may be available upon request.
**All calibrations were made using air as a calibration gas.
Note: All specifications are subject to change without notice.

INO
2740 Einstein Street, Québec City, Québec, G1P 4S4 Canada
418-657-7006 / 1-866-657-7406
www.ino.ca / info@ino.ca