

HERMETIC VACUUM PACKAGING

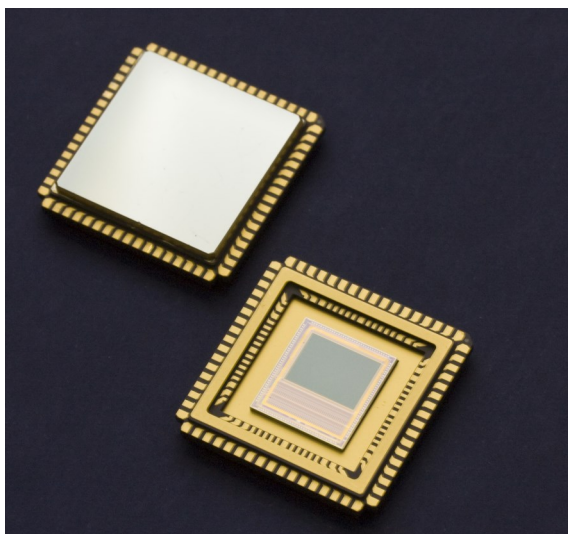
Ceramic LCC Packages

Keywords: hermetic packaging, hermetic package, vacuum packaging, MEMS vacuum packaging, ceramic LCC packages

TECHNOLOGY

INO has developed a number of hermetic vacuum packaging technologies for MEMS devices based on metallic and ceramic headers with cavity pressure level less than 1 mTorr.

Processes are performed in state-of-the-art semi-automated vacuum furnaces and systems that allow for activation of nonevaporable getters.



Ceramic LCC packages

STATE OF DEVELOPMENT

The ceramic LCC packages technology has been developed up to TRL-8. At this level of technology readiness, the technology has proven to be repeatable, reproducible and reliable.

KEY APPLICATIONS

The ceramic LCC vacuum packaging technology was originally developed for uncooled bolometric detectors. However, the package can accommodate other MEMS devices that require a vacuum environment down to 1 mTorr and a window.

INO's solid expertise in vacuum technology allows to adapt the vacuum sealing technology to specific device requirements.

ADVANTAGES

- High productivity due to batch processing
- Low cost
- Compact size
- Fluxless technology
- Compatible with temperature sensitive devices
- Flexibility in package geometry, window materials and solder alloys
- Integrated pressure sensors for cavity pressure monitoring

BUSINESS OPPORTUNITY

INO is looking for companies already involved in the MEMS/MOEMS industry and who would like the opportunity to integrate this platform in specific applications.

INTELLECTUAL PROPERTY

Trade secrets.

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For the complete list of technologies available for transfer
www.ino.ca/availabletechnologies