

Lithoglas® Cavity Substrates

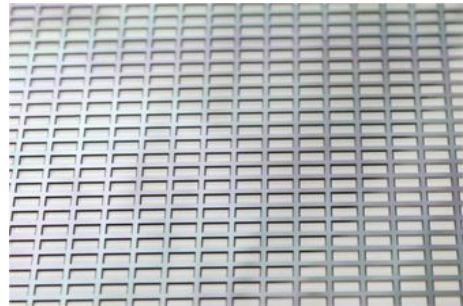
Lithoglas® micro-structured cavity substrates are manufactured according to your design with high precision either as a full glass solution or a silicon-glass hybrid for larger cavity heights. The integration of optical features like coatings and apertures is standard. The glass caps are typically used in wafer-level or COB-packaging.

Cavity substrates for chip encapsulation



full glass cap (glass dam on glass substrate)

- ✓ cavity heights < 20 $\mu\text{m} \pm 1 \mu\text{m}$
- ✓ e.g. for imagers, detectors, LCOS



hybrid cap (silicon dam on glass substrate)

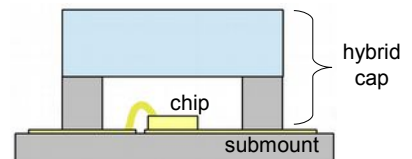
- ✓ cavity heights > 100 $\mu\text{m} \pm 5 \mu\text{m}$
- ✓ e.g. for MOEMS, LEDs, submounts

Hermetic encapsulation

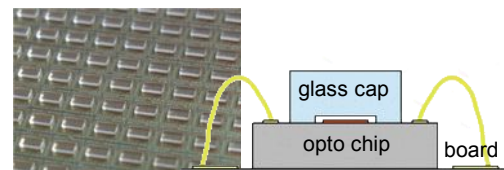
- ✓ Lithoglas® cavity structures are fully hermetic
- ✓ Anodic bonding of substrates feasible
- ✓ Excellent reliability achievable with glue bonding

Customized design

- ✓ cavity dimensions acc. to your design
- ✓ various lid materials, coatings available
- ✓ alignment features / structures optional
- ✓ available for wafer-level or COB packaging



encapsulation of mounted device with hybrid cap



wafer-level bonded glass caps for COB packaging



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