

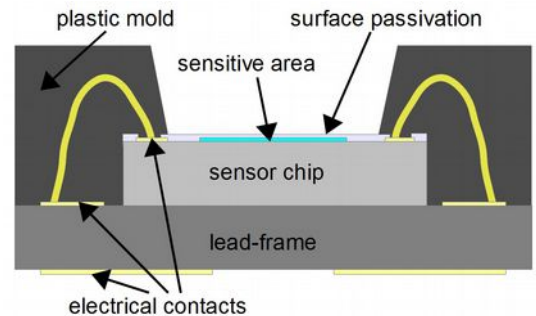
Lithoglas® Surface Passivation

Lithoglas® micro-structured coatings can be used as surface passivation for the hermetic sealing of sensitive chip areas. Lithoglas® coatings are excellent moisture barriers applied on wafer-level under clean-room conditions, enabling low-cost plastic-molded COB packaging with high reliability.

Hermetic sealing of chip surface on wafer-level



structured and transparent Lithoglas® coatings, e.g. for the packaging of optical devices



open cavity package using glass as surface passivation

Improved reliability

- ✓ immediate protection of active circuitry
- ✓ Lithoglas® is long-term stable moisture barrier
- ✓ reduced stress – matched CTE of glass to Si

Reduced package size

- ✓ chip scale and low profile packages feasible
- ✓ replacement solution for TO packages
- ✓ SMD-compatibility

Reduced packaging cost

- ✓ highly reliable mold packages feasible
- ✓ glass sealing on wafer-level

Step 1: Lithography



Step 2: Glass Deposition



Step 3: Lift-Off



lift-off processing enabling gentle structuring of glass film



MSG Lithoglas GmbH
 Maria-Reiche-Str. 1
 01109 Dresden, Germany



www.lithoglas.de / info@lithoglas.de