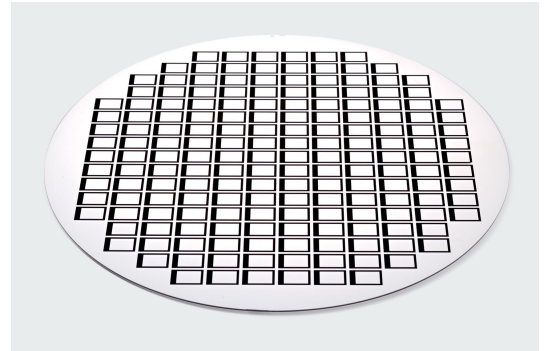


Wafer Level Packaging

Coated Glass Wafer for Advanced Optical Packaging

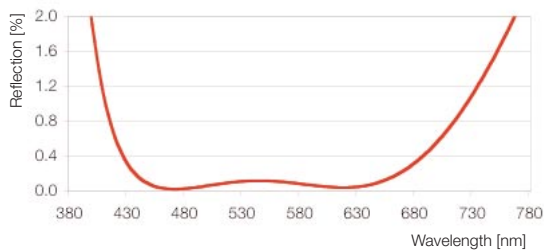
Wafer Level Packaging is the preferred technology for high volume optical packaging. The glass wafer is merged with the silicon wafer before dicing. Some of the applications require a spacer between the two wafers. Ocean Thin Films provides glass wafers with low defect optical coatings – if required with Chrome apertures for light beam shaping.



Benefits

- High cleanliness at assembly step
- High yields due to clean work pieces
- Reduced handling efforts
- Lower cost due to parallel assembly step on devices
- Enables further miniaturization

Anti Reflex Coatings on WLP

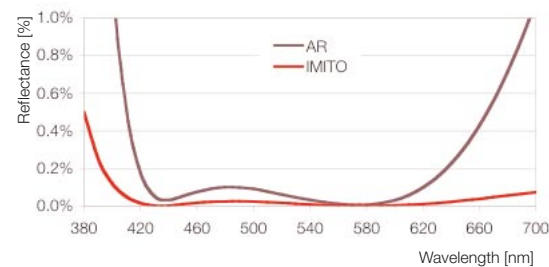


Application
MEMS/CMOS Packaging

Size of wafer
200 mm round, 1.1 mm thick

Typical glass type
Borofloat, Eagle XG

Index Matched ITO on WLP

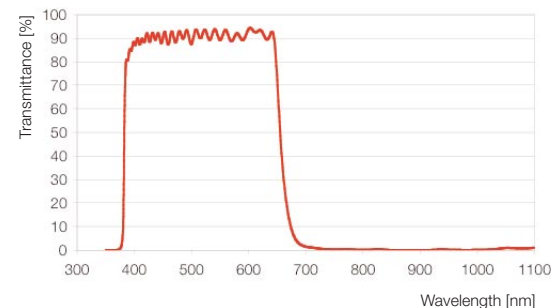


Application
LCOS Microdisplays Packaging

Size of wafer
200 mm round, 0.7/1.1 mm thick

Typical glass type
Corning 1737, Eagle XG

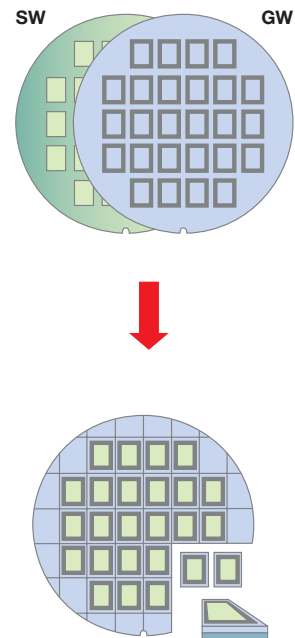
IR Cut Filters on WLP



Application
CMOS Packaging

Size of wafer
200 mm round, 0.3/0.4 mm thick

Typical glass type
Schott D263T



Schematic Wafer Level Packaging: Entire semiconductor wafer (SW) with array of sensors is covered by a cover glass wafer (GW) – see top. Combined wafers are cut into pieces (bottom).

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