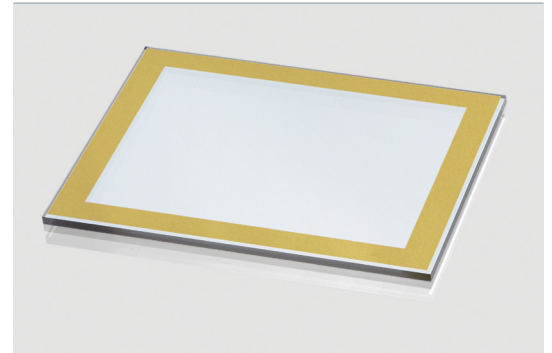


Patterned Gelot™ for Advanced Optical Packaging

Solderable Glass Lids

Light sensitive semiconductor devices require a packaging including a transparent glass lid. Soldering is the assembly technology which provides best hermeticity values of such packagings. Gelot™ solderable coating gives the glass a surface which is well adhesive to solder such as Gold or Palladium. Gelot™ is applied to the lid in form of a frame with a clear aperture.



Benefits

- Soldering of glass to metals and ceramics
- Excellent hermeticity values in assemblies with glass lids
- Suitable for high temperature applications
- Excellent shelf life values due to non-corrosive surface
- Frames may be used as apertures
- Allows clean assembly process
- Wafer Level Packaging (WLP) can be supported

Applications

Packaging of semiconductor devices such as CCD/CMOS sensors, MEMS.

Technical Data

Outer surface of coating	Gold
Thickness of coating	300 nm
Minimum feature size of coating	20 µm
Size of Lids	up to 120 mm sq.
Adhesion	> 10 N/mm ²
Shear strength	> 4 N/mm ²

Recommendations

Solder preform: Au, Pd (Al, Zn or Cd to be avoided)
Stencilled AR on clear aperture

Sketch of soldered assembly

The Gelot™ coating provides the glass a solderable surface. The solder itself must be applied in form of a preform.

