

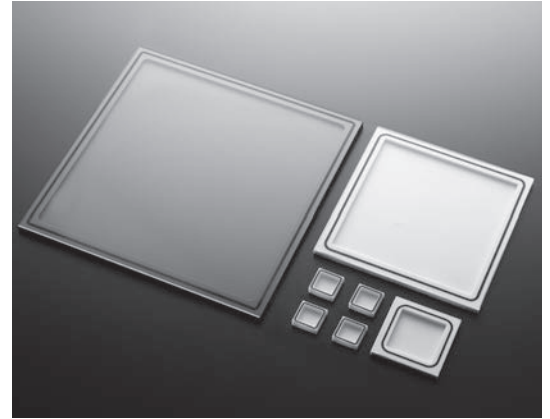
Glass Frit for Laser-sealing of Ceramic Packages

Glass frit for laser-sealing can create hermetic seals between glass lids and ceramic packages. This glass frit has a lower CTE* than conventional products and excellent wettability with ceramics. Therefore, this glass frit is suitable for hermetic sealing applications requiring high reliability.

*CTE: coefficient of thermal expansion

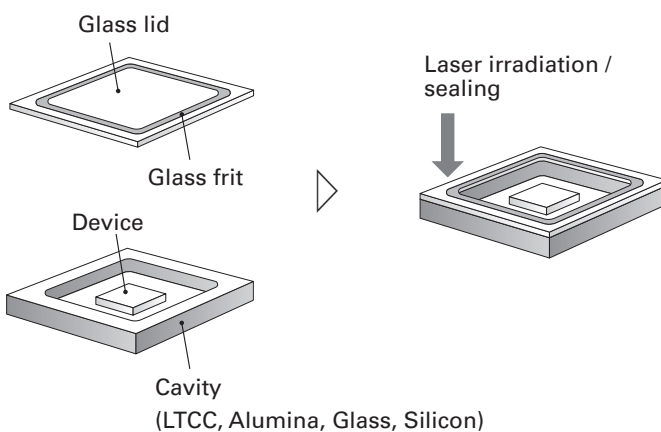
Features

- Similar CTE to ceramic material CTE: 6.5 to 7.2ppm/°C
- Excellent wettability with ceramics
- Prevents thermal damage to internal devices
- High reliability of hermetic sealing
- Glass lids with glass frit are available.



Application examples

Laser-sealing Process



Available Materials and Sizes

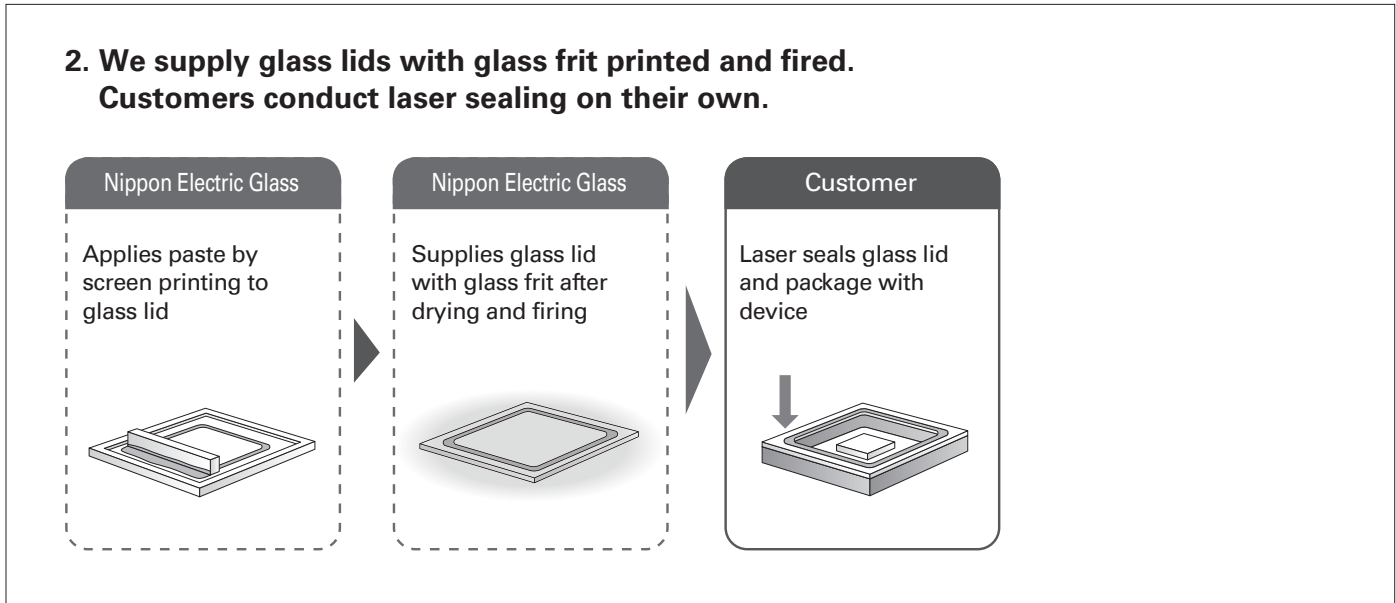
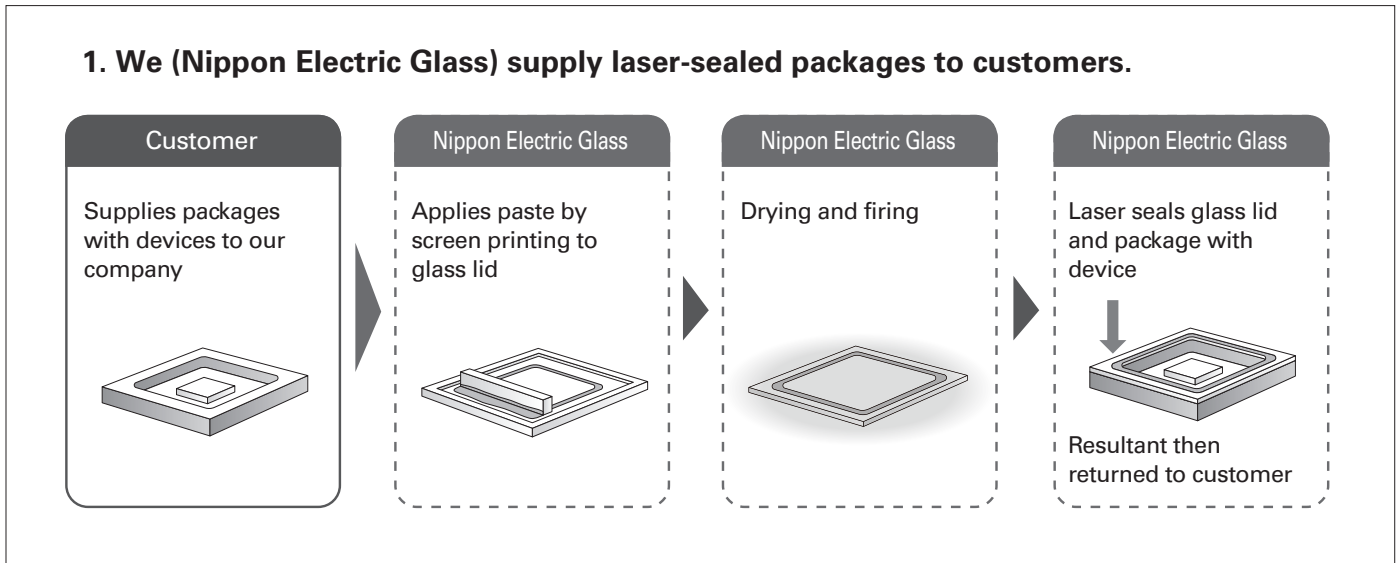
Cavity Material	Package/Substrate Size	Glass Lid thickness
LTCC	up to 60mm	up to 1mm
Alumina	up to 60mm	up to 0.5mm
Glass	up to 200mm	up to 1mm
Silicon	up to 10mm	up to 0.2mm

Applications

- Micro Electro Mechanical Systems (MEMS) packages
- Deep UV LED packages
- Hermetic sealing for packages
- OLED devices

Supply Forms and Processes

- Our general supply methods are given below.
- Customers can simplify the process.



- In addition, a combination of a glass lid with glass frit and LTCC cavity made by our company that is suitable for laser-sealing can be supplied. In such case, we can also supply the same in the form of a package after sealing by our company.
- Customers can select the optimal glass lid with fired glass frit from our various glass lids with a wide CTE range.