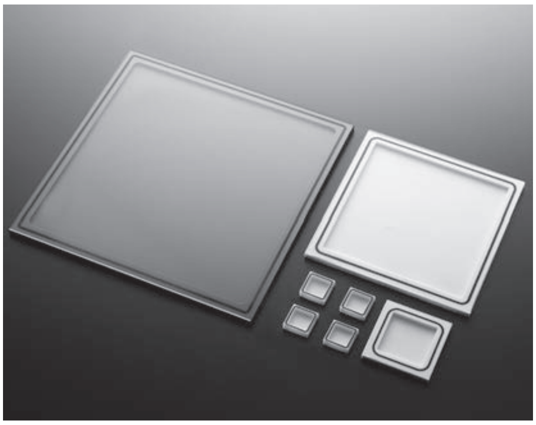
Ref. No. 2410-26E

Glass Frit for Laser-Sealing

Glass frit for laser-sealing achieves hermetic sealing of glass substrates or glass and cavities.* Laser-sealing is available for package sealing, providing less thermal damage to internal devices. Our glass frit is suitable for the technology utilized for hermetic sealing applications that requires high reliability.

*Alumina, LTCC, Silicon

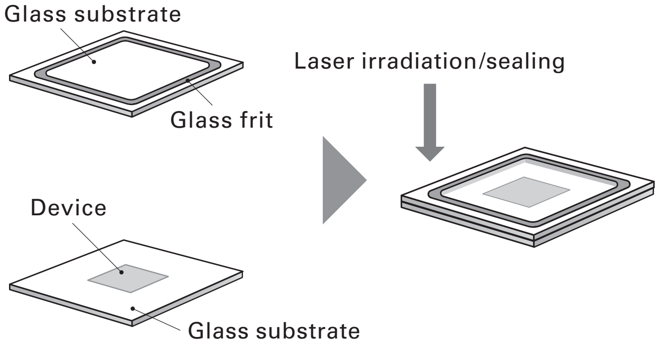


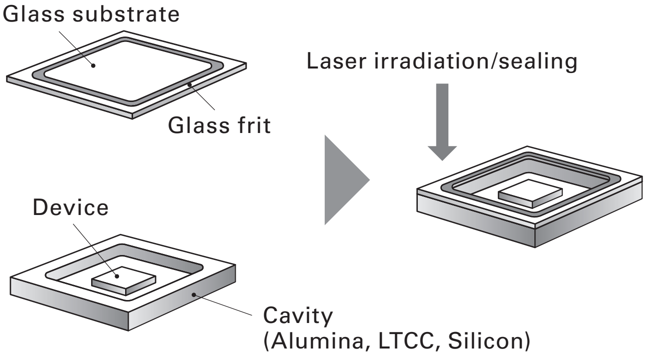
Application examples

Features

- Prevents thermal damage to internal devices
- High reliability of hermetic sealing
- Glass lid with glass frit is available.
- Applicable to our glass substrate materials

Laser-Sealing Process





Applications

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

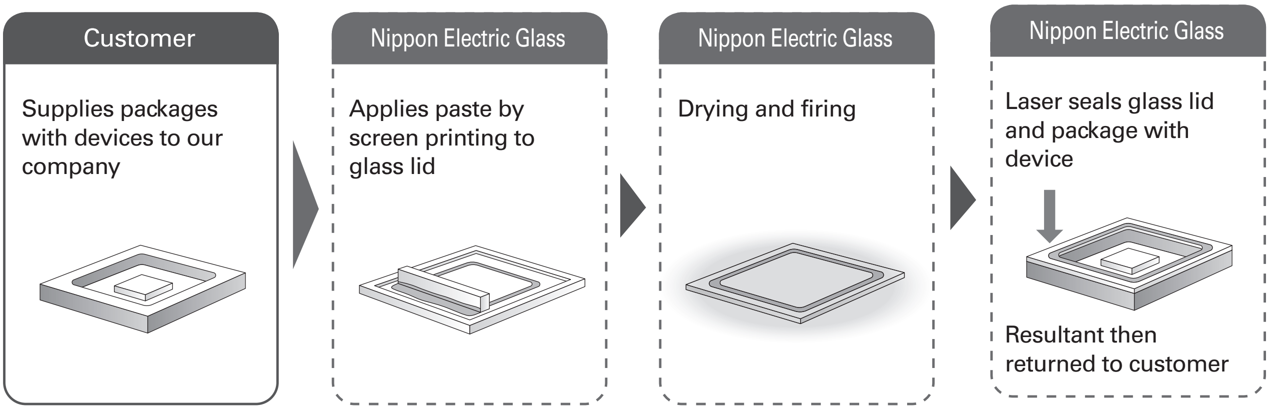
Available Materials and Sizes

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

Supply Forms and Processes

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

1. We (Nippon Electric Glass) supply laser-sealed packages to customers.



Customer

Supplies packages with devices to our company

Nippon Electric Glass

Applies paste by screen printing to glass lid

Nippon Electric Glass

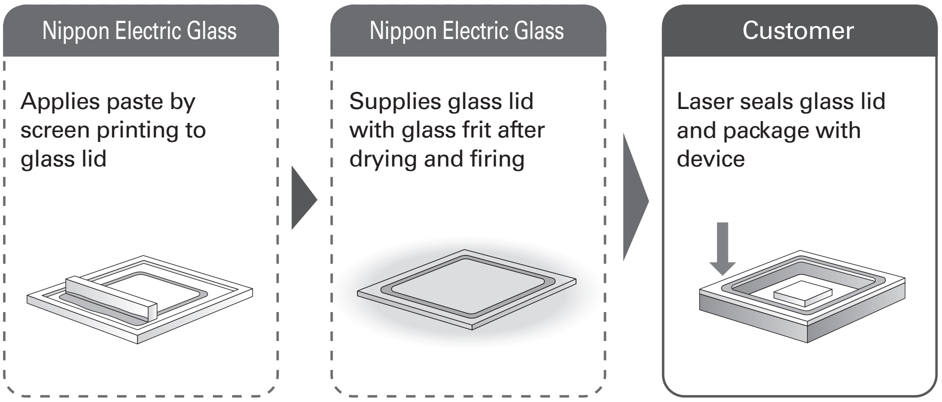
Drying and firing

Nippon Electric Glass

Laser seals glass lid and package with device

Resultant then returned to customer

2. We supply glass lids with glass frit printed and fired. Customers conduct laser sealing on their own.



Nippon Electric Glass

Applies paste by screen printing to glass lid

Nippon Electric Glass

Supplies glass lid with glass frit after drying and firing

Customer

Laser seals glass lid and package with device

- Customers can select the optimal glass lid with fired glass frit from our various glass lids with a wide CTE range.