SCHOTT FLEXINITY[®] mini

SCHOTT FLEXINITY[®] mini is a brand new product that addresses the fundamental challenges of processing small and thin glass components for electronics and opto-electronics. It delivers all the outstanding features of SCHOTT FLEXINITY[®] in a tiny form – offering high versatility for small glass parts, delivering highly accurate and strong components down to a few millimeters, with high quality edges and the option to be through structured. The glass parts can be delivered in-frame, making them easy to handle during system integration.

Characteristics

FLEXINITY[®] mini offers a number of key benefits when compared to products manufactured by alternative singularization processes. These benefits provide FLEXINITY[®] mini with a series of unique properties and features, which include:





Small geometry

High performance edges



Superior formats and structures



In-frame

delivery







Tight tolerances

Low total cost of ownership



SCHOTT FLEXINITY[®] mini

Applications

Opto-electronics

As devices become smaller, the demand for space-saving packaging for opto-electronic components becomes larger. FLEXINITY[®] mini offers versatile, precise, and reliable small glass parts for pick & place packaging that are easy to handle and ready to integrate.

Luxury goods

High end consumer products such as watches require high performance materials such as sapphire or glass as a design feature. The contouring choices, through hole structuring, and in-frame coating options offered by FLEXINITY[®] mini make glass a great aesthetic an appealing choice for brands.

FLEXINITY® mini overcomes todays limitations

Many industries, such as opto-electronics and semiconductor packaging, rely on small glass components with precise dimensions and high quality edge geometry. There are manifold ways to realize such articles including CNC, hollow drilling, sand blasting. However they have their intrinsic drawbacks with respect to either performance, handling

or total cost of ownership. FLEXINITY® mini provides the optimum portfolio with that regards.

Traditional methods have limitations concerning the final geometry of the glass parts, and run a high risk of uncontrolled randomly distributed edge imperfections.

SCED

glass made of ideas

| 100.0 μm | | 100.0 µm | | 100.0 µm | |
|---|-----------------|------------------------|---|----------|---|
| FLEXINITY® | Hollow drilling | | Sand blasting | | X from e sources |
| Standard structuring capabilities* | | | | | |
| Thickness range (depending on glass type) | | 0.1 – 3.3 mm | | | |
| Format (frame) | | Max. 600 mm in diam | eter | | |
| Size of detached parts | | Down to 1 mm | | | |
| Layout (outer contour of detached parts) | | Round, rectangular, fr | ee shape | | |
| Layout (holes) | | Through structures ac | Through structures according to customer specifications | | |
| Outer contour & hole radius | | Down to 25 µm | | | ted in Ge |
| Minimum dimensions of structure elements | | 100 µm | | | ENGLISH/US 04/2022 kn/nino Printed in Germany |
| Feature size tolerance | | < 20 µm (equiv. ± 10 µ | um) | | 022 kn/i |
| Position tolerance of features | | < 20 µm (equiv. ± 10 µ | um) | | /US 04/2 |
| Frame size | ≥ 10 mm | | | | ENGLISH |

* Limitations in feature design and demands deviating from these capabilities will be evaluated upon request

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