

SCHOTT FLEXINITY® for 3D Imaging and Sensing

SCHOTT FLEXINITY® portfolio of structured glasses provides design flexibility for illumination and sensors in 3D imaging and sensors. FLEXINITY® offers highly accurate and precise geometrical properties, excellent optical characteristics and superior surface quality, for superior performance.

Our structured glass materials are available in a wide range of thicknesses, enabling SCHOTT to offer customized solutions for a vast variety of applications, such as Time of Flight (ToF), Structured Light and Stereo Vision for 3D imaging and sensing. The main components for realization are glass spacer.



Wide spectrum
of dimensions



Broad range
of glasses



Tight
tolerances



Variety of structure
elements


SCHOTT FLEXINITY®

Specifications

Available glass types and specifications for structured substrates below:

D 263® T eco	MEMpax®	BOROFLOAT® 33	AF 32® eco
<ul style="list-style-type: none">• Multiple thicknesses• Low TTV and tight tolerances• Easy dicing and cutting	<ul style="list-style-type: none">• Pristine surface available in thicknesses < 0.7 mm• Low surface roughness	<ul style="list-style-type: none">• Anodically bondable to silicon due to similar CTE• High mechanical, thermal and chemical resistance	<ul style="list-style-type: none">• Alkali free – compatible to semiconductor process• Superior surface quality – easy to coat

Standard structuring capabilities*

Thickness range (depending on glass type)	0.1 – 3.3 mm
Format	Max. 600 mm in diameter 
Layout	Through structures according to customer specifications
Structuring radius	Down to 25 µm
Feature size tolerance	< 20 µm (equiv. ± 10 µm)
Minimum dimension of structure element	100 µm
Wall taper angle	90° ± 0.5°
Edge exclusion zone	≥ 3 mm
Position tolerance of features	< 20 µm (equiv. ± 10 µm)
Thickness tolerance**	± 10 µm – ± 20 µm
TTV (total thickness variation)**	≤ 10 µm – ≤ 15 µm

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

** Depending on thickness and size

