Carrier Solutions

Ultra-Low Total Thickness Variation (TTV) Glass Wafers

Our Ultra-Low TTV Glass Wafers have superior surface quality, flexible thickness, and can be available in a wide range of CTEs to meet customers' most challenging requirements – from research & development phase to mass production.

Applications

This glass wafer has one of the lowest TTV currently available and enables advanced semiconductor manufacturing including RF applications for 5G connectivity and hybrid bonding.

- Enables ultra-thinning of device wafer (final thickness $<10\mu m$)
- Allows more TTV tolerance for the adhesive layer to achieve same total stack TTV in semiconductor packaging
- Supports existing temporary bonding infrastructure to enable thinner device wafers
- · Improves yield of Z-height sensitive processes

Key Benefits

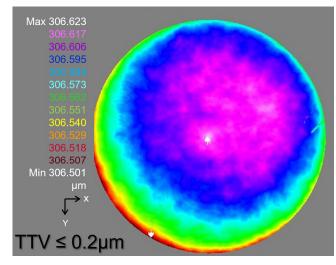
- TTV ≤0.2µm is available in sizes up to 200mm (3mm edge exclusion)
- TTV ≤0.4µm is available in sizes up to 300mm (2mm edge exclusion)
- This product is available now in a range of thicknesses for a variety of glass compositions.
- · Available in across a range of CTEs from 3.4 to 12.6 ppm/°C
- · High stiffness to help overcome CTE mismatch challenge
- Optically transparent enabling UV or IR based debond processes and laser mark serialization

Options and Features

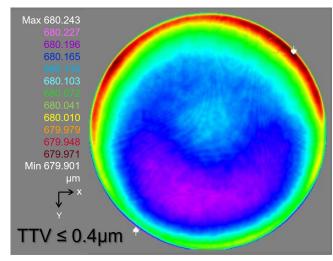
Diameter (mm)	100-300
Thickness (mm)	0.5 to 1.0
Edge Beveling	Radius (R) Type and Chamfer (C)
Surface Roughness (nm)	<1.0
Features	Semi-standard notch/flat or custom
Surface ID Marking	Semi-standard or custom

For other non-standard specifications please contact Corning.

200mm



300mm



Please contact for more information: www.corning.com/advanced-optics|specialtymaterials@corning.com