

OA-31

OA-31 is low thermal compaction glass that was developed as a glass substrate for LTPS display in smartphones and other mobile devices. The ratio of glass shrinkage caused by heat treatment was greatly reduced compared with conventional products. OA-31 has a significantly smooth surface and offers uniformity of thickness achieved through the overflow process. It is most suitable as a glass substrate for next-generation displays and carriers for flexible OLED displays.

Features

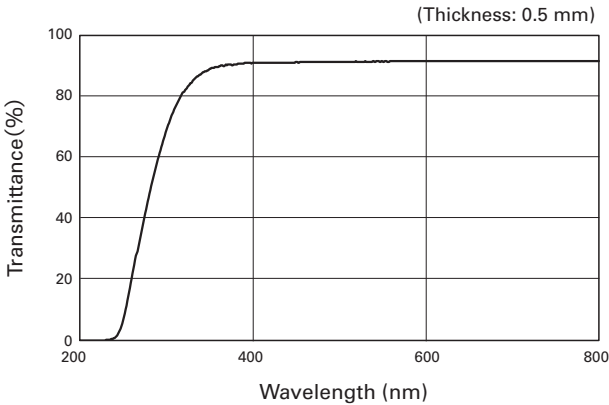
1. Low thermal compaction
- Excellent thermal dimensional stability in extremely high-temperature processing such as LTPS process
2. High Young's modulus
- Minimal sag
3. Superior optical properties
- High light transmittance
4. Smooth surface
- A significantly smooth surface is derived from the overflow process.
5. Small thickness deviation
- Uniformity of thickness is derived from the overflow process.



Properties

Properties/Glass Code			OA-31
Strain point		°C	750
Young's modulus		GPa	83
Density		× 10 ³ kg/m ³	2.64
Coefficient of thermal expansion	30-380°C	× 10 ⁻⁷ /K	39
Poisson's ratio			0.25
Vickers hardness	Hv		680
Volume resistivity log ρ	350°C	Ω・cm	13.2
Dielectric constant	1MHz, RT		5.9
tan δ	1MHz, RT		0.002
Light transmittance	λ = 550nm	%	91
Refractive index (n _d)	587.6nm		1.53
Chemical durability	10% HCl (80°C-60min)		No visual change
	63 BHF (20°C-3min)		No visual change
Alkali oxide content		wt%	0.1 max.
As, Sb content		wt%	Less than 0.1

Transmittance



Thermal Shrinkage

