

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

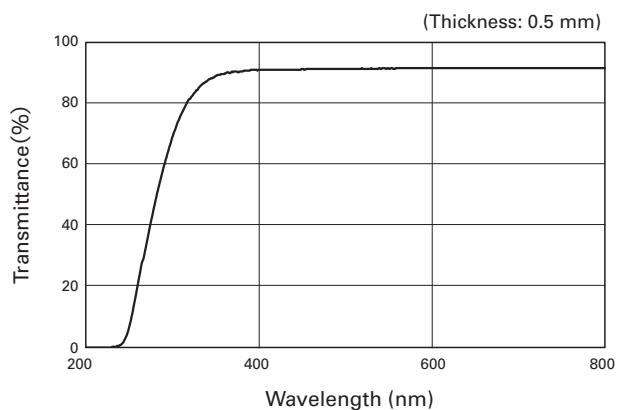
- 1. Low thermal compaction**
Excellent thermal dimensional stability in extremely high-temperature processing such as LTPS process
- 2. High Young's modulus**
Minimal sag
- 3. Superior optical properties**
High light transmittance
- 4. Smooth surface**
A significantly smooth surface is derived from 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	$\times 10^3 \text{kg/m}^3$	2.64
Coefficient of thermal expansion	30-380°C $\times 10^{-7}/\text{K}$	39
Poisson's ratio		0.25
Vickers hardness	Hv	680
Volume resistivity $\log \rho$	350°C $\Omega \cdot \text{cm}$	13.2
Dielectric constant	1MHz, RT	5.9
$\tan \delta$	1MHz, RT	0.002
Light transmittance	$\lambda = 550\text{nm}$ %	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

