

## 7059 / 7059F Barium-Borosilicate Glass

### Typical Applications

- Low-Alkali Thin Film Substrate for Electronic applications
- LCD Technology
- Optical Windows
- Sensor Technology

7059 barium-borosilicate glass is a low alkali technical sheet glass from Corning with a good thermal shock resistance. 7059 glass has long been the standard of the electronics industry for thin-film circuits, which require special electrical properties. 7059F glass is fusion drawn into sheets at final thickness obtaining a flat smooth surface finish directly from the molten glass. 7059 glass is slot drawn and is not as smooth as the 7059F. Both 7059 materials have a low level of alkali which is below 0,3%. This is important for many electronic application, because alkali ions are known to lower the performance, reliability and longevity of thin-film devices.

To request windows or substrates made of 7059 Glass with your individual dimensions, please click the button below:

[Request for quotation!](#)

### Specifications of 7059

[Show transmission curve of 7059 glass](#)

#### Refractive Index

- $n_D = 1,5333$  (589,3nm)

#### Density

- $2,76 \text{ g/cm}^3$  (20°C)

#### Young's Modulus

- $6,89 \times 10^3 \text{ kg/mm}^2$

#### Coefficient of Thermal Expansion (20-300°C)

- $46,0 \times 10^{-7} / ^\circ\text{C}$  (0-300°C)
- $50,1 \times 10^{-7} / ^\circ\text{C}$  (25-598°C)

#### Viscosity

- Softening Point 844°C
- Annealing Point 639°C
- Strain Point 593°C

#### Electrical Properties

- Dielectric Constant 5,84 (20°C / 1 MHz)
- Dielectric Loss Factor 0,1% (20°C / 1MHz)

#### Standard Thicknesses

Thicknesses	Tolerance	Thicknesses	Tolerance
0,4mm	±0,127	0,5mm	±0,127
0,7mm	±0,127	0,8mm	±0,127
1,1mm	±0,127	1,2mm	±0,127