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)
- $46.0 \times 10^{-7}/\degree \text{C}$ (0-300°C)
- $50.1 \times 10^{-7}/\degree \text{C}$ (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 / 1 MHz)

Standard Thicknesses

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<thead>
<tr>
<th>Thicknesses</th>
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<th>Tolerance</th>
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<tbody>
<tr>
<td>0.4mm</td>
<td>±0.127</td>
<td>0.5mm</td>
<td>±0.127</td>
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<tr>
<td>0.7mm</td>
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<td>0.8mm</td>
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<tr>
<td>1.1mm</td>
<td>±0.127</td>
<td>1.2mm</td>
<td>±0.127</td>
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7059 near zero alkali barium-borosilicate glass
http://www.pgo-online.com/intl/katalog/7059.html