Applications
- Radio Frequency Front End (RFFE)
- Filters
- Antennas
- Switches in mobile phones
- Medical equipment
- MEMS
- Interposer

Benefits
- Ability to lower electrical loss particularly at high frequency levels
- Capability to deliver glass as thin as 100µm
- Superior surface quality enables fine line spacing
- Positional Accuracy is within +/- 5µm

Dielectric Loss

Glass vs Silicon

<table>
<thead>
<tr>
<th>Frequency (GHz)</th>
<th>0.1</th>
<th>2.1</th>
<th>4.1</th>
<th>6.1</th>
<th>8.1</th>
<th>10.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>S21 (dB)</td>
<td>-0.0</td>
<td>-0.3</td>
<td>-0.6</td>
<td>-0.9</td>
<td>-1.2</td>
<td>-1.5</td>
</tr>
</tbody>
</table>

Precision Holes

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wafer Size</td>
<td>100/150/200/300mm; custom sizes available upon request</td>
</tr>
<tr>
<td>Panel Size</td>
<td>Up to 510mm x 510mm</td>
</tr>
<tr>
<td>Positional Accuracy</td>
<td>+/- 5µm</td>
</tr>
<tr>
<td>Pitch</td>
<td>Minimum 2X holes diameter</td>
</tr>
<tr>
<td>Hole Diameter</td>
<td>25µm – 100µm</td>
</tr>
</tbody>
</table>

Precision Holes

- Improved Throughput: 10X in 2 years
- Increased Capacity: 10X by 2018
- Supply Chain: A diverse array of companies are investing in glass cutting, handling and metallization capacity
Precision Glass Solutions offer glass wafers and panel format glass-based solutions, substrate products and key supporting technology platforms in metrology and laser glass cutting. Trends for higher speeds, miniaturization and interconnectivity are all driving the increased use of glass in many electronics applications. Corning has been working for nearly a decade to deliver customer focused innovation aimed at improving attributes of glass, in its various formats, to make it an attractive solution for next generation semiconductor packaging.

Contact us
corning.com/precision-glass-solutions
precisiongs@corning.com

Regional Sales Offices

China
Corning China (Shanghai) Regional Headquarters
6F, Li Ming Building, 111 Gui Qing Road
Shanghai, 200233, China
t: 0086 21 3338 4338
f: 0086 21 3338 4300

Europe
Corning GmbH — Corning International
Abraham-Lincoln-Strasse 30
65189 Wiesbaden, Germany
t: +49 611 7366 159
f: +49 611 7366 143

Japan
Corning International K.K
Akasaka Intercity 7th floor
1-11-44 Akasaka, Minato-ku
Tokyo, 107-0052, Japan
t: +81 3 3586 1052
f: +81 3 3587 0906

Korea
Corning Korea Company Ltd.
6th Fl., Gangnam Finance Center
152, Teheran-ro, Gangnam-gu,
Seoul, 06236, Korea
t: +82 2 796 9500
f: +82 2 796 9300

North America
Corning Incorporated
HP-CB-06
One Museum Way
Corning, NY 14831
United States
t: +607 974 9000

Singapore
Corning Singapore Holdings Pet Ltd.
1, Kim Seng Promenade
Great World City
#9-11/12 West Tower
237994, Singapore
t: +65 65729740
f: +65 67352913

Taiwan
Corning Incorporated-Taiwan
8F, No. 8, Sec.3, Minsheng E. Rd.
Zhongshan Dist., Taipei City 10480
Taiwan, R.O.C
t: +886 2 2716 0338
f: +886 2 2516 7500