

# Through Glass Vias Solutions

## Applications

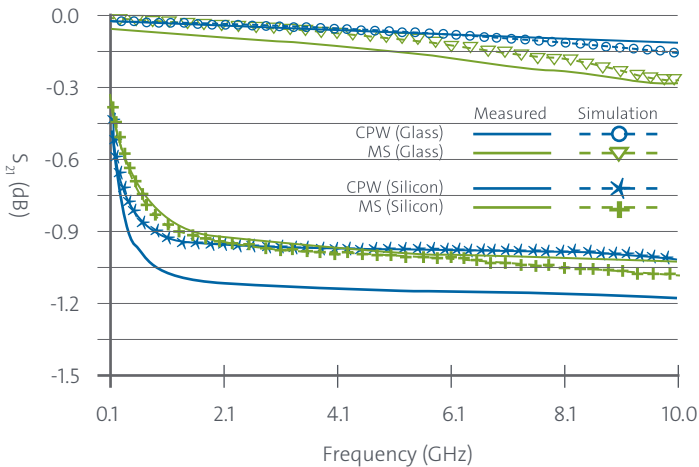
- Radio Frequency Front End (RFFE)
- Filters
- Antennas
- Switches in mobile phones
- Medical equipment
- MEMS
- Interposer

## 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 with +/- 5µm

## Dielectric Loss

Glass vs Silicon



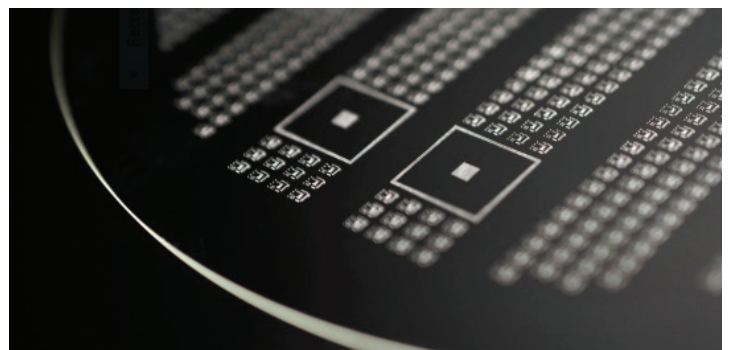
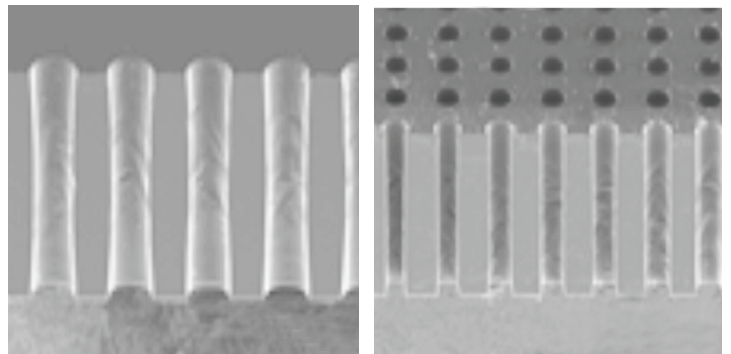
Insertion loss measurement in collaboration with ITRI

## Precision Holes

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

## 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

CORNING

# Superior Standards

## Through Glass Vias Solutions

Precision glass with precision vias, ideal for RF and interposer applications.

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.

### 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

Contact us

[corning.com/precision-glass-solutions](http://corning.com/precision-glass-solutions)

[precisiongs@corning.com](mailto:precisiongs@corning.com)