

## Your Total Solution Partner

# Corning<sup>®</sup> 7980 Fused Silica

Corning® 7980 is a very pure, non-crystalline silica glass. It features very low thermal expansion and excellent optical qualities, including very high transmission in the UV spectrum.

#### Features:

- Excellent Optical Properties
- Low Thermal Expansion
- High UV Transmission

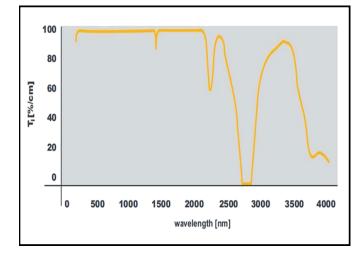
### **Applications:**

- Optical Windows
- High Temperature View Ports

#### **Dimensions:**

- Thicknesses: 1.6mm
- Sizes: Up to 6.5" x 6.5" (161.5 x 161.5mm)

### Transmission:



#### **Physical Properties:**

| Index of Refraction @ 589.3mm                     | 1.45840                    |                          |
|---|----------------------------|--------------------------|
| Thermal Expansion<br>0 - 200°C (32 - 92°F)        | 5.7 x 10 <sup>-7</sup> /°C |                          |
| Electrical Properties                             |                            |                          |
| Log10 Volume Resistivity<br>(25° <b>C,</b> 482°F) | 11.8 ohm*cm                |                          |
| Density (25°C) ρ                                  | 2.201 g/cm <sup>3</sup>    | 137.4 lb/ft <sup>3</sup> |
| Young's Modulus E                                 | 72.7 GPa                   | 10.5 Mpsi                |
| Poisson's Ratio µ                                 | 0.16                       | 0.16                     |
| Knoop Hardness<br>HK <sub>0.1/20</sub>            | 522 kg/mm <sup>2</sup>     |                          |
| Shear Modulus                                     | 31.4 GPa                   | 4.55 Mpsi                |
| Softening Point<br>(10 <sup>7.6</sup> poises)     | 1585°C                     | 2885°F                   |
| Annealing Point                                   | 1042°C                     | 1908°F                   |
| Strain Point (10 <sup>14.5</sup> poises)          | 893°C                      | 1639°F                   |

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#### **Glass Fabrication**



**Coating Deposition** 



**CNC Machining** 



**Strengthening - Chemical & Heat** 



Screen Printing of Graphics



Abrisa Technologies, a member of HEF Photonics, is a globally recognized technology glass fabrication and optical thin film coating company with expertise in high volume manufacturing and engineering capabilities, delivering Total Solutions that provide excellent performance, fitness-for-use and economies of scale.

Our US based, state-of-the-art ISO 9001:2015 and ITAR registered facilities include Abrisa Industrial Glass in Santa Paula, CA and ZC&R Coatings for Optics in Torrance CA. These two divisions produce solutions from cut-to-order coated glass components to custom complex and ready-to-install fabricated, strengthened, optically coated, electronically enabled and branded sub-assemblies.

Our Total Solutions serve a variety of markets including Micro-Electronics, Defense and Avionics, Display, Industrial Automation, Optical Sensors, Imaging, Photonics, Medical & Dental, Life Science and more.





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