

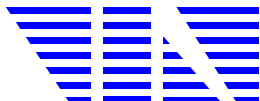
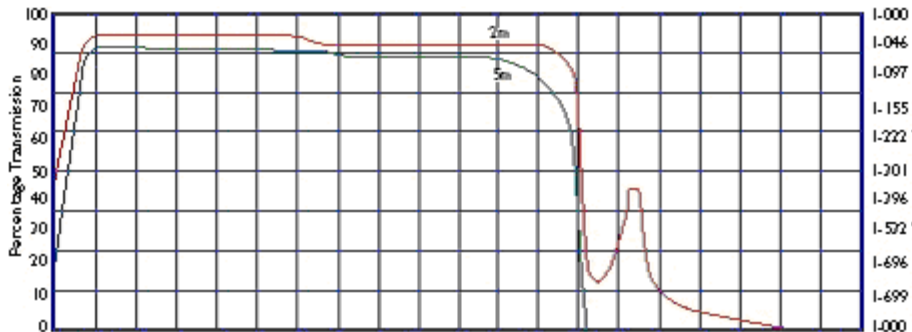
# Corning Glass 7740 Properties

## ✦ Corning 7740 (Pyrex Borosilicate)

Corning 7740, popularly known as Pyrex is a Borosilicate glass composition that provides unique chemical, thermal, mechanical, and optical properties. Pyrex glass is available in various thicknesses from 3/32" up to 2-1/4". All Pyrex flat glass is commercially annealed to facilitate further cutting, and fabrication. It has an excellent thermal expansion match to Silicon and high resistance to attack from water, acids, salt solutions and organic solvents. Pyrex is commonly used glass in viewports for vacuum applications.

Properties	Value
Density	2.23 g/cm <sup>3</sup>
Softening Point	821°C
Annealing Point	560°C
Strain Point	510°C
Thermal Expansion (0-300°C)	32.5 x 10 <sup>-7</sup> /°C
Thermal Conductivity	1.14W/m°C
Refractive Index	1.473 @ 589.3nm
Dielectric Constant	4.60 @1 MHz/ 20°C
Loss Tangent	0.50% @1 MHz/ 20°C
Volume Resistivity	8.10 ohm-cm @ 250°C
Transmittance (t = 2.06mm)	~90% (450 - 680nm)

Typical Chemical Composition (% weight)	
SiO <sub>2</sub>	80.6%
B <sub>2</sub> O <sub>3</sub>	13.0%
Na <sub>2</sub> O	4.0%
Al <sub>2</sub> O <sub>3</sub>	2.3%



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