

Glass Properties

구 분	Pyrex1737 Low Alkali	Borofloat 33	Pyrex 7740 33	Eagle XG (Eagle 2000)	Gorilla Glass	D263T	B270	AF-45	Soda-Lime	Quartz
제 조 사	Corning	Schott	Corning	삼성코닝	Corning	Schott	Schott	Schott		ASAHI Glass
Standard Sheet Size(mm)					405×460					
Available thickness(mm)					0.7~2.0					

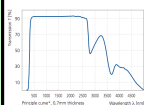
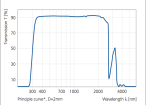
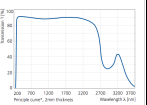
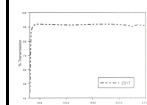
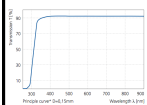
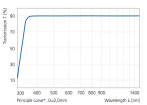
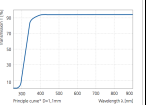
▶ Mechanical Properties

Density (g/cm ³)	2.54 at 20℃	2.20 at 25℃	2.23	2.55	2.45	2.51 at 40℃	2.55	2.72	2.50	2.20
Young's Modulus (KN/mm ²)	70.0	63.0	62.7	71.5	73.3	72.9	71.5	66.0	73.0	73.0
Poisson's Ratio	0.22	0.20	0.20	0.23	0.21	0.21	0.22		0.23	0.17
Knoop Hardness HK ₁₀₀		480	418			590	542			

▶ Thermal Properties

Linear Thermal Coefficient (×10 ⁻⁷ /K) of Expansion	37.6 (0~300℃)	32.5 (20~300℃)	32.5 (0~300℃)	31.7 (0~300℃)	91 (0~300℃)	72 (20~300℃)	95 (20~300℃)	45	90	≤6 (25~200℃)
Thermal Conductivity (w-m/m ² .sec.K)		1.12	1.13 (0.0027 cal/cm)							1.3~1.5 (0~100℃)
Thermal Capacity (KJ/Kg.K)		0.83 (20/100℃)	0.75 (0.18 cal/g.℃)							0.89~1.15 (20~1000℃)
Glass Transition Temp 유리전이온도(Tg) (℃)	—	525	525			557		662		
Strain Point (℃) 10 ^{14.5} poises	666	518	510	669	553	529	511	627	514	1000
Annealing Point (℃) 10 ¹³ poises	721	560	560	722	602	557	541	663	546	1120
Softening Point (℃) 10 ^{7.6} poises	975	820	821	971	837	736	724	883	726	
Working Point (℃) 10 ⁴ poises	1312	1270	1252	1321						
Max Operating Temp		Short term 500 Long term 450								

▶ Optical Properties

Refractive Index (n _d @ 588nm)[굴절율]	1.519	1.472	1.474	1.510	1.503	1.523	1.523	1.526	1.520	
Transmission										at 800μm t Wave L Min% 200nm 87% 230nm 90% 260nm 90%

▶ Electrical Properties

Dielectric Constant Er	5.7 (1KHz)	4.6	4.6 (1MHz)			6.7	7	6.2		
Loss Factor tan d (×10 ⁻⁴)		37	0.5 % (1MHz)			61	30	9		