

High Refractive Index Wafers

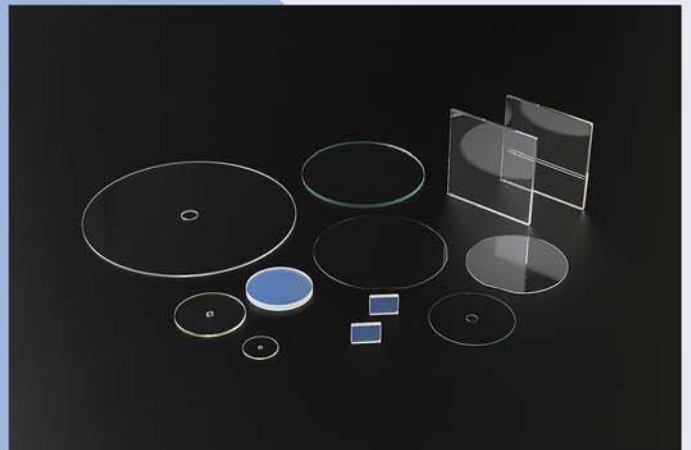
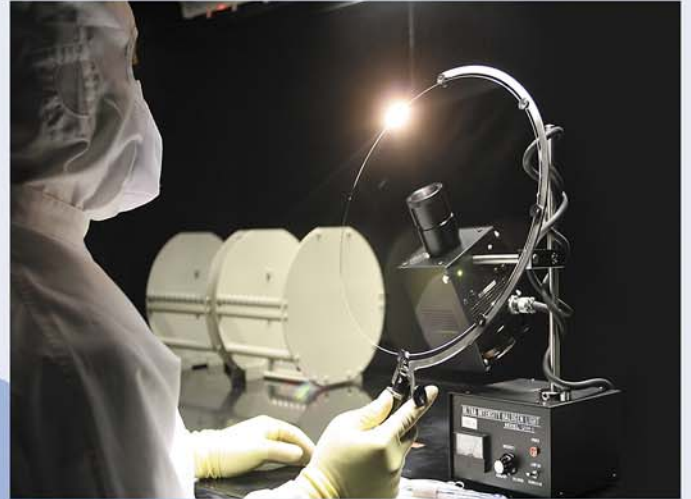
Substrates

Ohara is a world class manufacturer of high quality double-side lapped and polished substrates.

Our high index wafers are ideal for low cost, high performance, consumer applications including AR/VR and other wearable devices.

Advantages

- Sizes up to 12" diameter
- Ultra-thin, can be <200 micron
- Flatness ~ 1 micron
- RMS values ~ 2 Angstroms
- Class 100 clean room
- Megasonic clean line
- Excellent metrology capabilities
- Optical glass, fused silica, sheet glass



High Refractive Index Wafers

Optical Properties		
Refractive index nd	2.001	
Abbe number vd	29.14	
Thermal Properties		
Transformation Temperature Tg (°C)	725	
Expansion Coefficients α (10 ⁻⁷ /°C)	(-30~+70°C)	75
	(+100~+300°C)	88
Thermal Conductivity k W/(m·K)	0.944	
Chemical Properties		
Water Resistance(Powder) Group RW(P)	1	
Acid Resistance(Powder) Group RA(P)	1	
Weathering Resistance(Surface) Group W(S)	1	
Phosphate Resistance PR	1.0	
Mechanical Properties		
Young's Modulus E (108N/m ²)	1313	
Rigidity Modulus G (108N/m ²)	502	
Poisson's Ratio σ	0.307	
Knoop Hardness Hk[Class]	650	7
Abrasion Aa	55	
Photoelastic Constant β nm/(cm·10 ⁵ Pa)	0.76	

OHARA S-LAH99

- 2.001 index glass
- Size up to 12" in diameter
- Good transmittance
- Low cost for consumer applications
- Excellent chemical resistance
- Well suited for AR/VR
- High index enables a wider field of view

Internal Transmittance (10mm thick sample)

