

Water Free Synthetic Fused Silica Windows for Infrared Laser

OPNQ

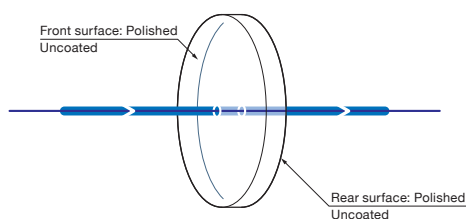
RoHS

A standard Fused silica window has hydroxyl absorption (OH radical group) at wavelength 1.4 μ m, 2.2 μ m, 2.7 μ m. Anhydrous synthetic quartz is a special material that does not absorb water molecules in the molecular glass; therefore there is no hydroxyl absorption at the IR region.

- The physical characteristics and optical properties of none hydroxyl absorption at IR region is the only difference from conventional synthetic quartz.
- The material is physically robust and provide higher stability and is recommend for use in vacuum and high pressure environments.

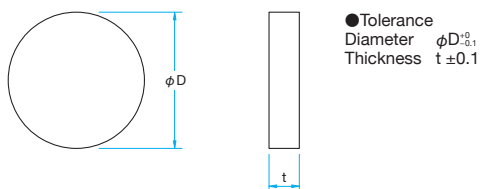


Schematic

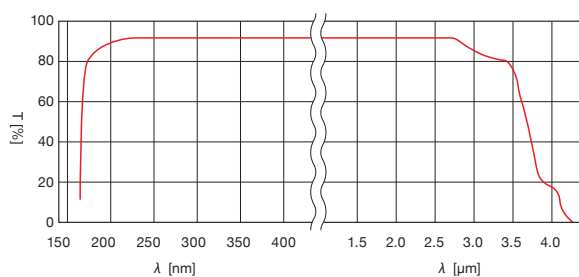


Outline Drawing

(in mm)



Typical Transmittance Data T: Transmission



Specifications

Material	Water Free Synthetic Fused Silica
Parallelism	<3'
Surface Quality (Scratch-Dig)	20-10
Clear aperture	90% of real diameter

Guide

- We also offer AR coatings in accordance to your wavelength selection.
- Product sizes and wedges which are not mentioned on our website or in this catalog are available, please ask our Sales Division.

Attention

- Fluorescence illuminant may occur with strong UV light exposure. For high UV exposure applications we recommend CaF₂ Windows (OPCF) and Excimer laser use Fused silica windows (OPSQK).
- Windows are offered standard with no AR coating and provide transmittance of 94% after loss of 3% for each surface.
- Wavefront reflection and transmission is not guaranteed; for interferometer and high precision optical application, please contact our Sales Division with your custom requests.

Physics

Wavelength [nm]	Refractive Index
193.5	1.561
200	1.548
250	1.509
300	1.486
350	1.476
400	1.470
500	1.462
600	1.458
700	1.455
800	1.453
1000	1.451
1500	1.445
2000	1.438
2500	1.430
3000	1.419
3500	1.407
Density	2.20g/cm ³
Thermal Conductivity	1.38W·m ⁻¹ ·K ⁻¹
Thermal Expansion Coefficient	0.55×10 ⁻⁶ /°C

Specifications

Part Number	Diameter φD [mm]	Thickness t [mm]
OPNQ-30C03-P	φ30	3
OPNQ-30C05-P	φ30	5
OPNQ-50C03-P	φ50	3
OPNQ-50C05-P	φ50	5

Compatible Optic Mounts

LHF -30S, -50S

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