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## 50mm Dia., 3mm Thick, NIR II Coated, Suprasil Window



Suprasil® Windows

Stock #25-594 **7 In Stock**

⊖ 1 ⊕ €431<sup>00</sup>

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Volume Pricing	
Qty 1-5	€431,00 each
Qty 6-25	€345,00 each
Qty 26-49	€324,00 each
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**!** Prices shown are exclusive of VAT/local taxes

### Product Downloads

### General

Protective Window **Type:**

### Physical & Mechanical Properties

45.00 **Clear Aperture CA (mm):**

**Diameter (mm):**

50.00 +0.00/-0.10

3.00 ±0.10 **Thickness (mm):**

Protective as needed **Bevel:**

90 **Clear Aperture (%):**

Fine Ground **Edges:**

<5 **Parallelism (arcsec):**

0.17 **Poisson's Ratio:**

70 **Young's Modulus (GPa):**

591.00 **Knoop Hardness (kg/mm<sup>2</sup>):**

## Optical Properties

NIR II (750 - 1550nm) **Coating:**

Suprasil® 300 **Substrate:**

1.459 **Index of Refraction (n<sub>d</sub>):**

10-5 **Surface Quality:**

λ/10 **Transmitted Wavefront, P-V:**

67.8 **Abbe Number (v<sub>d</sub>):**

**Coating Specification:**  
R<sub>abs</sub> ≤1.5% @ 750 - 800nm  
R<sub>abs</sub> ≤1.0% @ 800 - 1550nm  
R<sub>avg</sub> ≤0.7% @ 750 - 1550nm

750 - 1550 **Wavelength Range (nm):**

## Material Properties

2.20 **Density (g/cm<sup>3</sup>):**

**Coefficient of Thermal Expansion CTE (10<sup>-6</sup>/°C):**  
0.51 (0 to +100°C)  
0.58 (0 to +200°C)

## Regulatory Compliance

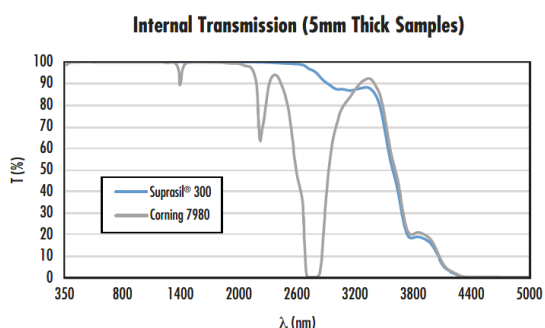
[View](#) **Certificate of Conformance:**

## Product Details

- High Transmission from 200 to 3500nm
- <1 ppm OH Content for Minimal Absorption Losses
- 10-5 Surface Quality and up to λ/10 TWD

Suprasil® Windows are constructed from high purity synthetic fused silica and provide high, flat transmission from 200 to 3500nm. Suprasil has similar mechanical properties to fused silica with the added benefit of having no absorption bands in the visible or infrared spectra, resulting in no transmission loss between 1400 - 2700nm. Compared to Infrasil®, Suprasil has lower absorption with a <1 ppm OH content, causing negligible increase in temperature from bulk absorption when used with high powered lasers. Suprasil Windows are ideal for laser material processing, medical laser applications, or applications using Nd:doped or 2 micron lasers.

## Technical Information



## Compatible Mounts

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