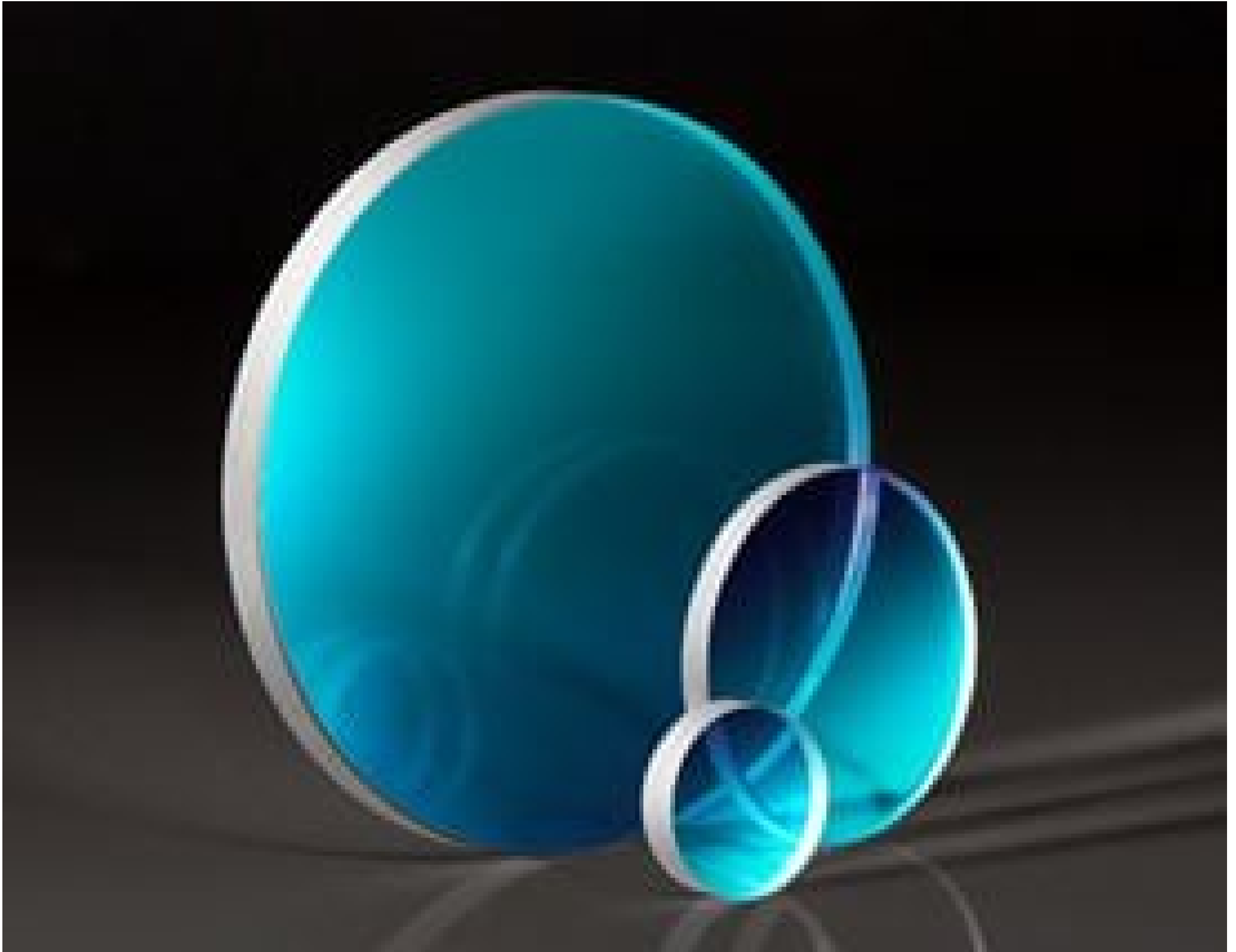


**TECHSPEC® 50mm Dia., VIS-NIR Coated, 30' Wedge, Fused Silica Wedged Window**



TECHSPEC® Fused Silica Wedged Windows

Stock #17-668 **2 In Stock**

⊖ 1 ⊕ €301.<sup>00</sup>

**ADD TO CART**

Volume Pricing	
Qty 1-5	€301,00 each
Qty 6-25	€240,00 each
Qty 26-49	€225,00 each
Need More?	<a href="#">Request Quote</a>

ⓘ Prices shown are exclusive of VAT/local taxes

Product Downloads

**General**

Wedged Window **Type:**

Glass **Type of Window:**

**Physical & Mechanical Properties**

Clear Aperture CA (mm):

45.00	
50.00 +0.0/-0.10	<b>Diameter (mm):</b>
3.00 ±0.20	<b>Thickness (mm):</b>
Fine Ground	<b>Edges:</b>
73	<b>Young's Modulus (GPa):</b>
30' ±10'	<b>Wedge Angle (arcmin):</b>

## Optical Properties

MS-NIR (400-1000nm)	<b>Coating:</b>
Fused Silica (Corning 7980)	<b>Substrate:</b> <input type="checkbox"/>
1.458	<b>Index of Refraction (n<sub>d</sub>):</b>
20-10	<b>Surface Quality:</b>
R <sub>abs</sub> ≤0.25% @ 880nm R <sub>avg</sub> ≤1.25% @ 400 - 870nm R <sub>avg</sub> ≤1.25% @ 890 - 1000nm	<b>Coating Specification:</b>
400 - 1000	<b>Wavelength Range (nm):</b>
M10 over 25mm Aperture	<b>Surface Flatness (P-V):</b>
5 J/cm <sup>2</sup> @ 532nm, 10ns	<b>Damage Threshold, Reference:</b> <input type="checkbox"/>

## Material Properties

0.52 (+5 to +35°C) 0.57 (0 to +200°C) 0.48 (-100 to +200°C)	<b>Coefficient of Thermal Expansion CTE (10<sup>-6</sup>/°C):</b>
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## Regulatory Compliance

Compliant	<b>RoHS 2015:</b>
View	<b>Certificate of Conformance:</b>
Compliant	<b>Reach 235:</b>

### Need different specs or modifications?

Edmund Optics offers comprehensive custom manufacturing services for optical and imaging components tailored to your specific application requirements. Whether in the prototyping phase or preparing for full-scale production, we provide flexible solutions to meet your needs. Our experienced engineers are here to assist—from concept to completion.

Our capabilities include:

- Custom dimensions, materials, coatings, and more
- High-precision surface quality and flatness
- Tight tolerances and complex geometries
- Scalable production—from prototype to volume

Learn more about our [custom manufacturing capabilities](#) or submit an inquiry [here](#).

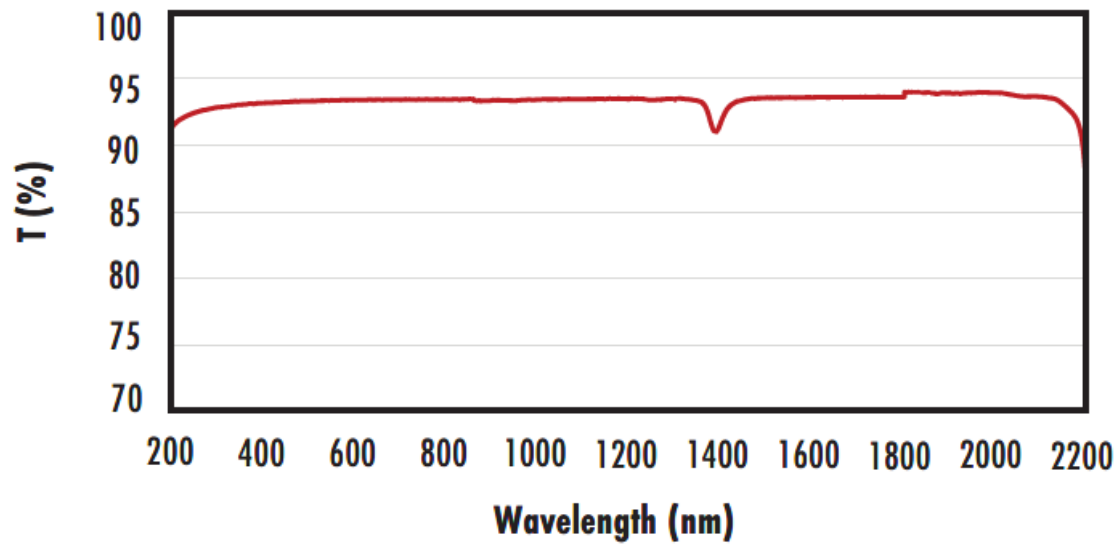
## Product Details

- UV Fused Silica Substrates with a 30 Arcminute Wedge
- M10 Surface Flatness and 20-10 Surface Quality
- Prevent Laser Instability When Used in Laser Cavities
- [N-BK7 Wedged Windows](#) and [Fused Silica Flat Windows](#) Also Available

TECHSPEC® Fused Silica Wedged Windows are manufactured from UV grade fused silica and feature a 30 arcminute wedge. The wedge of these windows eliminates Etalon effects by preventing back surface reflections from traveling along the same optical path as the transmitted beam. This protects against laser instability, mode-hopping, and power spikes when used in laser cavities and beam interference effects when used externally. TECHSPEC® Fused Silica Wedged Windows are ideal for use in UV or high power laser applications due to their high UV transmittance and insensitivity to temperature variations. These windows can also be used as beam pick-off optics or beam samplers to monitor laser beam properties such as beam power over time.

## Technical Information

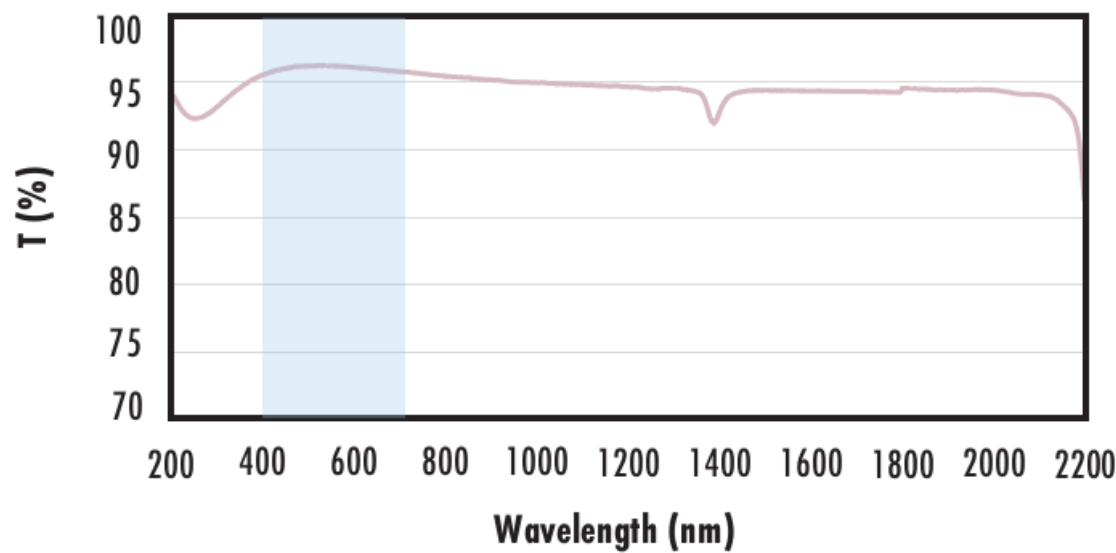
### Uncoated Fused Silica Typical Transmission



Typical transmission of a 3mm thick, uncoated fused silica window across the UV - NIR spectra.

[Click Here to Download Data](#)

### Fused Silica with MgF<sub>2</sub> Coating Typical Transmission



Typical transmission of a 3mm thick fused silica window with MgF<sub>2</sub> (400-700nm) coating at 0° AOI.

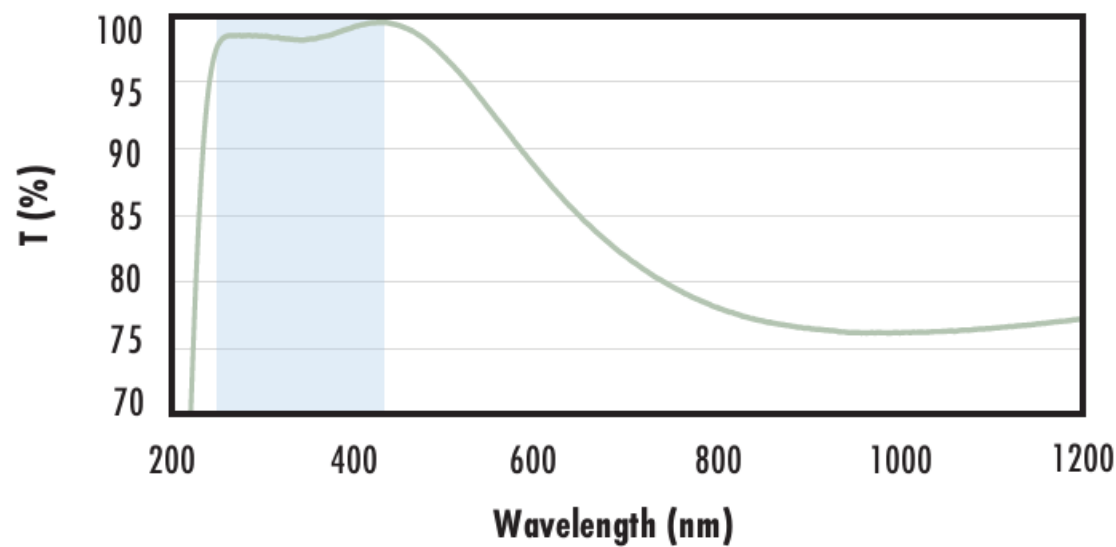
The blue shaded region indicates the coating design wavelength range, with the following specification:

$$R_{avg} \leq 1.75\% @ 400 - 700\text{nm (N-BK7)}$$

Data outside this range is not guaranteed and is for reference only.

[Click Here to Download Data](#)

### Fused Silica with UV-AR Coating Typical Transmission



Typical transmission of a 3mm thick fused silica window with UV-AR (250-425nm) coating at 0° AOI.

The blue shaded region indicates the coating design wavelength range, with the following specification:

$$R_{abs} \leq 1.0\% @ 250 - 425\text{nm}$$

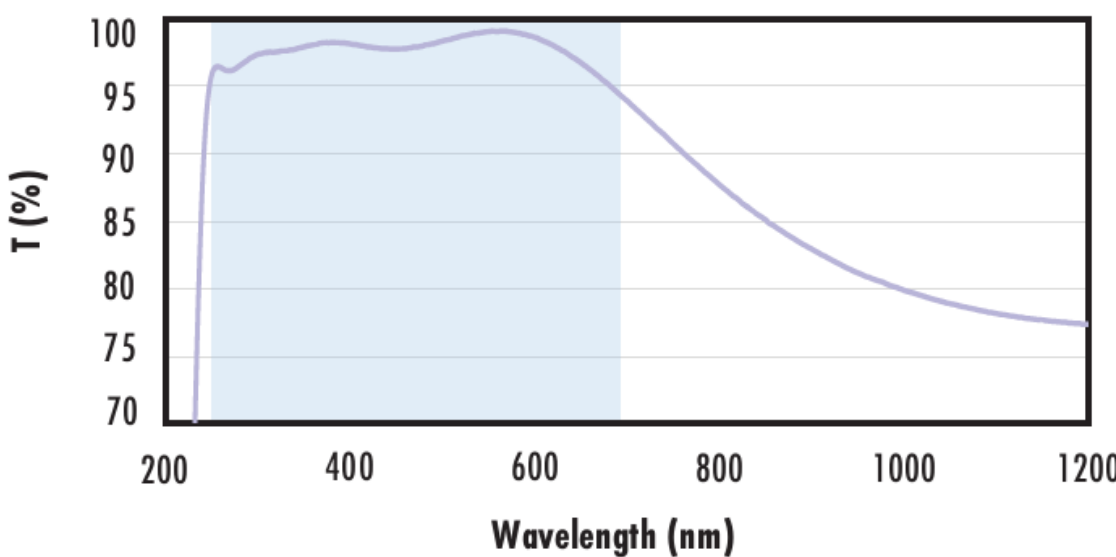
$$R_{avg} \leq 0.75\% @ 250 - 425\text{nm}$$

$$R_{avg} \leq 0.5\% @ 370 - 420\text{nm}$$

Data outside this range is not guaranteed and is for reference only.

[Click Here to Download Data](#)

### Fused Silica with UV-VIS Coating Typical Transmission



Typical transmission of a 3mm thick fused silica window with UV-VIS (250-700nm) coating at 0° AOI.

The blue shaded region indicates the coating design wavelength range, with the following specification:

$$R_{abs} \leq 1.0\% @ 350 - 450\text{nm}$$

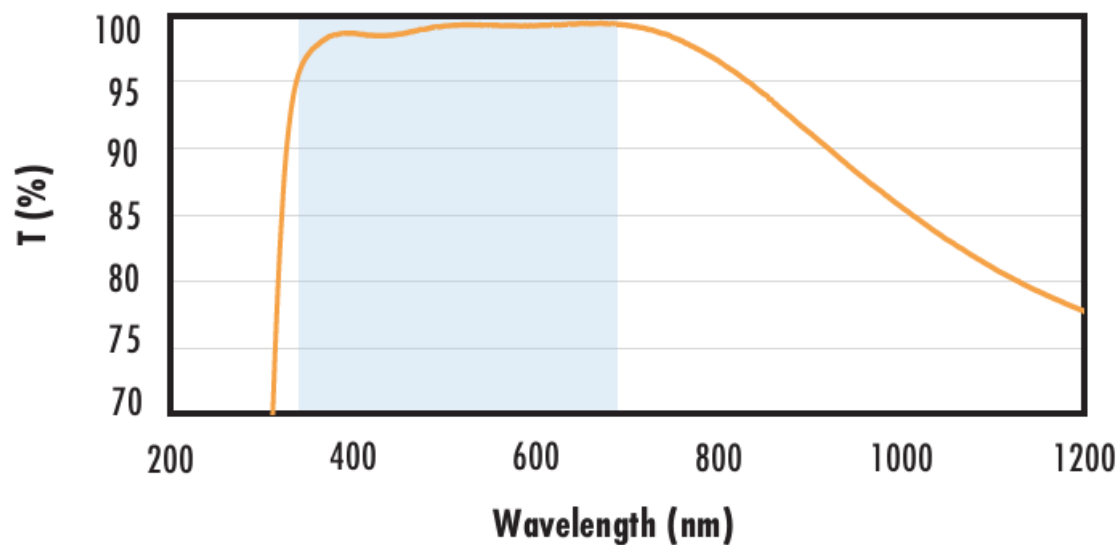
$$R_{avg} \leq 1.5\% @ 250 - 700\text{nm}$$

Data outside this range is not guaranteed and is for reference only.

[Click Here to Download Data](#)

### Fused Silica with VIS-EXT Coating

### Typical Transmission



Typical transmission of a 3mm thick fused silica window with VIS-EXT (350-700nm) coating at 0° AOI.

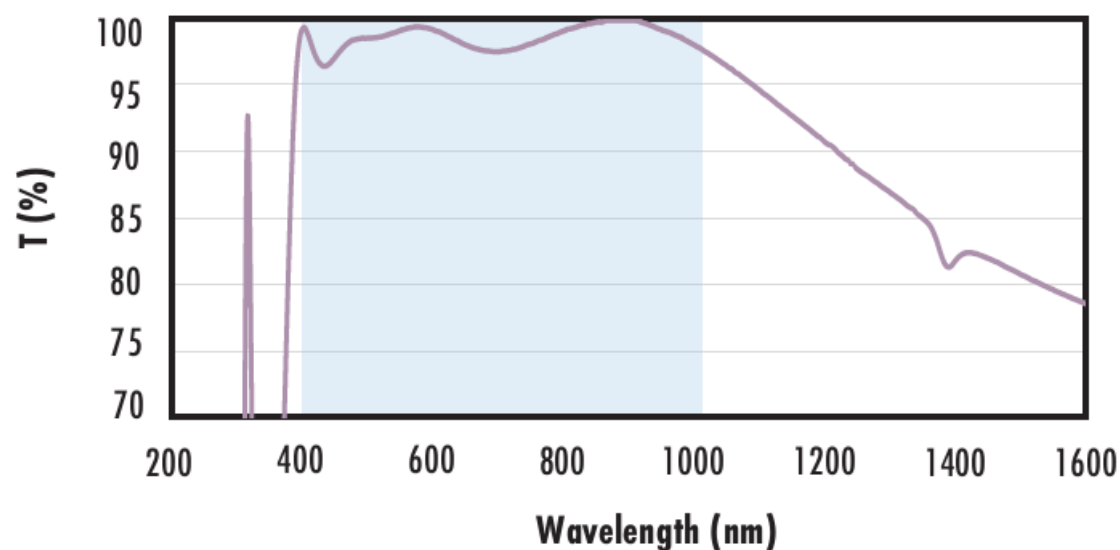
The blue shaded region indicates the coating design wavelength range, with the following specification:

$$R_{avg} \leq 0.5\% @ 350 - 700\text{nm}$$

Data outside this range is not guaranteed and is for reference only.

[Click Here to Download Data](#)

### Fused Silica with VIS-NIR Coating Typical Transmission



Typical transmission of a 3mm thick fused silica window with VIS-NIR (400-1000nm) coating at 0° AOI.

The blue shaded region indicates the coating design wavelength range, with the following specification:

$$R_{abs} \leq 0.25\% @ 880\text{nm}$$

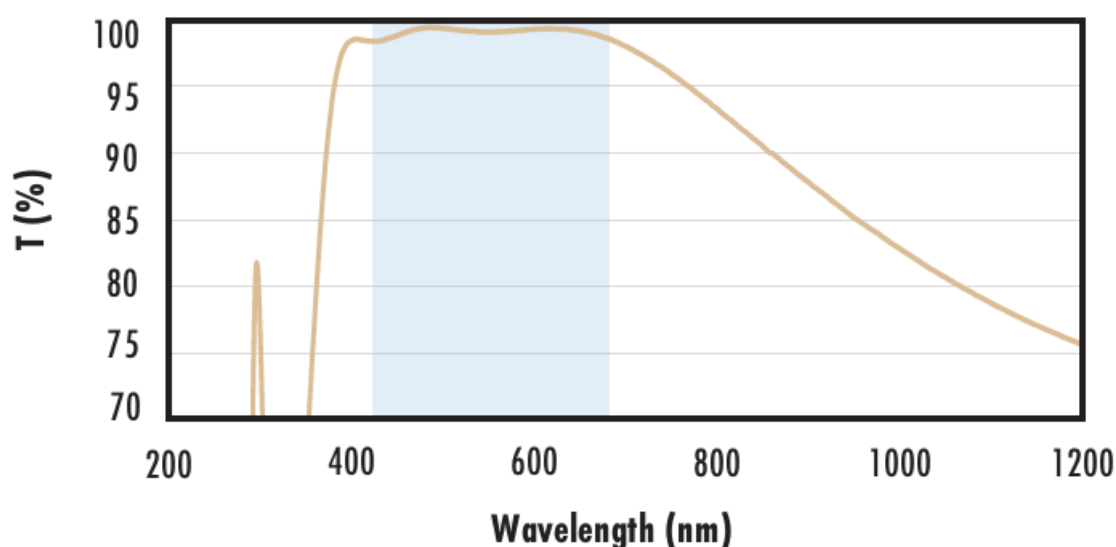
$$R_{avg} \leq 1.25\% @ 400 - 870\text{nm}$$

$$R_{avg} \leq 1.25\% @ 890 - 1000\text{nm}$$

Data outside this range is not guaranteed and is for reference only.

[Click Here to Download Data](#)

### Fused Silica with VIS 0° Coating Typical Transmission



Typical transmission of a 3mm thick fused silica window with VIS 0° (425-675nm) coating at 0° AOI.

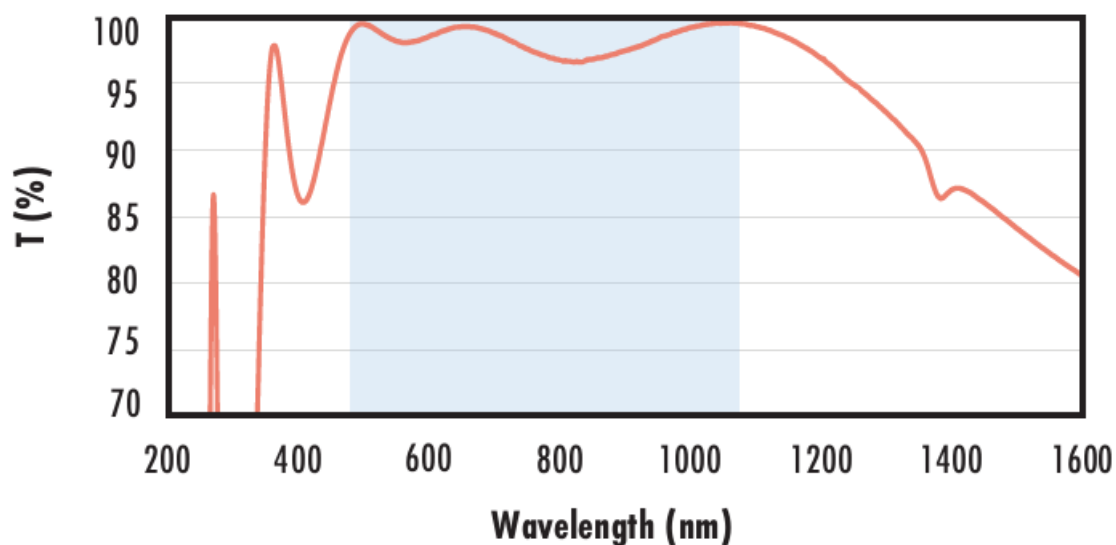
The blue shaded region indicates the coating design wavelength range, with the following specification:

$$R_{avg} \leq 0.4\% @ 425 - 675\text{nm}$$

Data outside this range is not guaranteed and is for reference only.

[Click Here to Download Data](#)

### Fused Silica with YAG-BBAR Coating Typical Transmission



Typical transmission of a 3mm thick fused silica window with YAG-BBAR (500-1100nm) coating at 0° AOI.

The blue shaded region indicates the coating design wavelength range, with the following specification:

$$R_{abs} \leq 0.25\% @ 532\text{nm}$$

$$R_{abs} \leq 0.25\% @ 1064\text{nm}$$

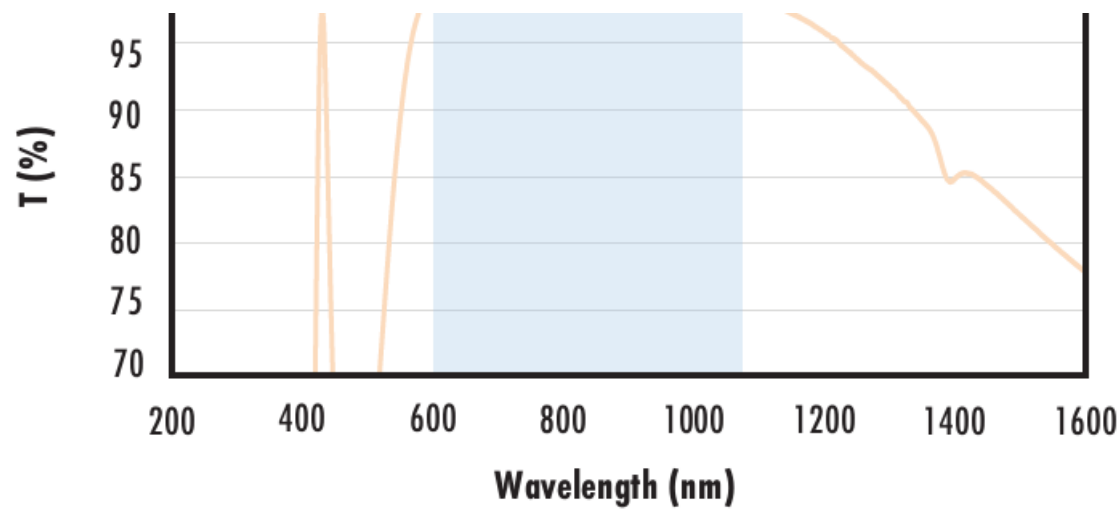
$$R_{avg} \leq 1.0\% @ 500 - 1100\text{nm}$$

Data outside this range is not guaranteed and is for reference only.

[Click Here to Download Data](#)

### Fused Silica with NIR I Coating Typical Transmission





Typical transmission of a 3mm thick fused silica window with NIR I (600 - 1050nm) coating at 0° AOI.

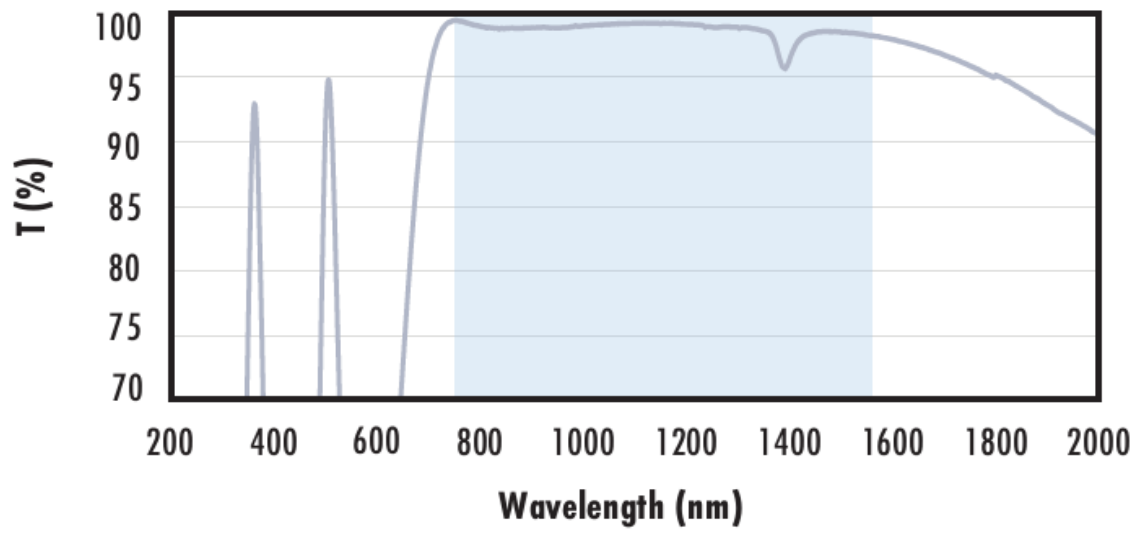
The blue shaded region indicates the coating design wavelength range, with the following specification:

$$R_{avg} \leq 0.5\% @ 600 - 1050nm$$

Data outside this range is not guaranteed and is for reference only.

[Click Here to Download Data](#)

### Fused Silica with NIR II Coating Typical Transmission



Typical transmission of a 3mm thick fused silica window with NIR II (750 - 1550nm) coating at 0° AOI.

The blue shaded region indicates the coating design wavelength range, with the following specification:

$$R_{abs} \leq 1.5\% @ 750 - 800nm$$

$$R_{abs} \leq 1.0\% @ 800 - 1550nm$$

$$R_{avg} \leq 0.7\% @ 750 - 1550nm$$

Data outside this range is not guaranteed and is for reference only.

[Click Here to Download Data](#)

## Coating Curves

## Compatible Mounts