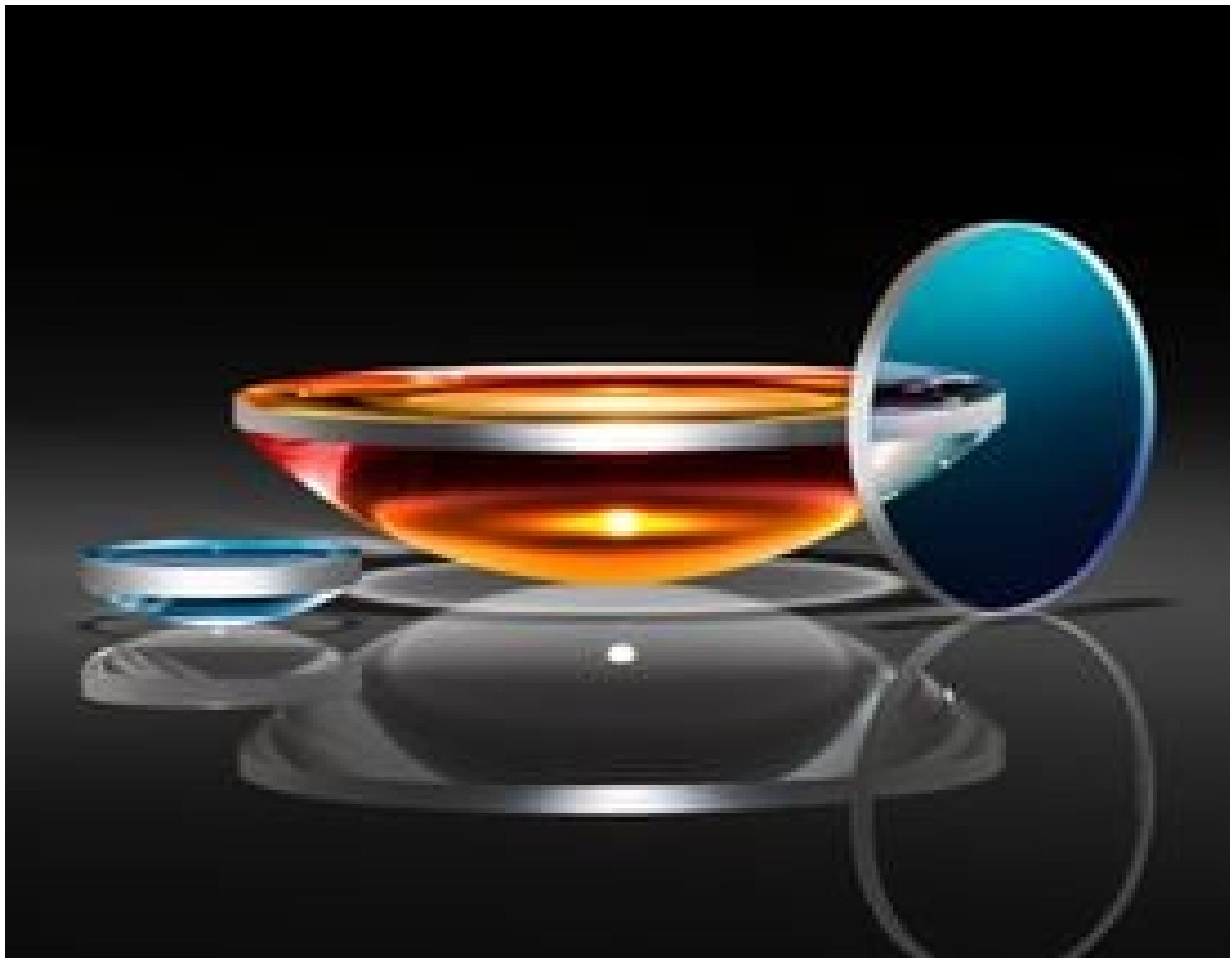
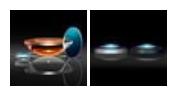


**TECHSPEC® 75mm Dia. x 100mm FL VIS-NIR Coated, UV Plano-Convex Lens**

UV Fused Silica Plano-Convex (PCX) Lenses

Stock #72-307 **5 In Stock**[-](#) 1 [+](#) **A\$1,184<sup>.00</sup>****ADD TO CART**

Volume Pricing	
Qty 1-5	A\$1,184.00 each
Qty 6-25	A\$944.00 each
Qty 26-49	A\$888.00 each
Need More?	<a href="#">Request Quote</a>

## Product Downloads

**SPECIFICATIONS****General**

Type:

## Physical & Mechanical Properties

Diameter (mm): 75.00

Centering (arcmin): <1

Center Thickness CT (mm): 21.00 ±0.10

Edge Thickness ET (mm): 1.53

Clear Aperture CA (mm): 73.5

Bevel: Protective as needed

## Optical Properties

Effective Focal Length EFL (mm): 100.00 @ 587.6

Back Focal Length BFL (mm): 85.61

Coating: VIS-NIR (400-1000nm)

Coating Specification:  
 $R_{abs} \leq 0.25\% @ 880\text{nm}$   
 $R_{avg} \leq 1.25\% @ 400 - 870\text{nm}$   
 $R_{avg} \leq 1.25\% @ 890 - 1000\text{nm}$

Substrate: Fused Silica (Corning 7980)

Surface Quality: 40-20

Power (P-V) @ 632.8nm: 3λ

Irregularity (P-V) @ 632.8nm: λ/2

Focal Length Tolerance (%): ±1

Radius R<sub>1</sub> (mm): 45.85

f#: 1.33

Numerical Aperture NA: 0.38

Wavelength Range (nm): 400 - 1000

Damage Threshold, Reference: 5 J/cm<sup>2</sup> @ 532nm, 10ns

## Regulatory Compliance

Certificate of Conformance:

[View](#)

## PRODUCT DETAILS

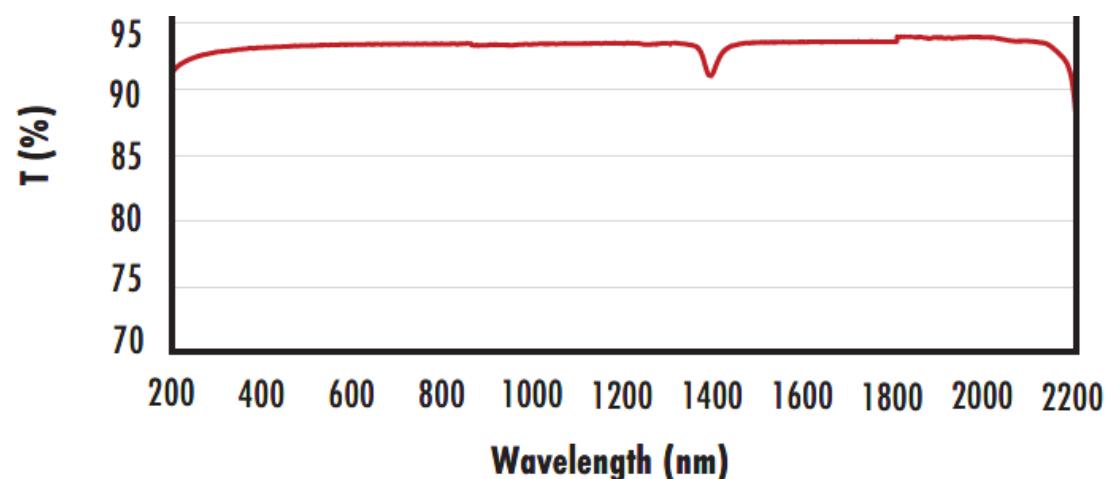
- AR Coated to Provide <1.25% Reflection per Surface for 400 - 870nm and for 890 – 1000nm
- Precision Fused Silica Substrate
- Various Coating Options: [Uncoated](#), [MgF<sub>2</sub>](#), [UV-AR](#), [UV-VIS](#), [VIS-EXT](#), [VIS 0°](#), [YAG-BBAR](#), [NIR I](#), and [NIR II](#)

TECHSPEC® UV Fused Silica Plano-Convex (PCX) Lenses MS-NIR Coated feature precision specifications and a [variety of coating options](#) on a broadband substrate. Fused Silica is commonly used in applications from the Ultraviolet (UV) through the Near-Infrared (NIR). Its low index of refraction, low coefficient of thermal expansion, and low inclusion content make it ideal for laser applications and harsh environmental conditions. TECHSPEC® UV Fused Silica Plano-Convex (PCX) Lenses MS-NIR Coated feature industry leading diameter and centration specifications, making them ideal for integration into demanding imaging and targeting applications. These lenses are VIS-NIR coated to increase their coating performance in the visible and near infrared region.

## TECHNICAL INFORMATION

### FUSED SILICA

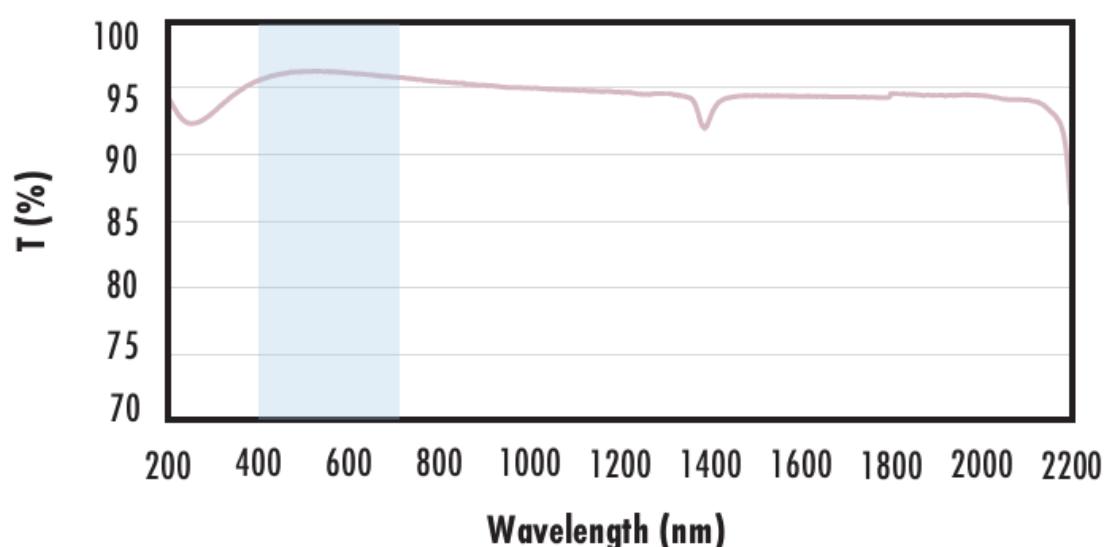
#### Uncoated Fused Silica Typical Transmission



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

[Click Here to Download Data](#)

### Fused Silica with $\text{MgF}_2$ Coating Typical Transmission



Typical transmission of a 3mm thick fused silica window with  $\text{MgF}_2$  (400-700nm) coating at 0° AOI.

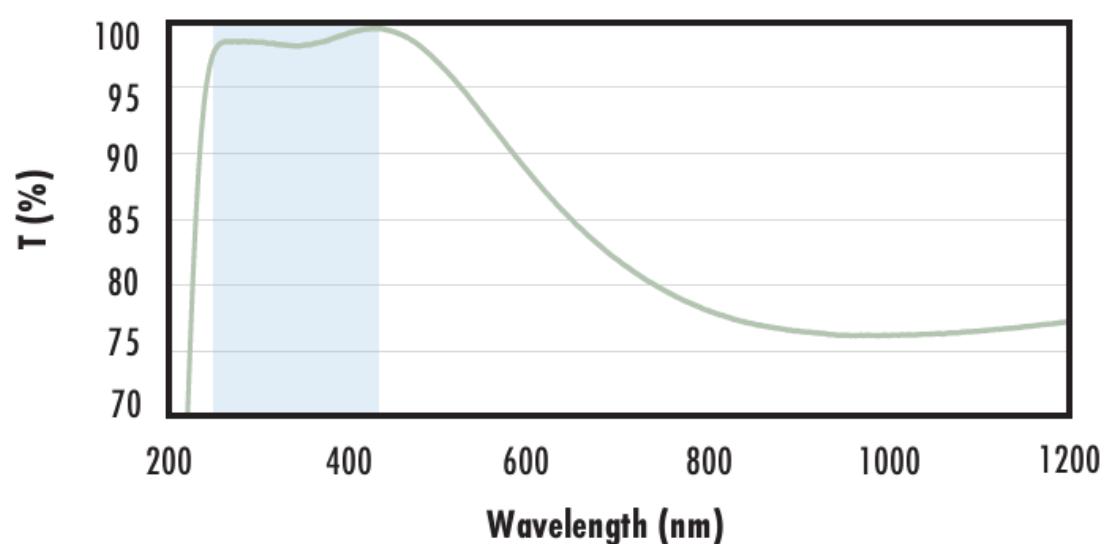
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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.

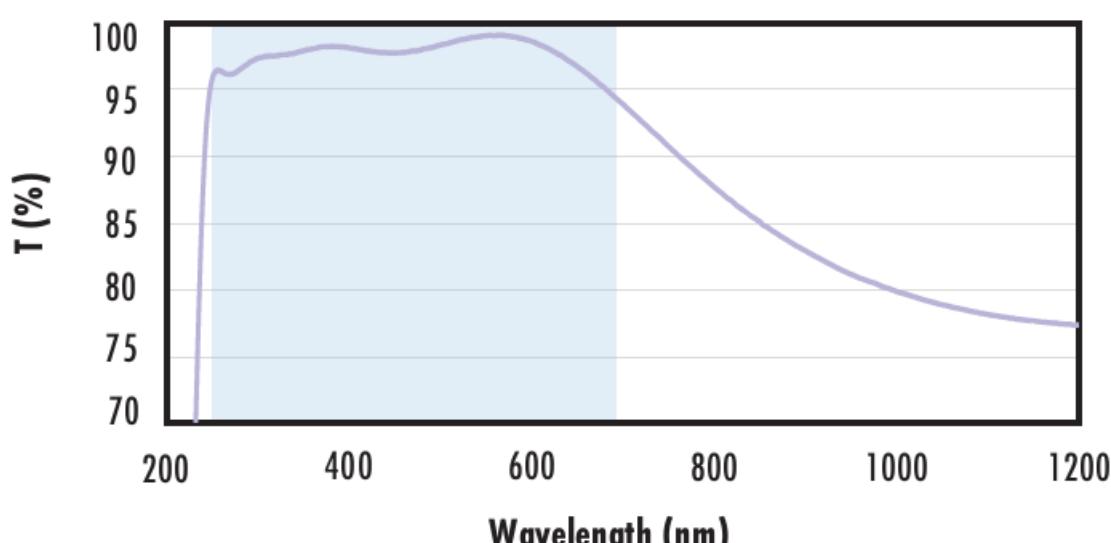
The blue shaded region indicates the coating design wavelength range, with the following specification:

$$\begin{aligned} R_{\text{abs}} &\leq 1.0\% \text{ @ 250 - 425nm} \\ R_{\text{avg}} &\leq 0.75\% \text{ @ 250 - 425nm} \\ R_{\text{avg}} &\leq 0.5\% \text{ @ 370 - 420nm} \end{aligned}$$

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

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### 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:

$$\begin{aligned} R_{\text{abs}} &\leq 1.0\% \text{ @ 350 - 450nm} \\ R_{\text{avg}} &\leq 1.5\% \text{ @ 250 - 700nm} \end{aligned}$$

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

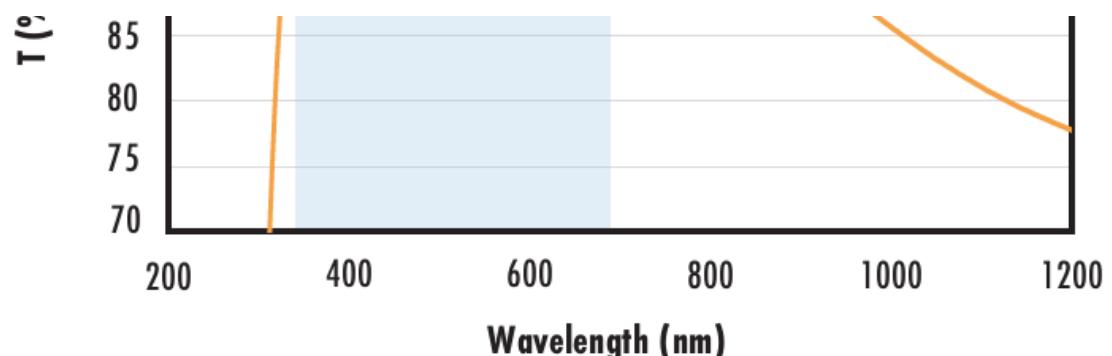
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### Fused Silica with VIS-EXT Coating Typical Transmission



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

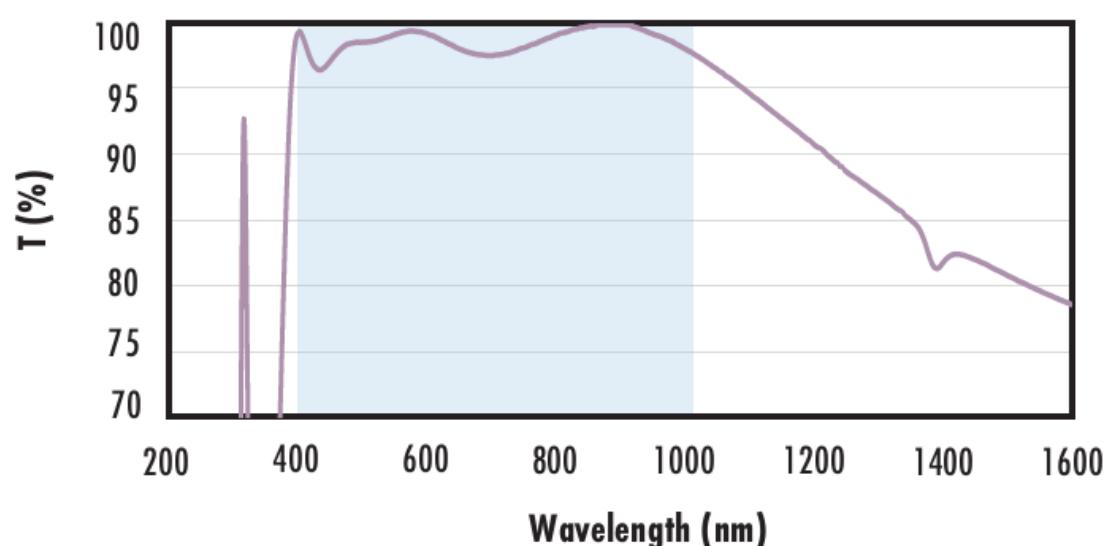
The blue shaded region indicates the coating design wavelength range, with the following specification:



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

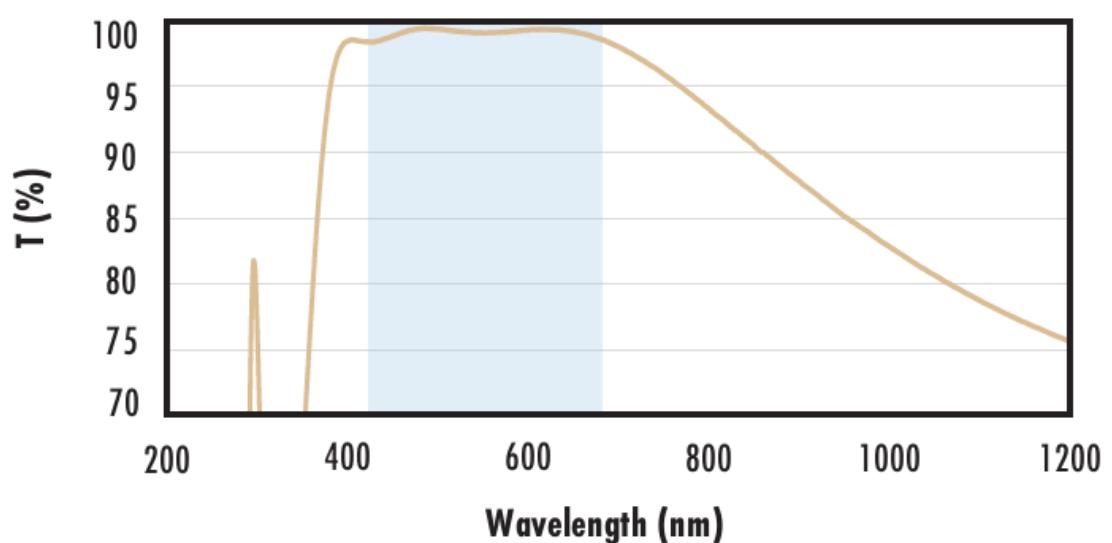
The blue shaded region indicates the coating design wavelength range, with the following specification:

$R_{abs} \leq 0.25\% @ 880\text{nm}$   
 $R_{avg} \leq 1.25\% @ 400 - 870\text{nm}$   
 $R_{avg} \leq 1.25\% @ 890 - 1000\text{nm}$

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

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### 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.

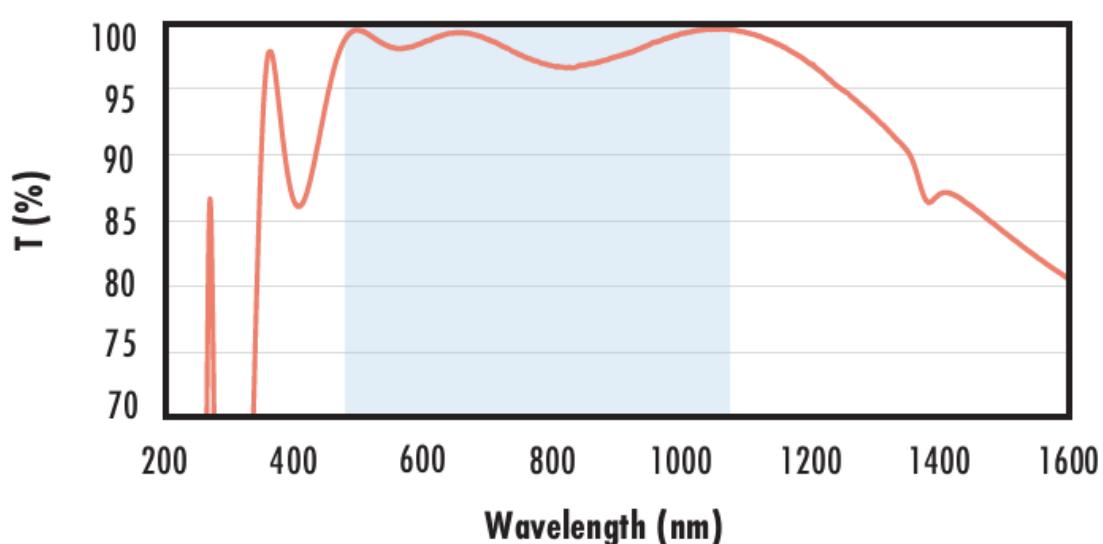
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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

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### 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.

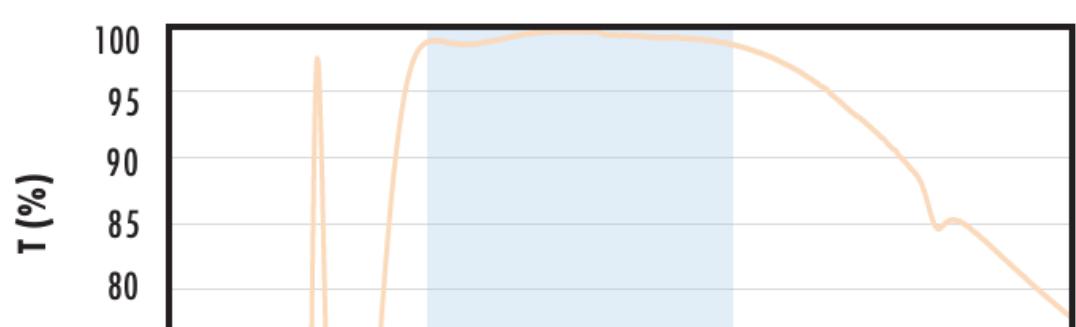
The blue shaded region indicates the coating design wavelength range, with the following specification:

$R_{abs} \leq 0.25\% @ 532\text{nm}$   
 $R_{abs} \leq 0.25\% @ 1064\text{nm}$   
 $R_{avg} \leq 1.0\% @ 500 - 1100\text{nm}$

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

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### Fused Silica with NIR I Coating Typical Transmission



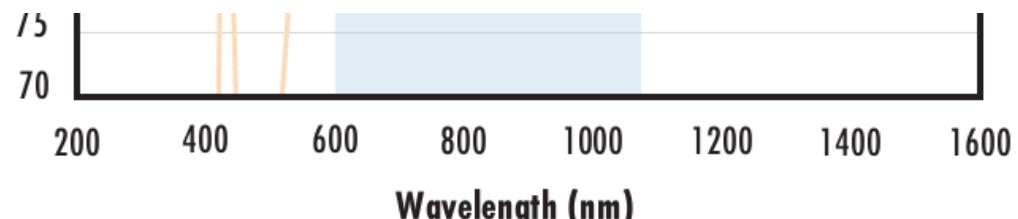
Typical transmission of a 3mm thick fused silica window with NIR I (600 - 1050nm) coating at 0° AOI.

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

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

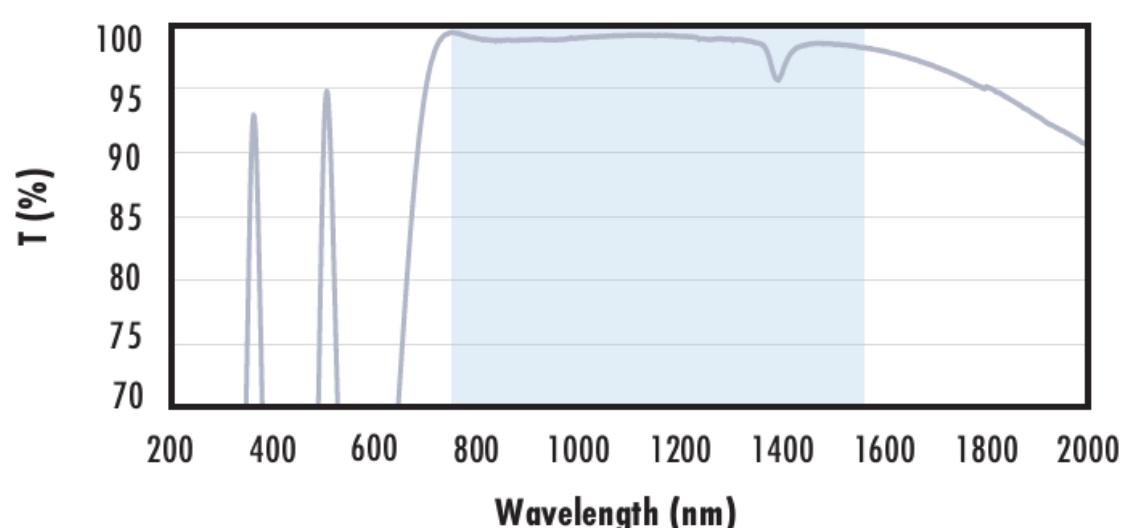
Data outside this range is not guaranteed and is for reference only.

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## 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:

$R_{abs} \leq 1.5\% @ 750 - 800\text{nm}$   
 $R_{abs} \leq 1.0\% @ 800 - 1550\text{nm}$   
 $R_{avg} \leq 0.7\% @ 750 - 1550\text{nm}$

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

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## COATING CURVES

### CUSTOM

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](#).