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[/ Fused Silica Plano-Convex \(PCX\)](#)  
[/ UV Fused Silica Plano-Convex \(PCX\)](#)

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**TECHSPEC®**

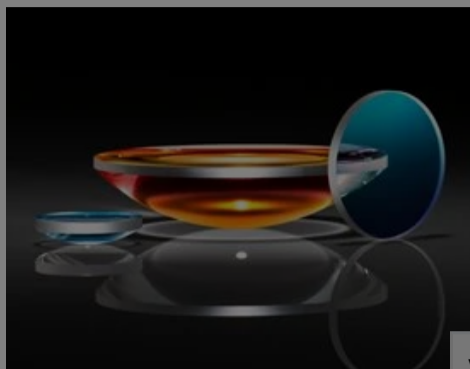
75mm Dia. x 100mm

Please select your shipping country to view the most accurate inventory information, and to determine the correct Edmund Optics sales office for your order.

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Convex Lens



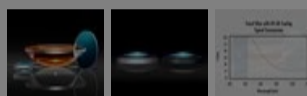
Stock #72-301 **2 In Stock**

1

€730<sup>,00</sup>

ADD TO CART

UV Fused Silica Plano-Convex (PCX) Lenses



Volume Pricing

Qty 1-5 €730,00 each

Qty 6-25 €585,00 each

Qty 26-49 €550,00 each

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Product Downloads

EO Spec Sheet

Prices shown are exclusive of VAT/local taxes

General

Type: Plano-Convex Lens

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: UV-AR (250-425nm)

Coating Specification: R<sub>abs</sub> ≤1.0% @ 250 - 425nm  
R<sub>avg</sub> ≤0.75% @ 250 - 425nm  
R<sub>avg</sub> ≤0.5% @ 370 - 420nm

Substrate: Fused Silica (Corning 7980)

Surface Quality: 40-20

Power (P-V) @ 632.8nm: 3λ

Irregularity (P-V) @ 632.8nm: 2λ

Focal Length Tolerance (%): ±1

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

<b>f/#:</b> 1.33	<b>Numerical Aperture NA:</b> 0.38
<b>Wavelength Range (nm):</b> 250 - 425	<b>Damage Threshold:</b> 3 J/cm <sup>2</sup> @ 255nm - 10ns
<p>Please select your shipping country to view the most accurate inventory information, and to determine the correct Edmund Optics sales office for your order.</p> <p><b>Select Your Country/Region:</b></p>	
<b>Regulatory Compliance</b>	
<b>Certificate of Conformance:</b>	<a href="#">View</a>

## 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](#).

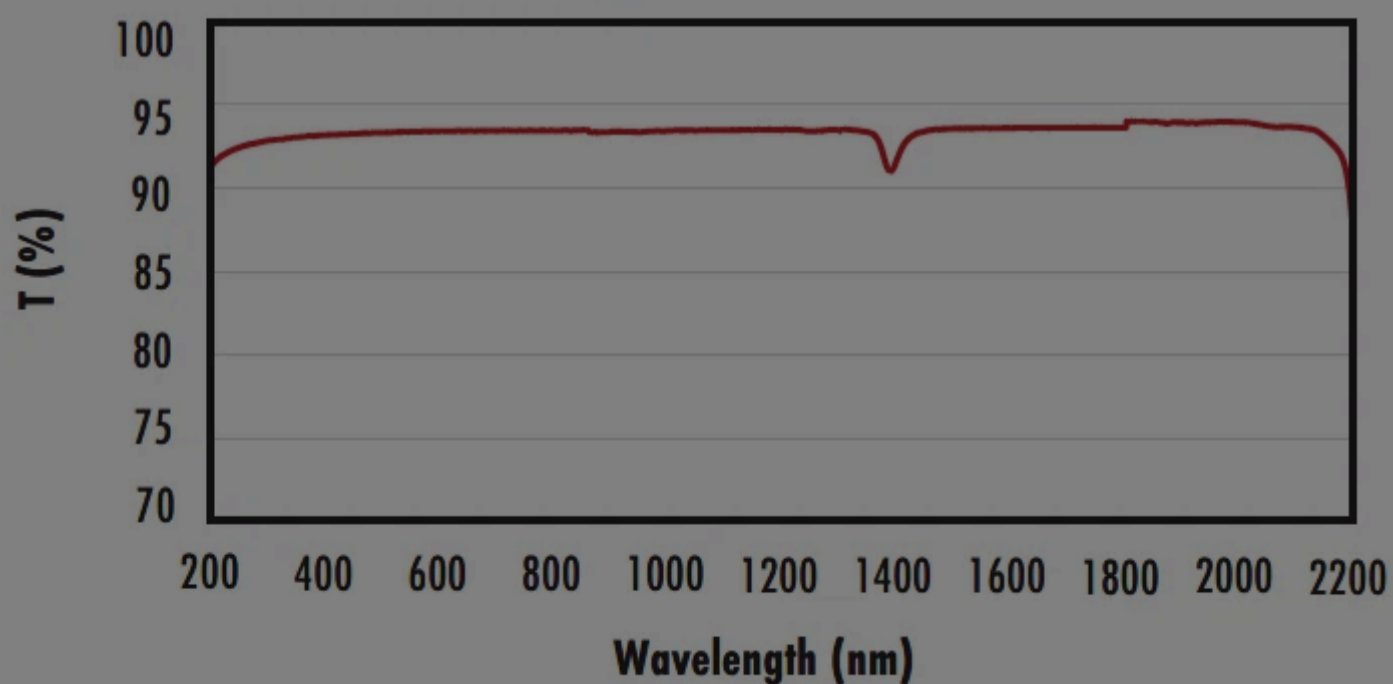
## Product Details

- AR Coated to Provide <0.75% Reflection per Surface for 250 - 425nm
- Precision Fused Silica Substrate
- Various Coating Options: [Uncoated](#), [MgF<sub>2</sub>](#), [UV-VIS](#), [VIS-EXT](#), [VIS-NIR](#), [VIS 0°](#), [YAG-BBAR](#), [NIR I](#), and [NIR II](#)

TECHSPEC® UV Fused Silica Plano-Convex (PCX) Lenses UV-AR 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 UV-AR Coated feature industry leading diameter and centration specifications, making them ideal for integration into demanding imaging and targeting applications. These lenses are UV-AR coated to increase their coating performance in the ultraviolet region.

## Technical Information

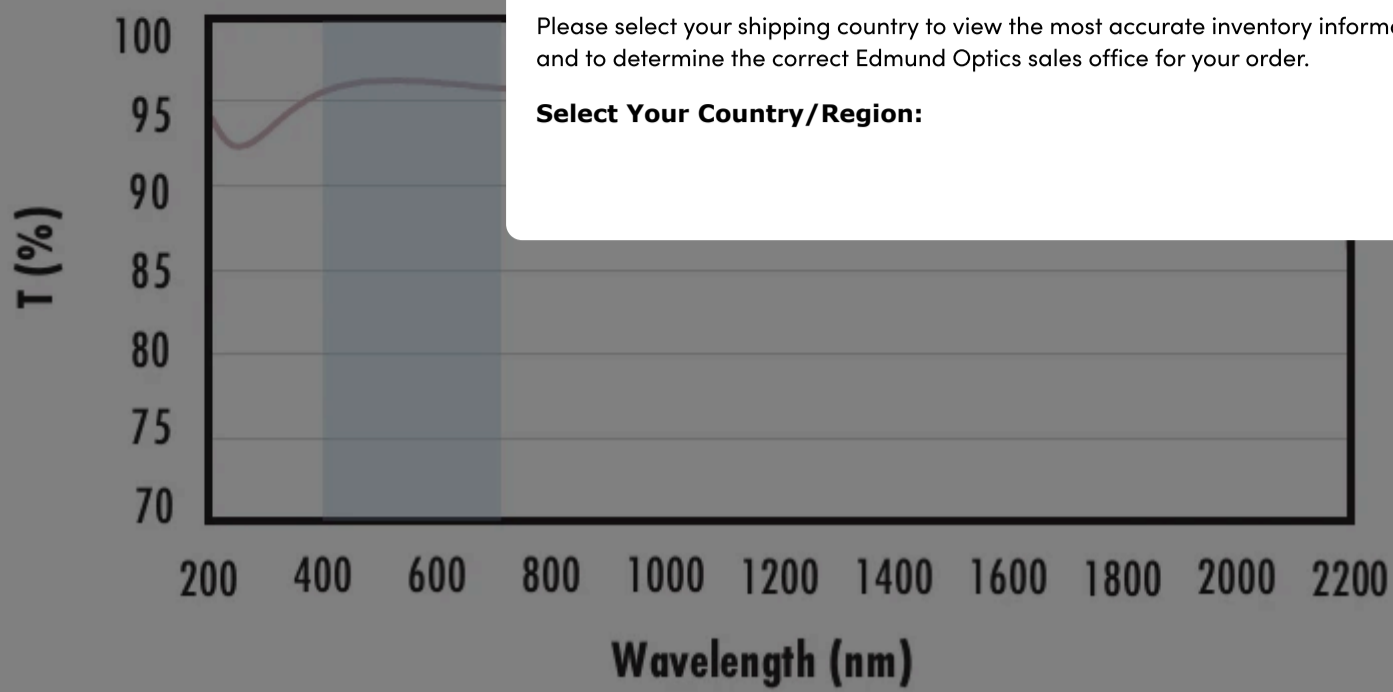
### Uncoated Fused Silica Typical Transmission



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.

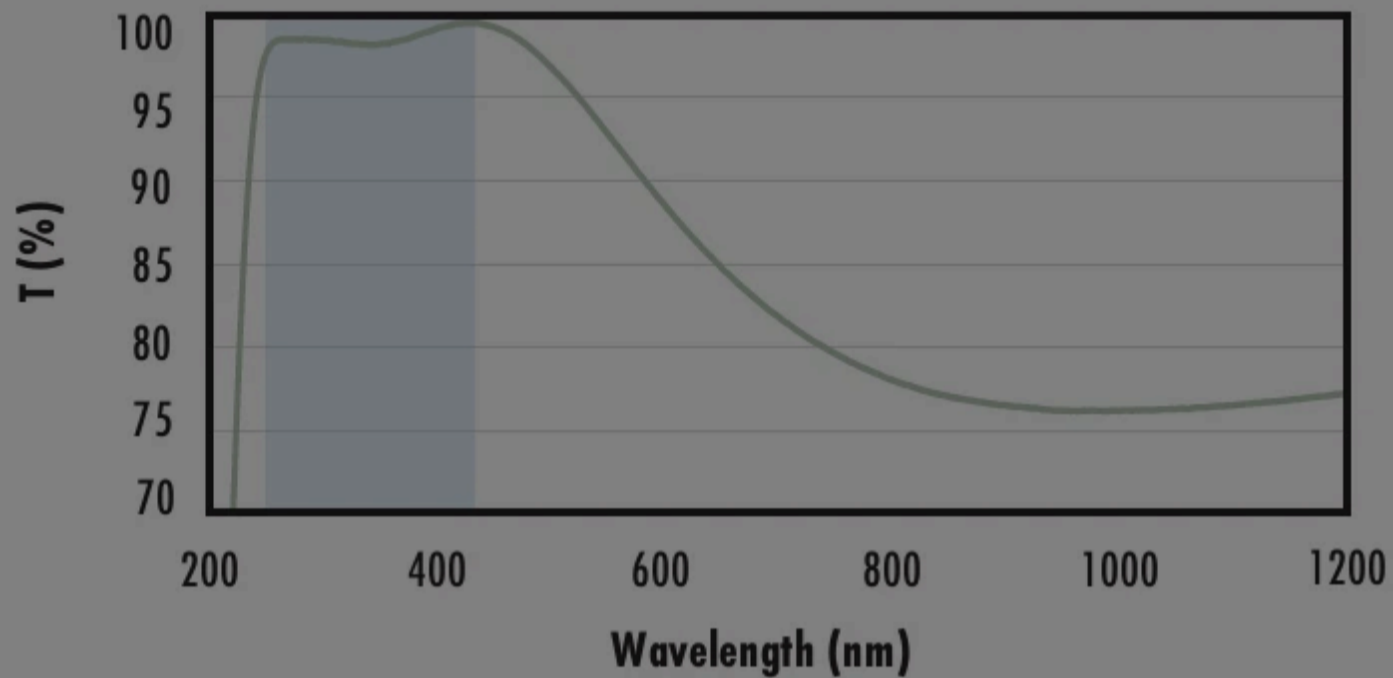
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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:

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

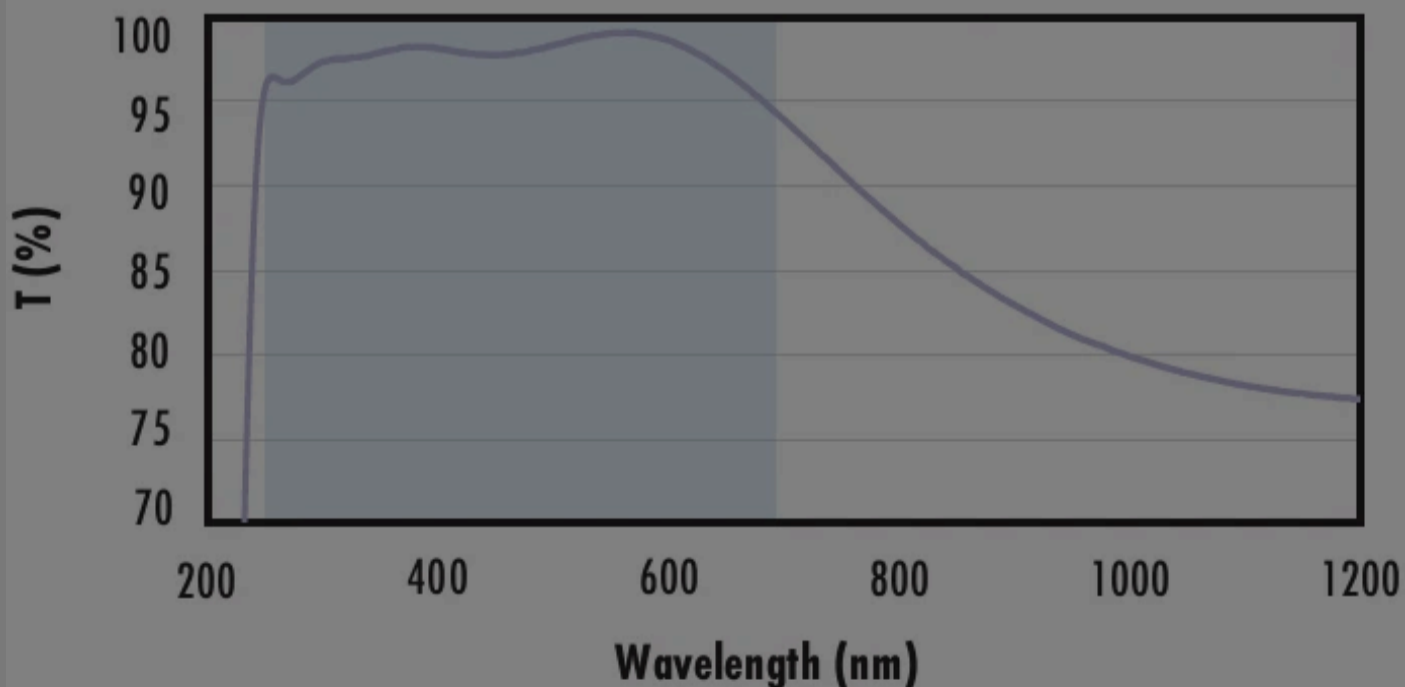
$$R_{avg} \leq 0.75\% \text{ @ } 250 - 425\text{nm}$$

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

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:

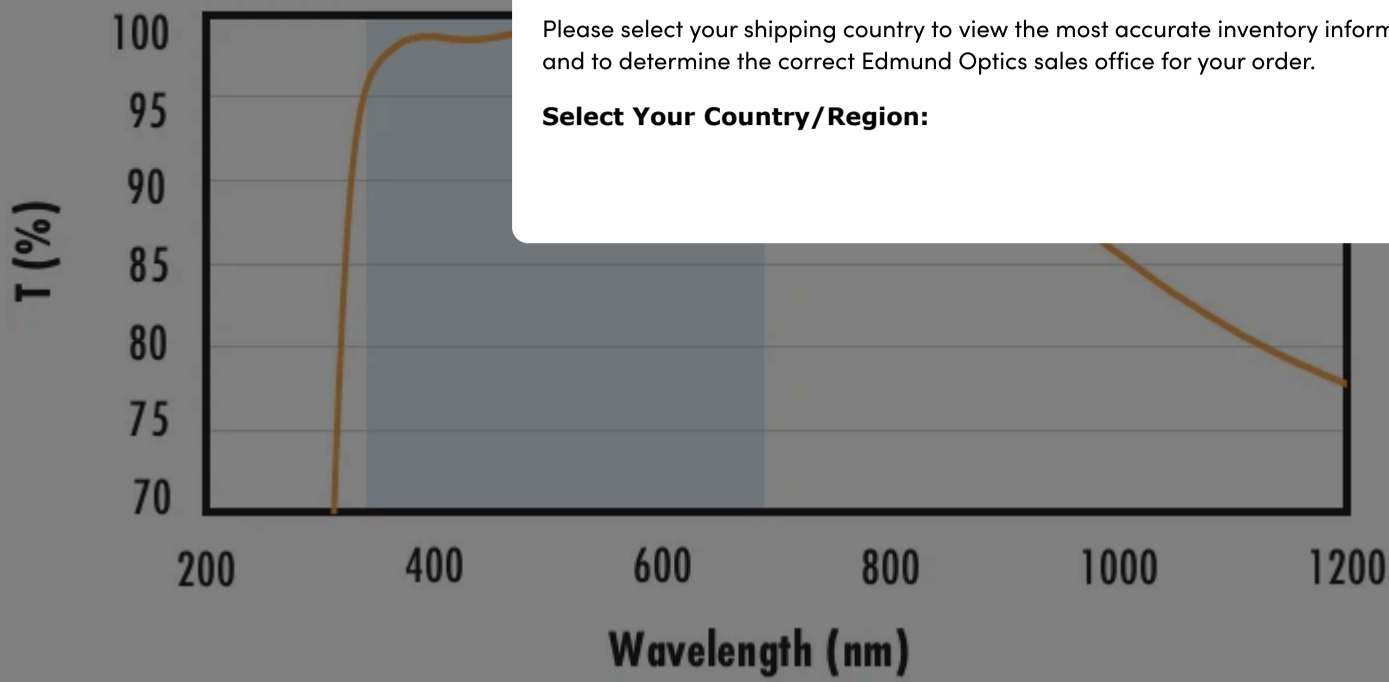
$$R_{abs} \leq 1.0\% \text{ @ } 350 - 450\text{nm}$$

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

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.

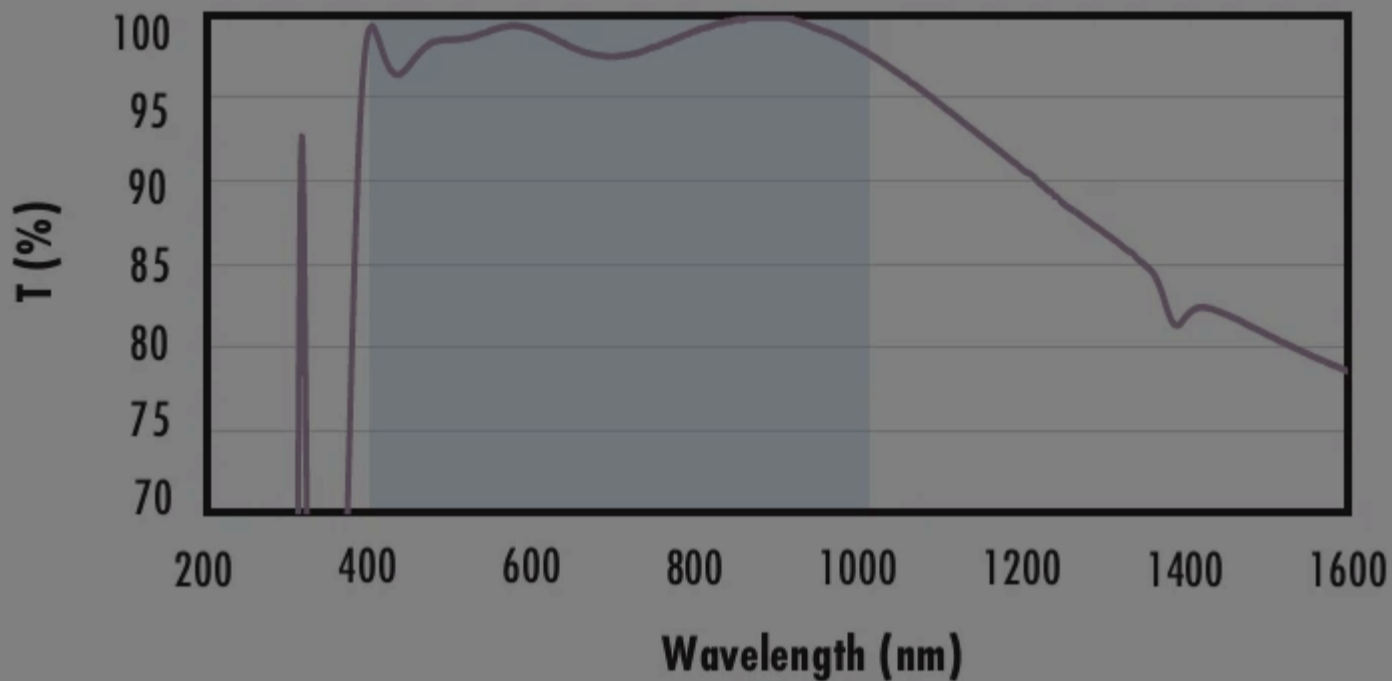
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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

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## 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:

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

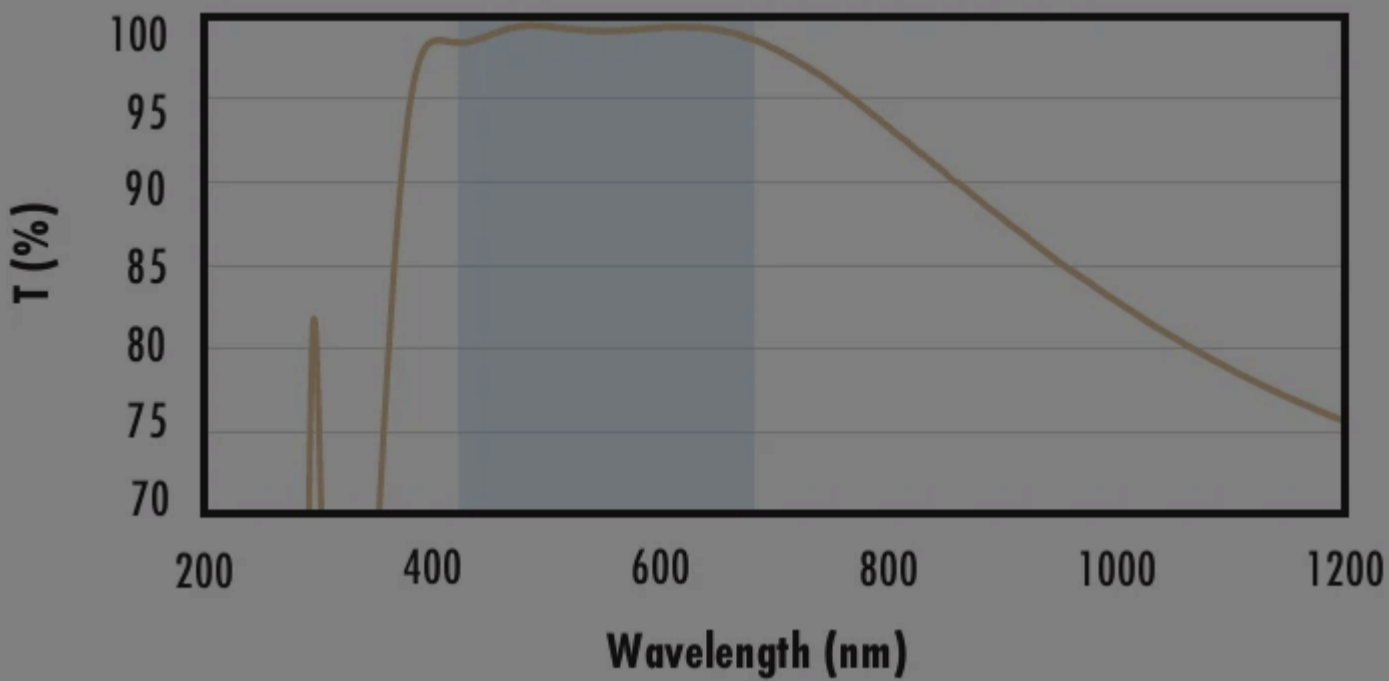
$$R_{avg} \leq 1.25\% @ 400 - 870\text{nm}$$

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

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.

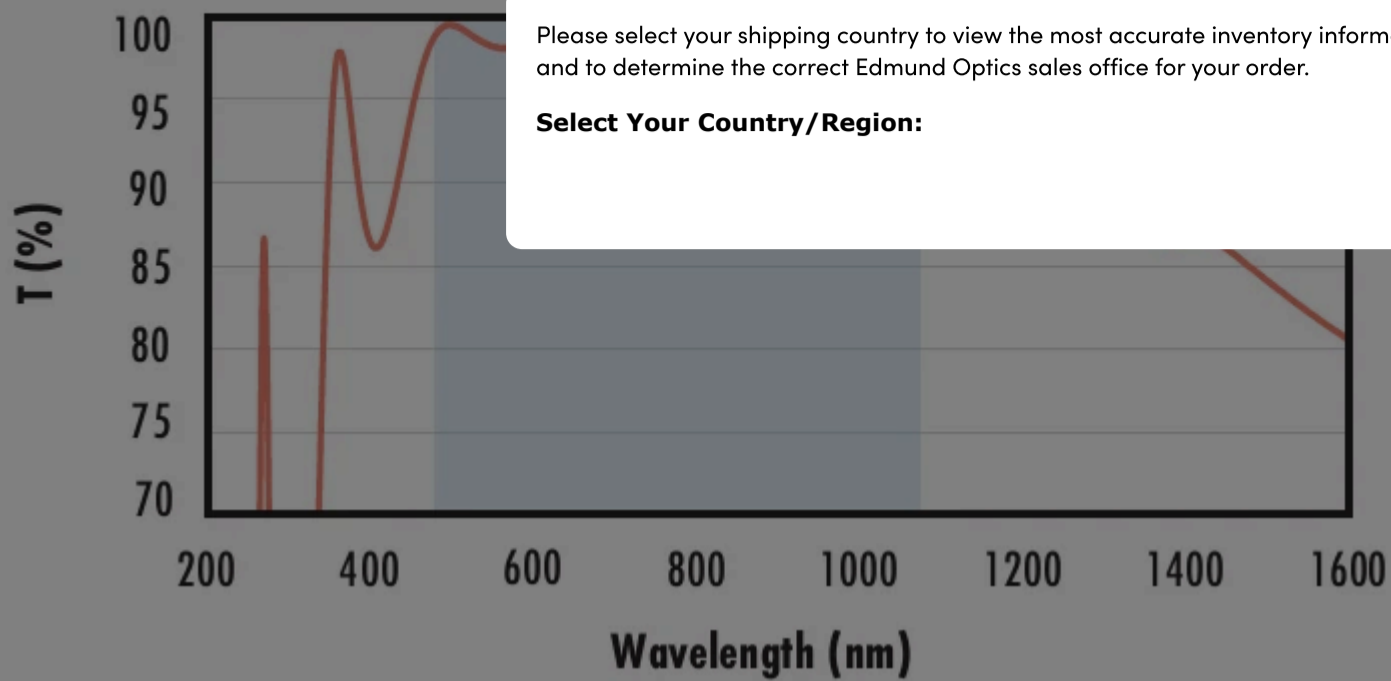
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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.

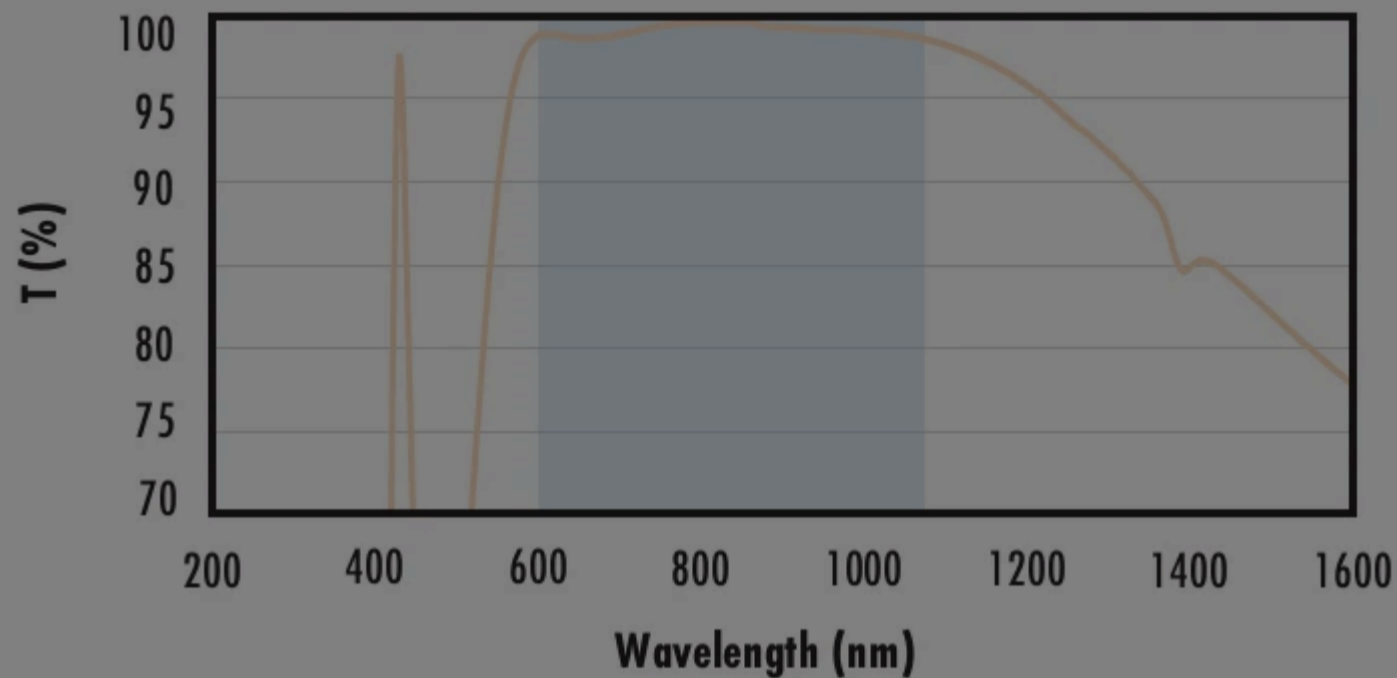
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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.

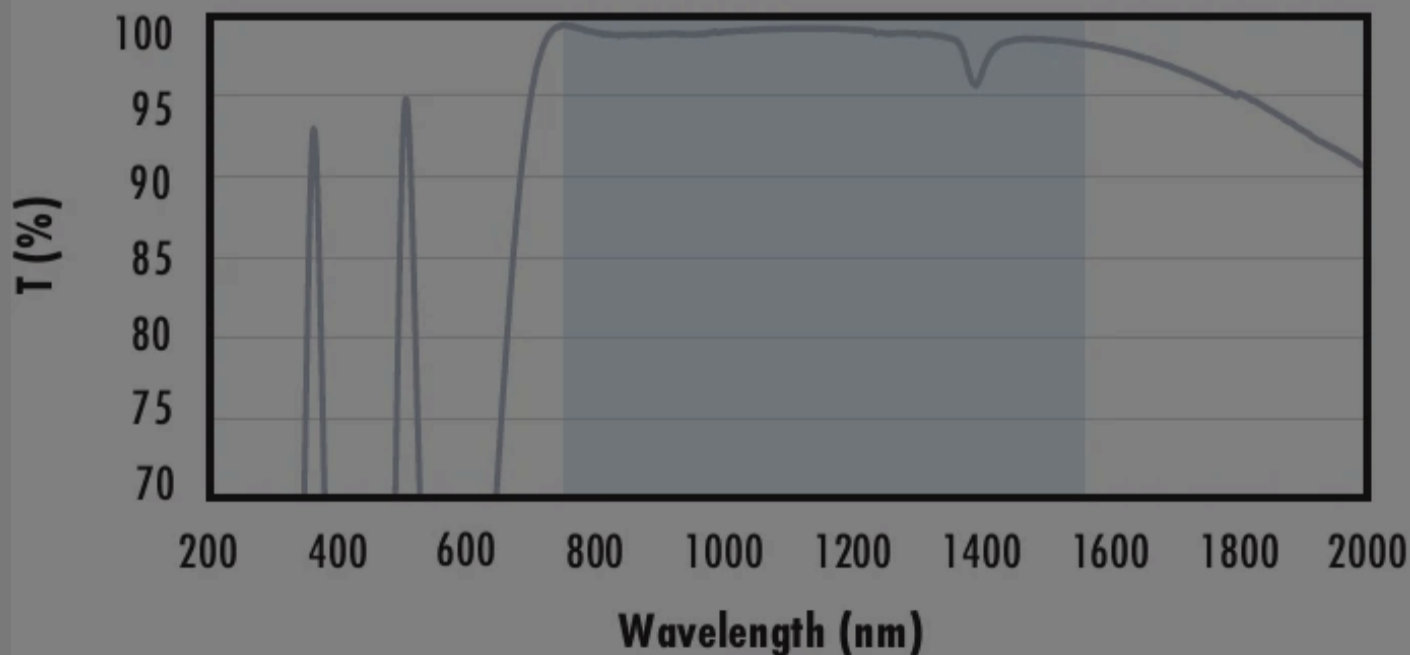
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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**Related Products**



C, S, and T-Mount Circular  
Optic Mounts



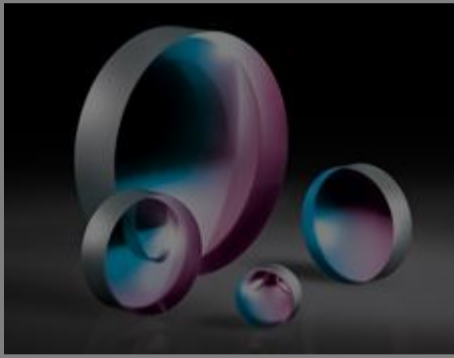
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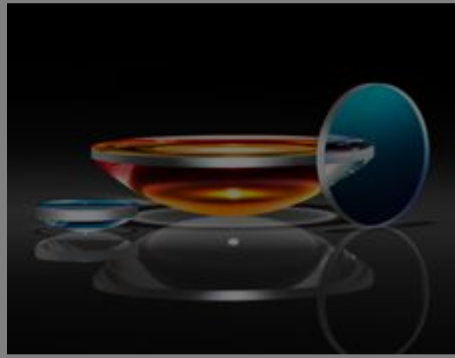
UV Fused Silica Aspheric Lenses

## Frequently Purchased Together



#48-330 - 25mm Dia. x -50mm FL,  
UV-AR Coated, UV DCV Lens  
**€171,00**

Qty



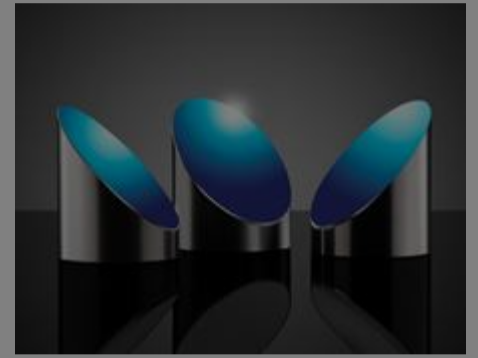
#48-677 - 25mm Dia. x 60mm  
FL UV-AR Coated, UV Plano-  
Convex Lens  
**€173,00**

Qty



#35-566 - 101.6 x 101.6mm EFL 90°  
Protected Aluminum 100Å Off-Axis  
Parabolic Mirror  
**€899,00**

Qty



#25-465 - 25.4mm Dia. x 25.4mm  
EFL, Enhanced Deep UV (DUV) 90°  
Off-Axis Mirror  
**€562,00**

Qty

