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

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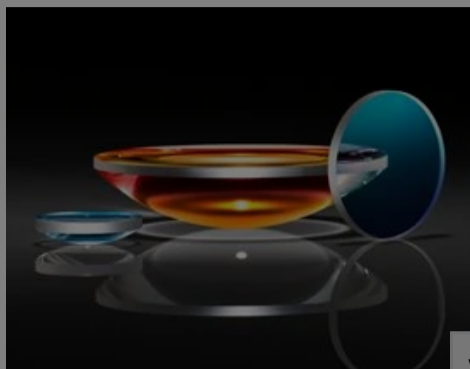
TECHSPEC®

25mm Dia. x 125mm F

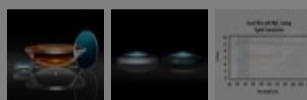
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UV Fused Silica Plano-Convex (PCX) Lenses



Stock #18-084 **CLEARANCE** 5 In Stock

1

€97^{,95}

ADD TO CART

Volume Pricing

Qty 1+ €97,95 each

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Prices shown are exclusive of VAT/local taxes

Product Downloads

- STEP:step
- PDF Drawing:pdf
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- Zemax:zar
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- Code V:seq
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General

Type: Plano-Convex Lens

Physical & Mechanical Properties

Diameter (mm): 25.00 -0.025

Centering (arcmin): <1

Center Thickness CT (mm): 3.42 ±0.10

Edge Thickness ET (mm): 2.04

Clear Aperture CA (mm): 24

Bevel: Protective as needed

Optical Properties

Effective Focal Length EFL (mm): 125.00 @ 587.6nm

Back Focal Length BFL (mm): 122.65

Coating: MgF₂ (400-700nm)

Coating Specification: R_{avg} ≤1.75% @ 400 - 700nm

Substrate: [Fused Silica](#) (Corning 7980)

Surface Quality: 40-20

Power (P-V) @ 632.8nm: 3 Rings

Irregularity (P-V) @ 632.8nm: 0.5 Rings

Focal Length Tolerance (%): ±1

Radius R₁ (mm): 57.30

f/#: 5

Numerical Aperture NA: 0.10

Wavelength Range (nm): 400 - 700

Damage Threshold, By Design: 10 J/cm² @ 532nm, 10ns

Regulatory Compliance

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Need different specifications?

Edmund Optics offers comprehensive custom manufacturing capabilities for a wide range of 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](#).

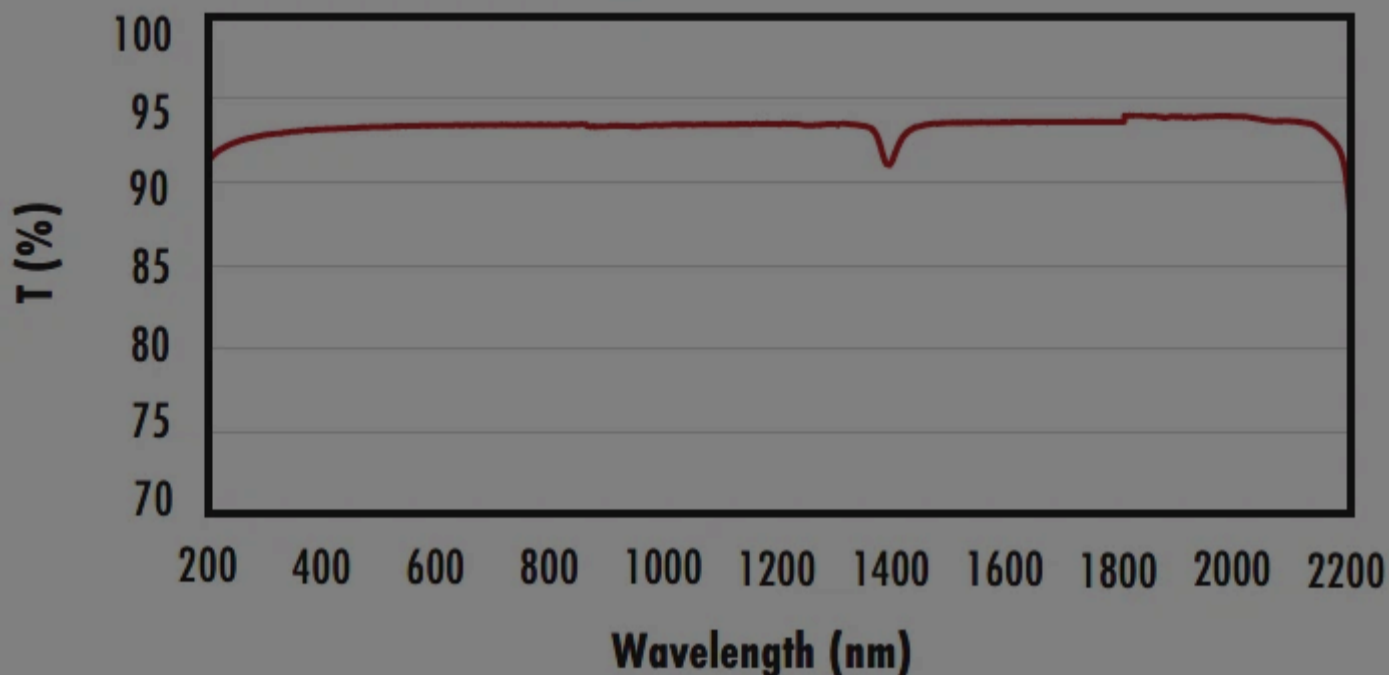
Product Details

- AR Coated to Provide <1.75% Reflection per Surface for 400 - 700nm
- Precision Fused Silica Substrate
- Various Coating Options: **Uncoated, UV-AR, UV-VIS, VIS-EXT, VIS-NIR, VIS 0°, YAG-BBAR, NIR I, and NIR II**

TECHSPEC® UV Fused Silica Plano-Convex (PCX) Lenses MgF2 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 MgF2 Coated feature industry leading diameter and centration specifications, making them ideal for integration into demanding imaging and targeting applications. These lenses are AR coated with MgF2 to increase performance in the VIS range.

Technical Information

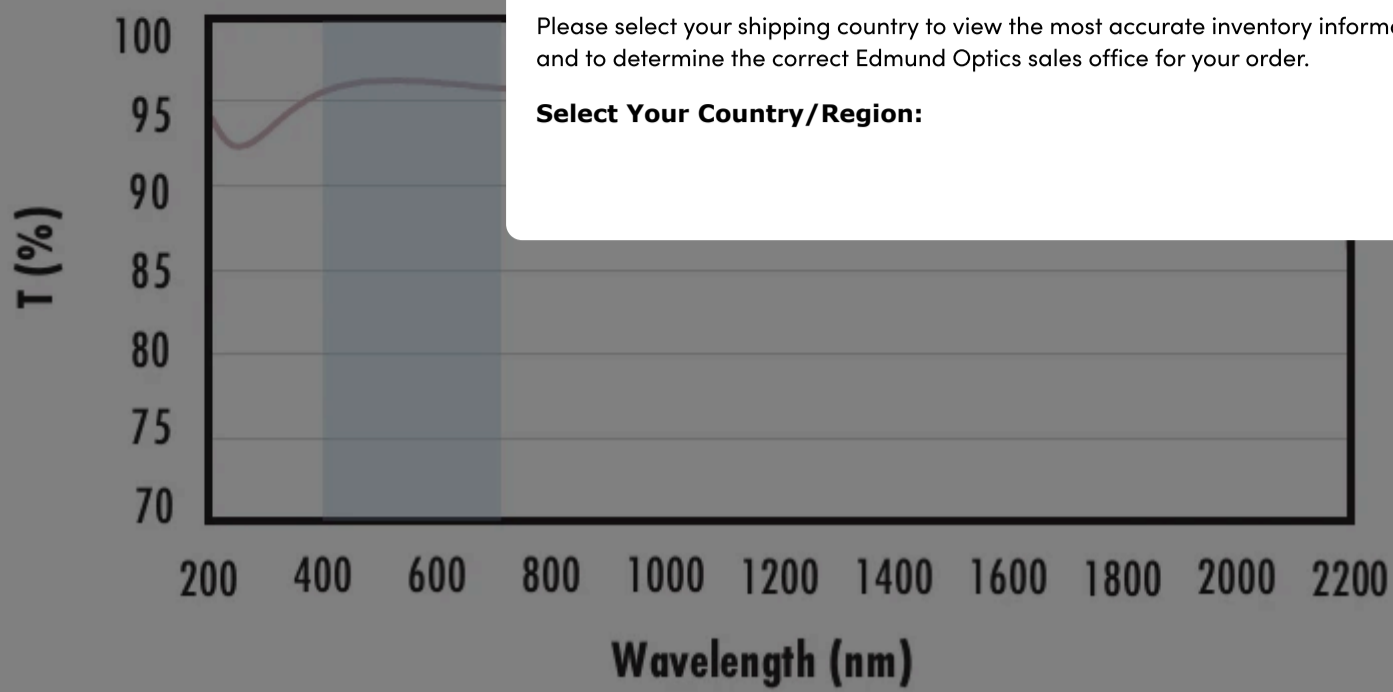
Uncoated Fused Silica Typical Transmission



Typical transmission of an uncoated fused silica window across the UV - NIR spectra.

[Click Here to Download Data](#)

Fused Silica with MgF₂ Coating Typical Transmission



Typical transmission of a fused silica window with MgF₂ (400-700nm) coating at 0° AOI.

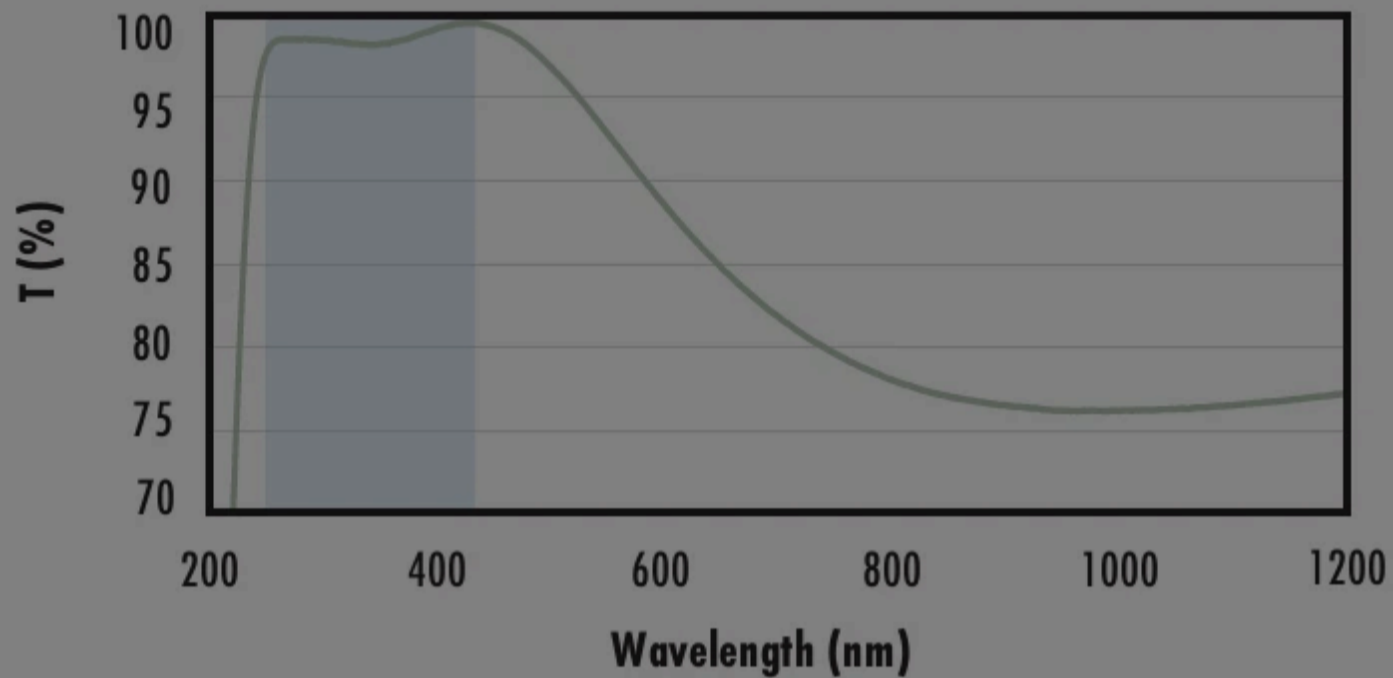
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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 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:

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

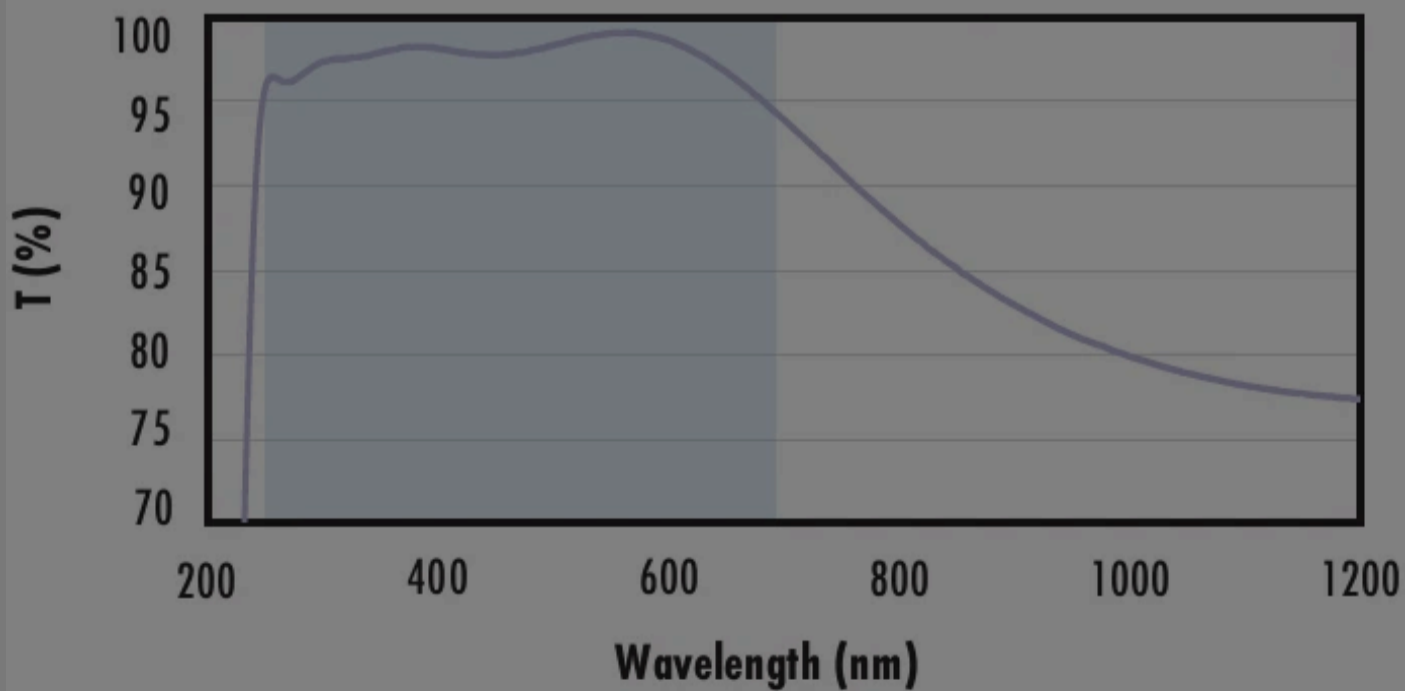
$$R_{avg} \leq 0.75\% \text{ @ } 250 - 425\text{nm}$$

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

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

[Click Here to Download Data](#)

Fused Silica with UV-VIS Coating Typical Transmission



Typical transmission of a 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:

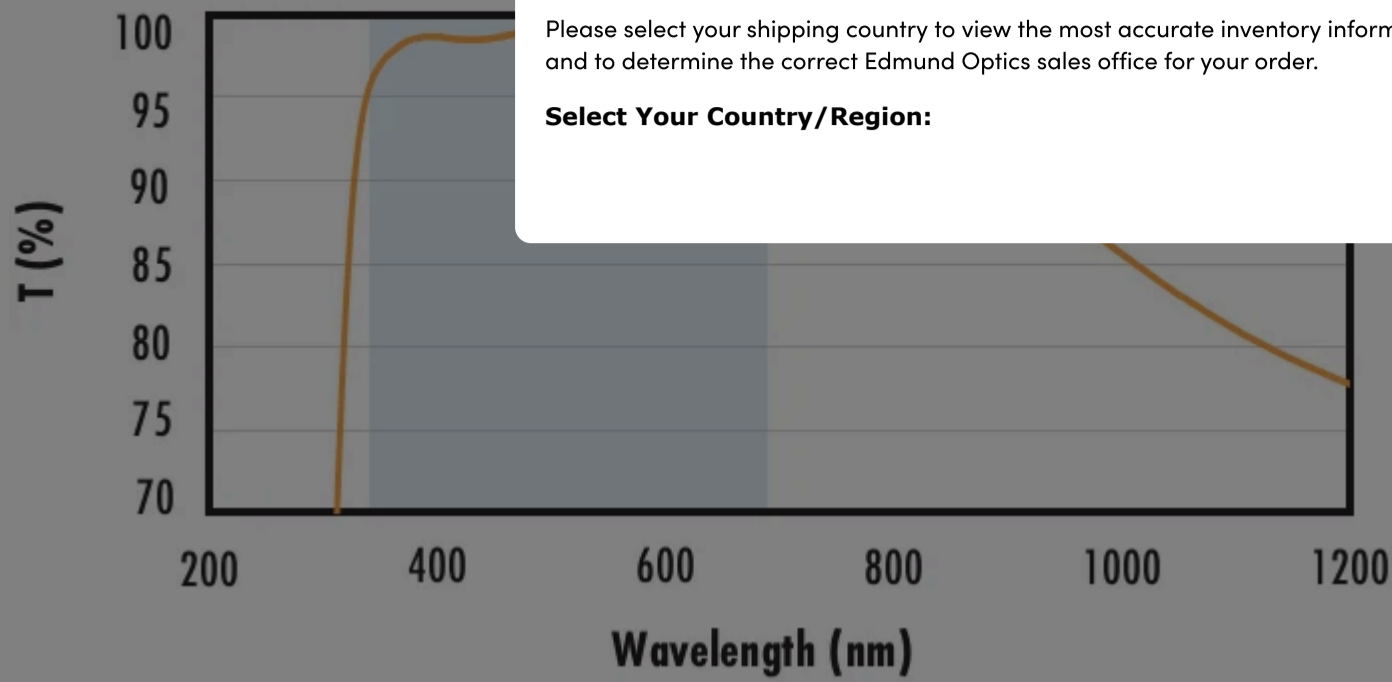
$$R_{abs} \leq 1.0\% \text{ @ } 350 - 450\text{nm}$$

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

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 fused silica window with VIS-EXT (350-700nm) coating at 0° AOI.

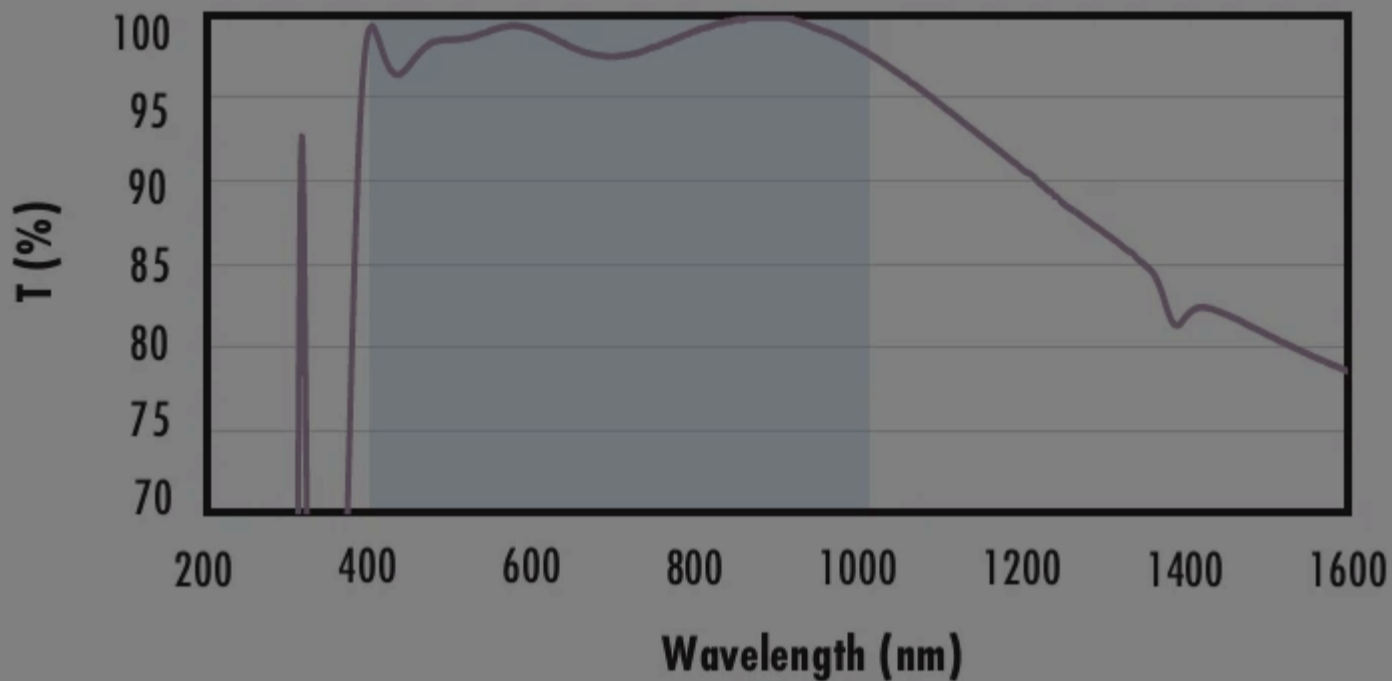
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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 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:

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

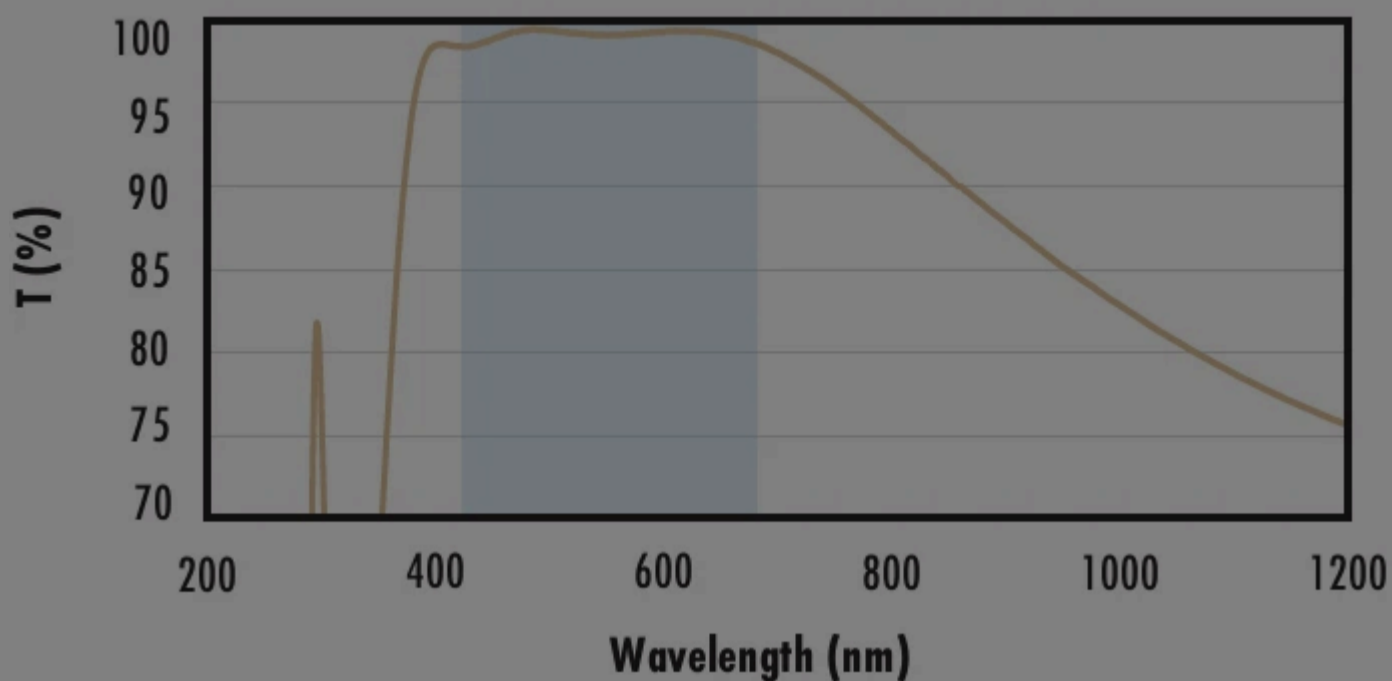
$$R_{avg} \leq 1.25\% @ 400 - 870\text{nm}$$

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

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 fused silica window with VIS (425-675nm) coating at 0° AOI.

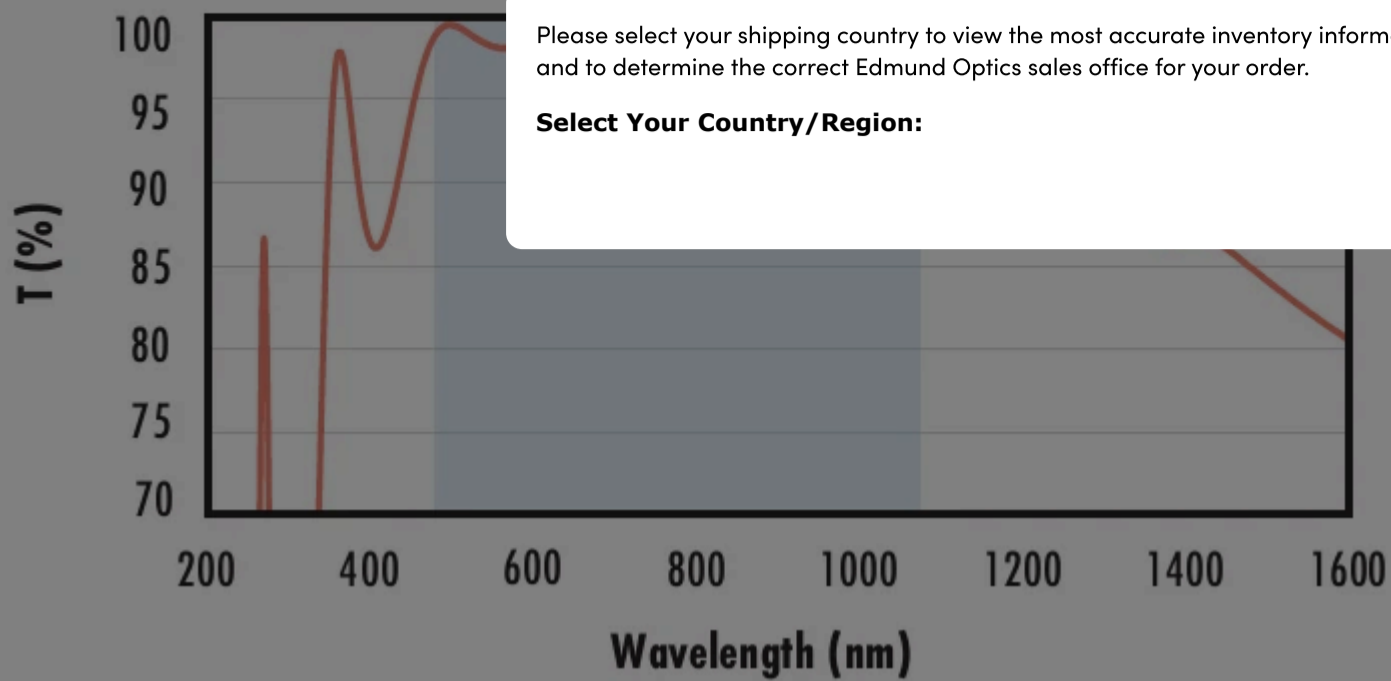
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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Fused Silica with YAG-BBAR Coating Typical Transmission



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

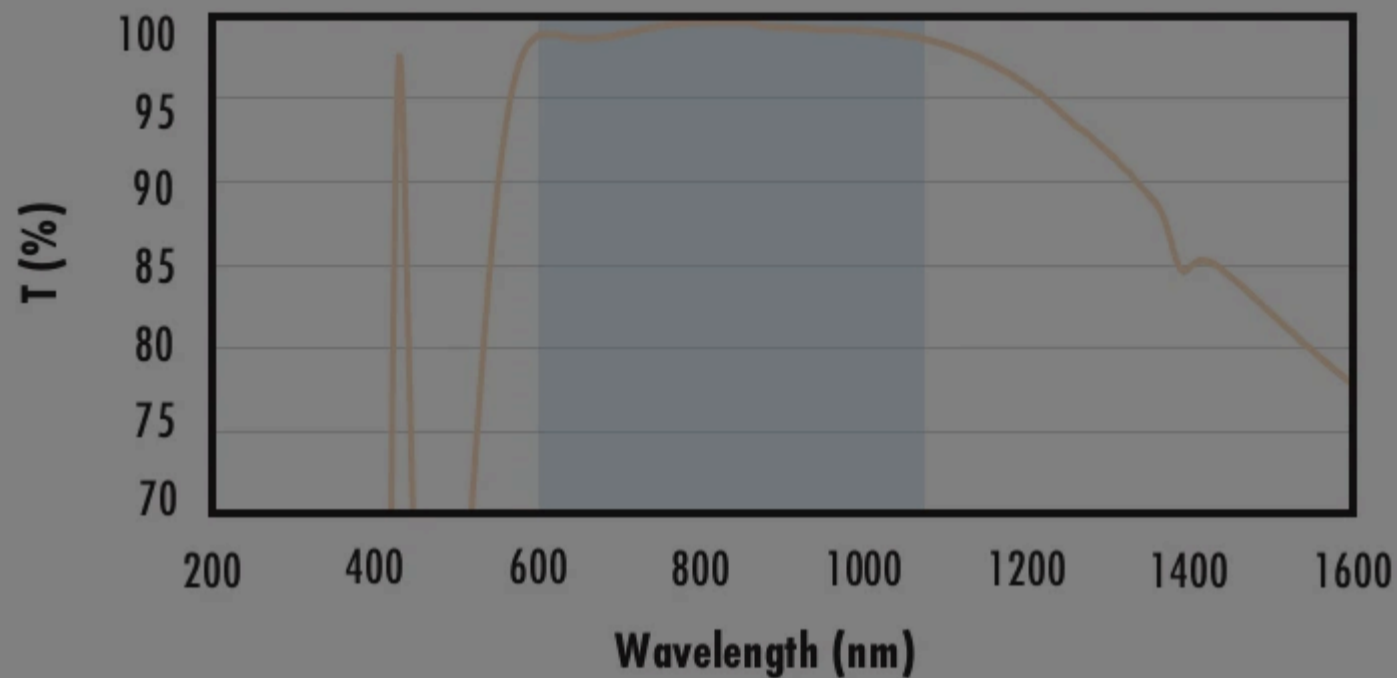
The blue shaded region indicates the coating design wavelength range, with the following specification:

- $R_{abs} \leq 0.25\%$ @ 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 fused silica window with NIR I (600 - 1050nm) coating at 0° AOI.

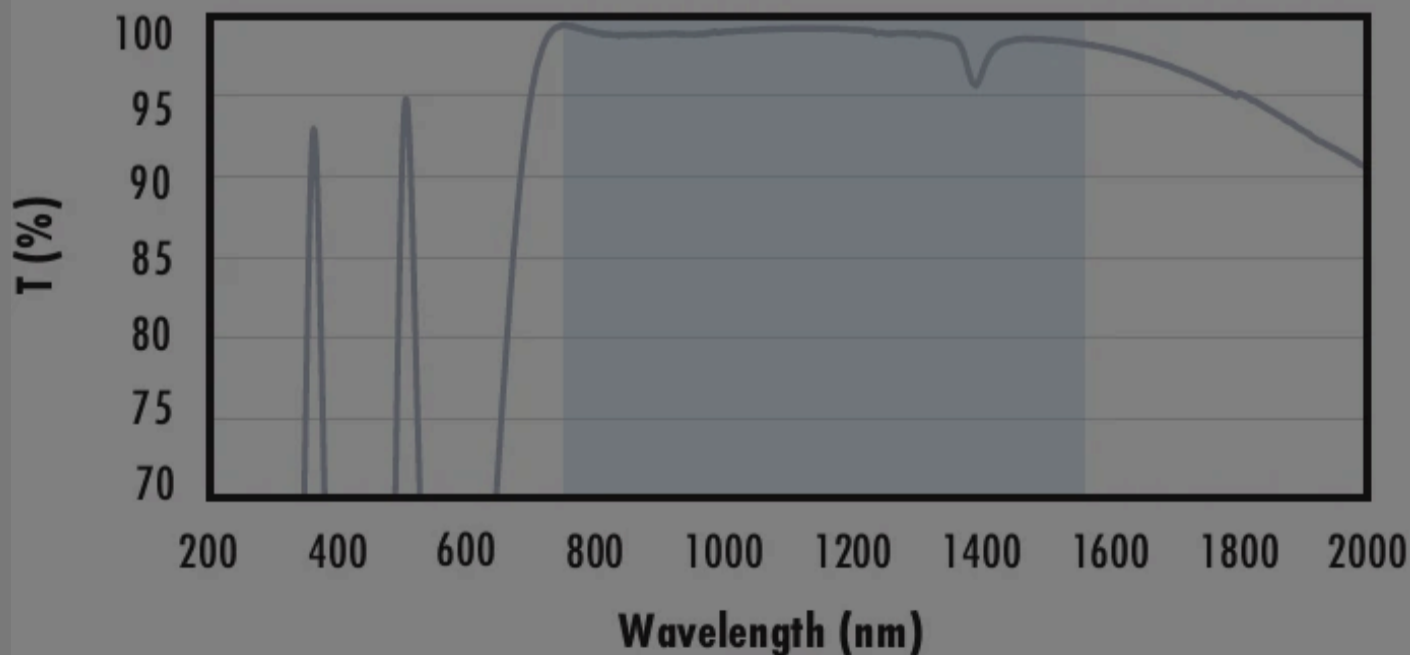
The blue shaded region indicates the coating design wavelength range, with the following specification:

- $R_{avg} \leq 0.5\%$ @ 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 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:

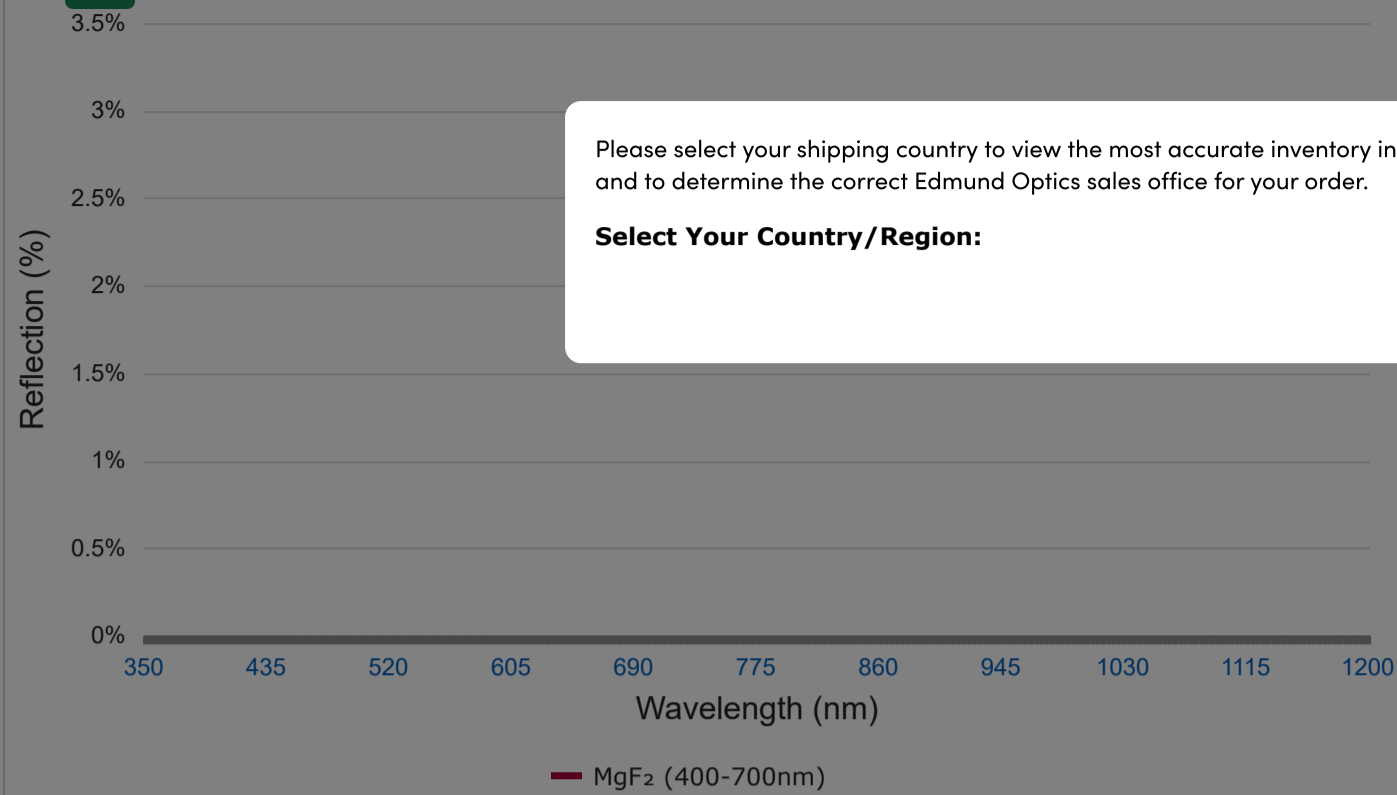
- $R_{abs} \leq 1.5\%$ @ 750 - 800nm
- $R_{abs} \leq 1.0\%$ @ 800 - 1550nm
- $R_{avg} \leq 0.7\%$ @ 750 - 1550nm

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

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Coating Curves

MgF₂ (400-700nm)



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Select Your Country/Region:

🔍 SHIFT + SELECT an area on CURVE to zoom

Please note that coating performance outside each product's specified design range is theoretical and may vary.

Related Products



C, S, and T-Mount Circular Optic Mounts



Optic Component Mounts



Basic and Plus Optical Component Cleaning Kits



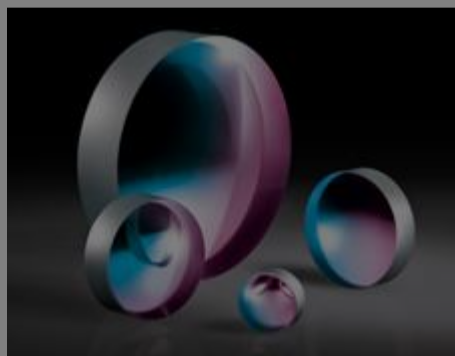
UV Fused Silica Aspheric Lenses

Frequently Purchased Together



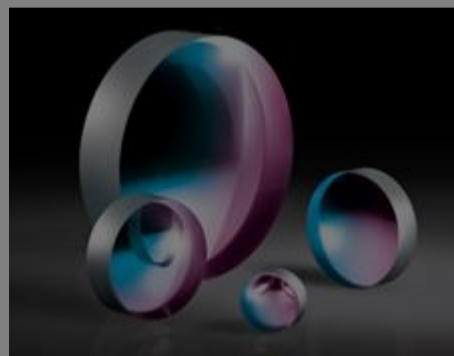
#48-306 - 25mm Dia. x 60mm FL, UV-AR Coated, UV Double-Convex Lens
€165,00

Qty



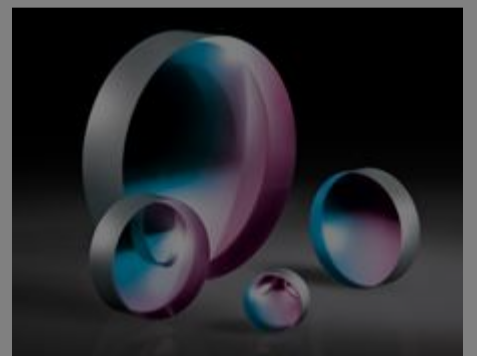
#48-322 - 25.0mm Dia. x -75 FL, UV-AR Coated, UV Plano-Concave Lens
€164,00

Qty



#48-324 - 25.0mm Dia. x -150 FL, UV-AR Coated, UV Plano-Concave Lens
€164,00

Qty



#48-325 - 25.0mm Dia. x -200 FL, UV-AR Coated, UV Plano-Concave Lens
€164,00

Qty