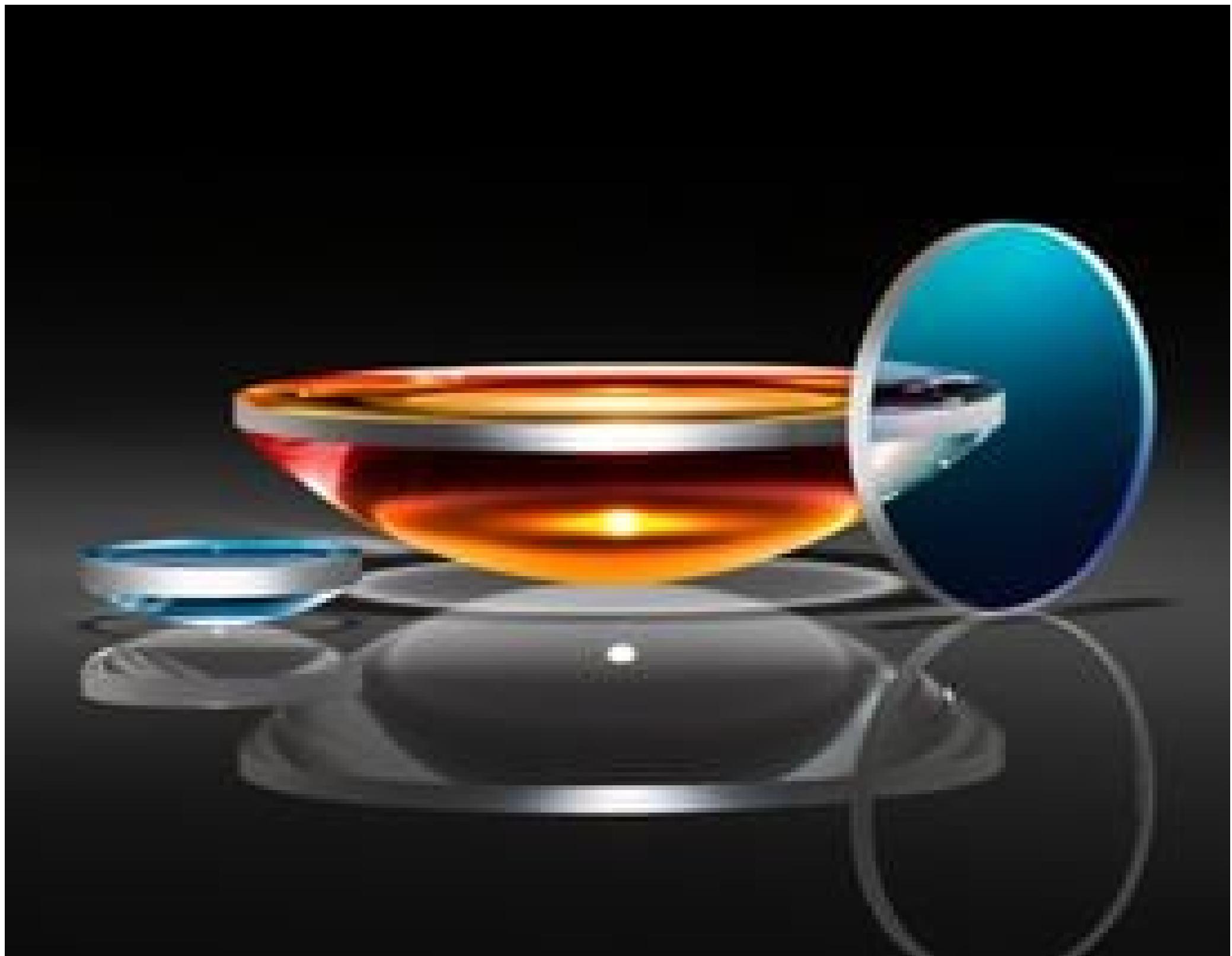


TECHSPEC® 25mm Dia. x 175mm FL, VIS-EXT Coated, Plano-Convex Lens

UV Fused Silica Plano-Convex (PCX) Lenses

Stock #18-097 **5 In Stock**[-](#) [1](#) [+](#) **A\$265^{.60}****ADD TO CART**

Volume Pricing	
Qty 1-5	A\$265.60 each
Qty 6-25	A\$212.80 each
Qty 26-49	A\$198.40 each
Need More?	Request Quote

Product Downloads

SPECIFICATIONS**General**

Type:

Physical & Mechanical Properties

	Diameter (mm):
25.00-0.025	
	Centering (arcmin):
<1	
	Center Thickness CT (mm):
3.01 ±0.10	
	Edge Thickness ET (mm):
2.03	
	Clear Aperture CA (mm):
24	
	Bevel:
Protective as needed	

Optical Properties

	Effective Focal Length EFL (mm):
175.00 @ 587.6nm	
	Back Focal Length BFL (mm):
172.94	
	Coating:
VIS-EXT (350-700nm)	
	Coating Specification:
R _{avg} <0.5% @ 350 - 700nm	
	Substrate: <input type="checkbox"/>
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):
80.23	
	f#:
7	
	Numerical Aperture NA:
0.07	
	Wavelength Range (nm):
350 - 700	
	Damage Threshold, By Design: <input type="checkbox"/>
5 J/cm ² @ 532nm, 10ns	

Regulatory Compliance

Compliant	RoHS 2015:
View	Certificate of Conformance:
Compliant	Reach 235:

PRODUCT DETAILS

- AR Coated to Provide <0.5% Reflection per Surface for 350 - 700nm

• Precision Fused Silica Substrate

• Various Coating Options: [Uncoated](#), [MgF₂](#), [UV-AR](#), [UV-VIS](#), [VIS-NIR](#), [VIS 0°](#), [YAG-BBAR](#), [NIRI](#), and [NIRII](#)

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

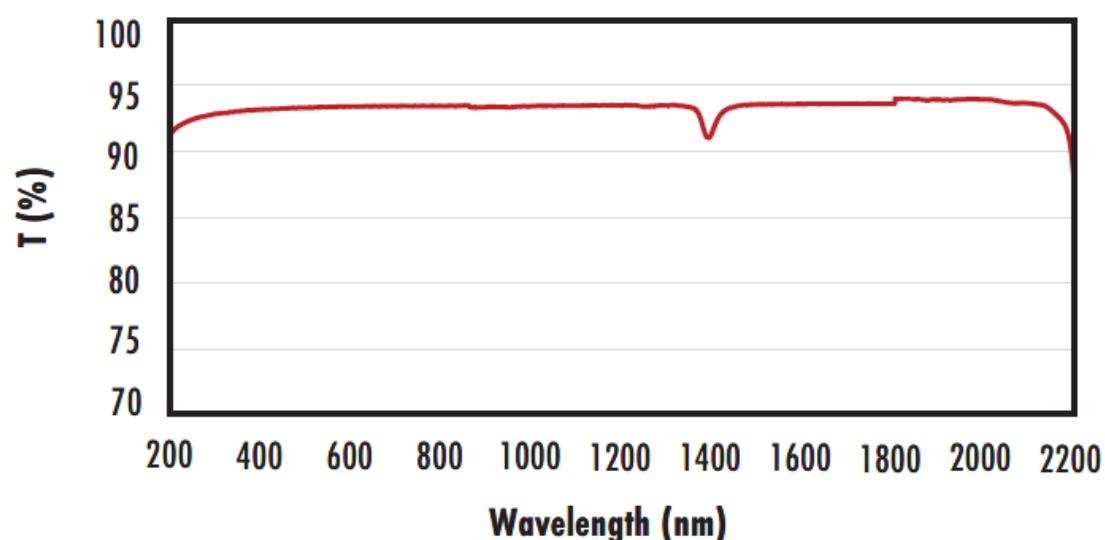
TECHNICAL INFORMATION

FUSED SILICA

Uncoated Fused Silica

[Technical Transmission](#)

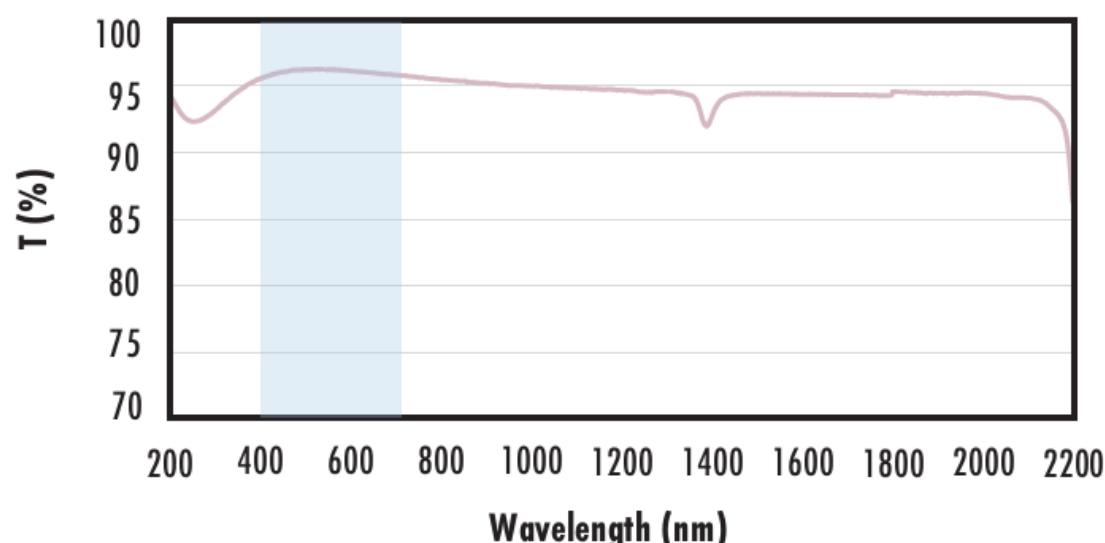
Typical Transmission



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

[Click Here to Download Data](#)

Fused Silica with MgF_2 Coating Typical Transmission



Typical transmission of a 3mm thick fused silica window with MgF_2 (400-700nm) coating at 0° AOI.

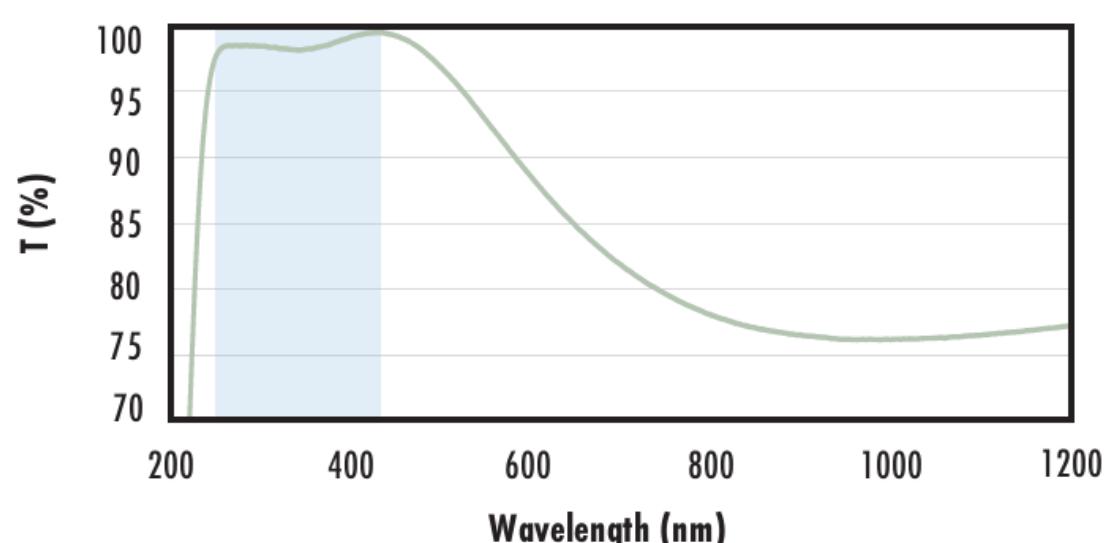
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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.

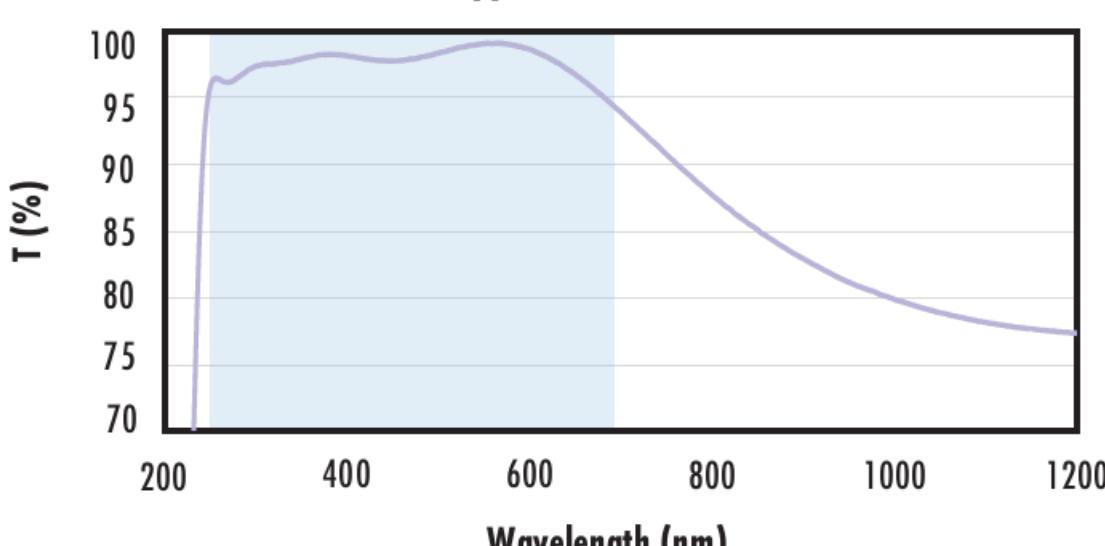
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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:

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

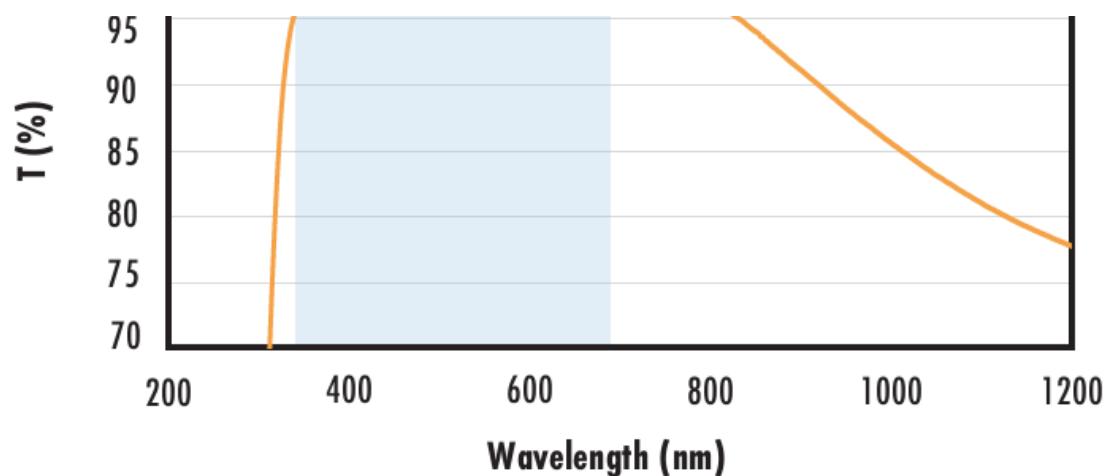
Data outside this range is not guaranteed and is for reference only.

[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 coating.



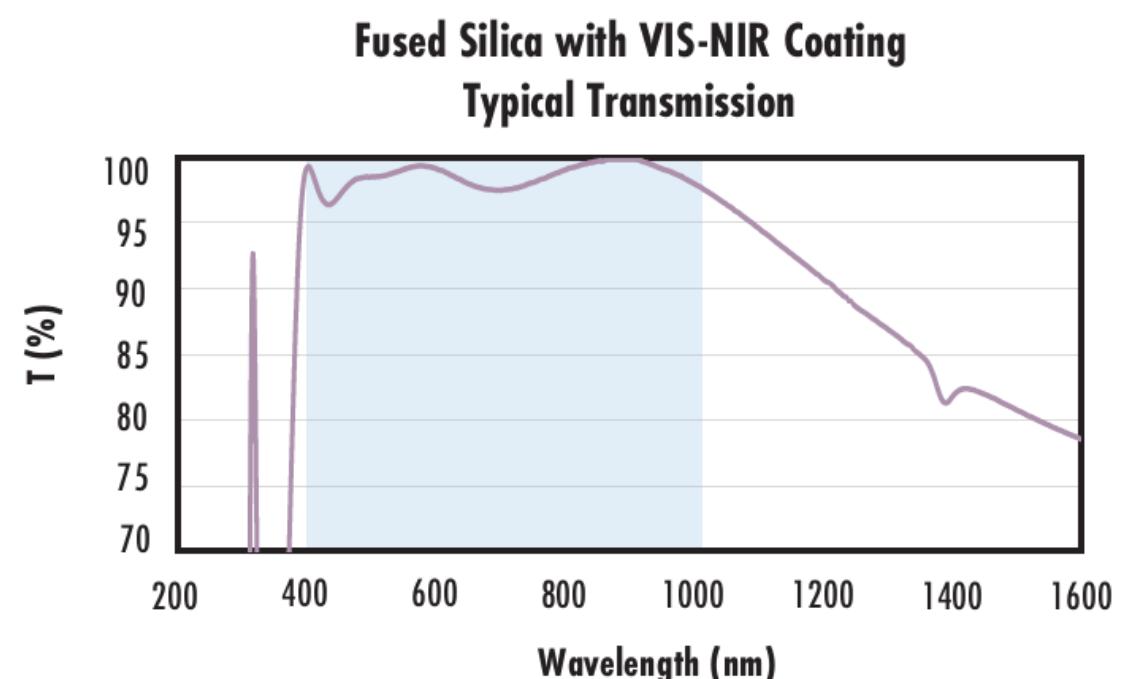
Typical transmission of a 3mm thick fused silica window with VIS-EXT (350-700nm) coating at 0° AOI.

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

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

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

[Click Here to Download Data](#)



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:

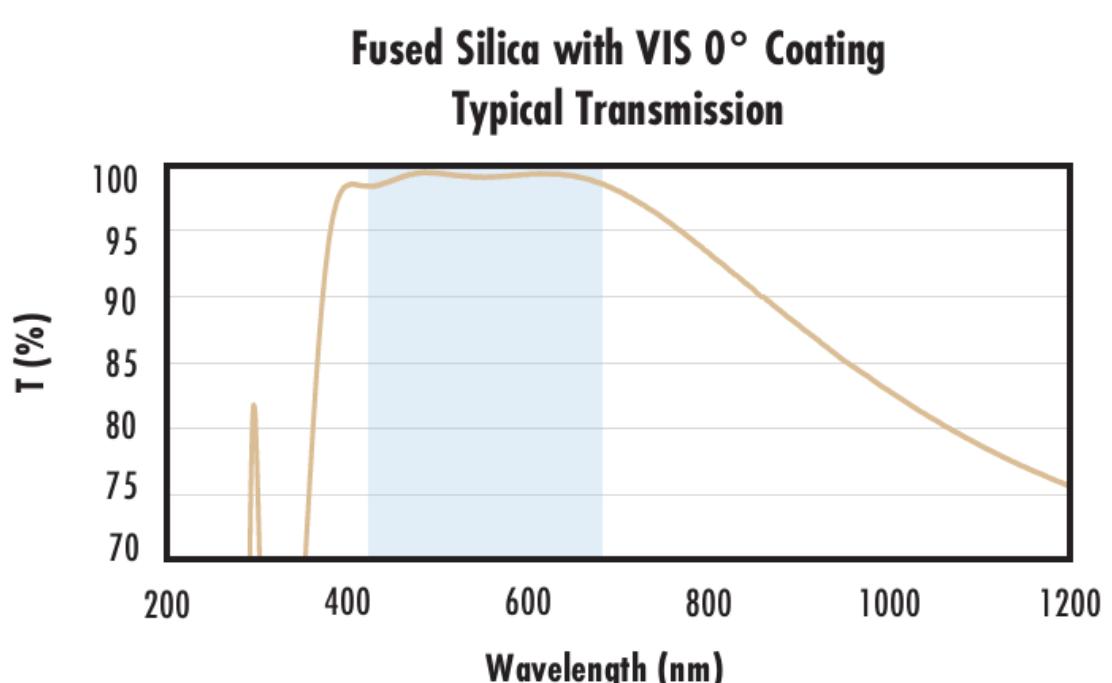
$$R_{abs} \leq 0.25\% @ 880nm$$

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

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

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

[Click Here to Download Data](#)



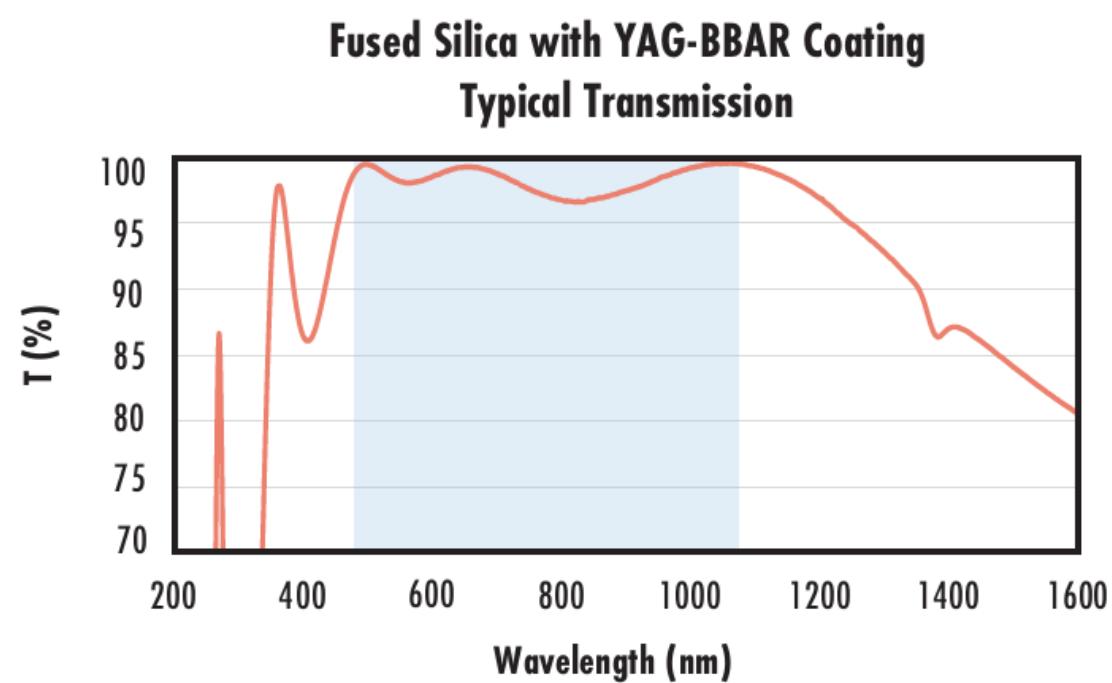
Typical transmission of a 3mm thick fused silica window with VIS 0° (425-675nm) coating at 0° AOI.

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

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

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

[Click Here to Download Data](#)



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:

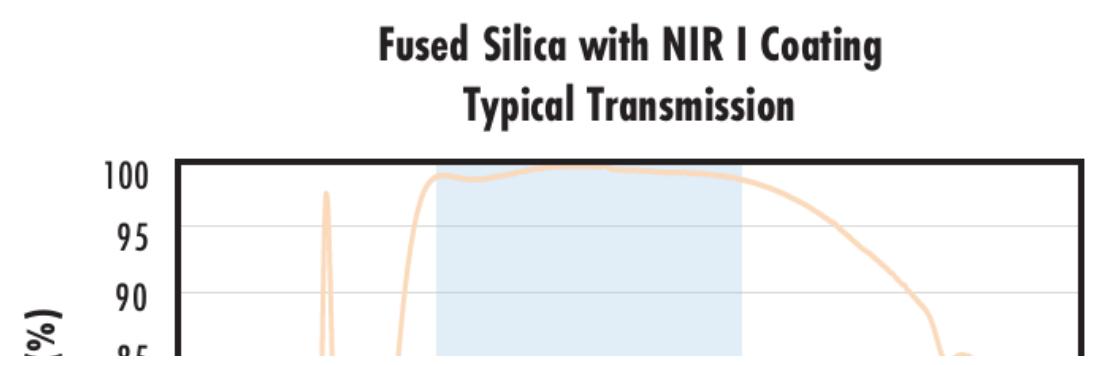
$$R_{abs} \leq 0.25\% @ 532nm$$

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

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

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

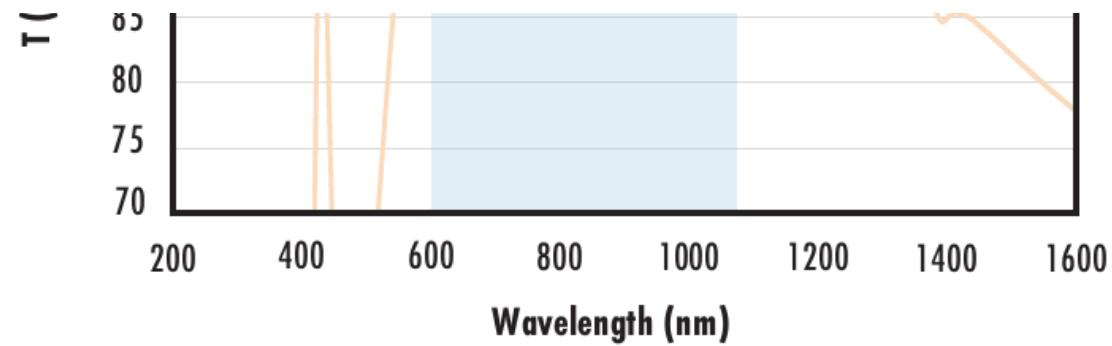
[Click Here to Download Data](#)



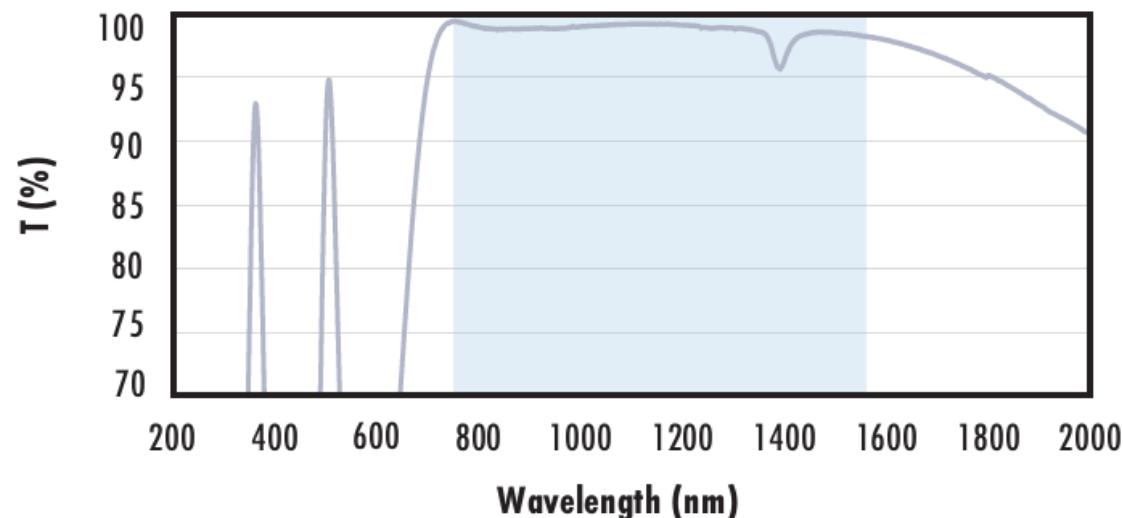
Typical transmission of a 3mm thick fused silica window with NIR I (600 - 1050nm) coating at 0° AOI.

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

$$R < 0.5\% @ 600 - 1050nm$$



Fused Silica with NIR II Coating Typical Transmission



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](#).