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**TECHSPEC® 25mm Dia. x 50mm FL UV-AR Coated, UV Plano-Convex Lens**



UV Fused Silica Plano-Convex (PCX) Lenses



Stock #48-284 **5 In Stock**

⊖ 1 ⊕ C\$250<sup>00</sup>

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Volume Pricing	
Qty 1-5	C\$250.60 each
Qty 6-25	C\$200.20 each
Qty 26-49	C\$187.60 each
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**General**

Plano-Convex Lens **Type:**

**Physical & Mechanical Properties**

25.00 +0.0/-0.025 **Diameter (mm):**

Centering (arcmin):	<1
Center Thickness CT (mm):	5.84 ±0.10
Edge Thickness ET (mm):	2.13
Clear Aperture CA (mm):	24
Bevel:	Protective as needed

## Optical Properties

Effective Focal Length EFL (mm):	50.00 @ 587.6nm
Back Focal Length BFL (mm):	46.00
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:	<a href="#">Fused Silica</a> (Corning 7980)
Surface Quality:	40-20
Power (P-V) @ 632.8nm:	1.5λ
Irregularity (P-V) @ 632.8nm:	λ/4
Focal Length Tolerance (%):	±1
Radius R <sub>1</sub> (mm):	22.92
f/#:	2
Numerical Aperture NA:	0.25
Wavelength Range (nm):	250 - 425
Damage Threshold, Reference:	3 J/cm <sup>2</sup> @ 355nm, 10ns

## Regulatory Compliance

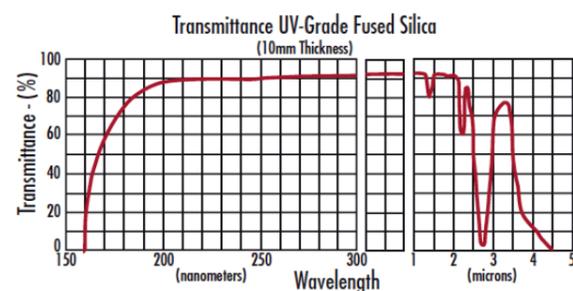
RoHS 2015:	<a href="#">Compliant</a>
Certificate of Conformance:	<a href="#">View</a>
Reach 235:	<a href="#">Compliant</a>

## Product Details

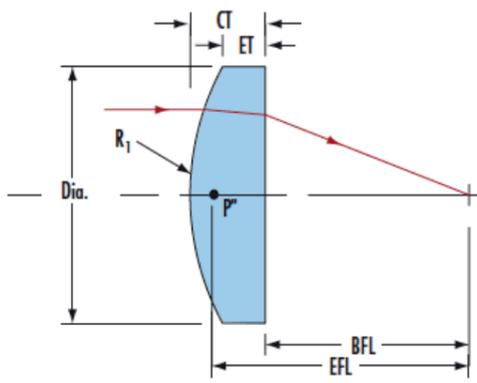
- AR Coated to Provide <0.75% Reflection per Surface for 250 - 425nm
- Precision Fused Silica Substrate
- Various Coating Options: [Uncoated](#), [MgF<sub>2</sub>](#), [UV-VIS](#), [VIS-EXT](#), [VIS-NIR](#), [VIS 0°](#), [YAG-BBAR](#), [NIR I](#), and [NIR II](#)

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

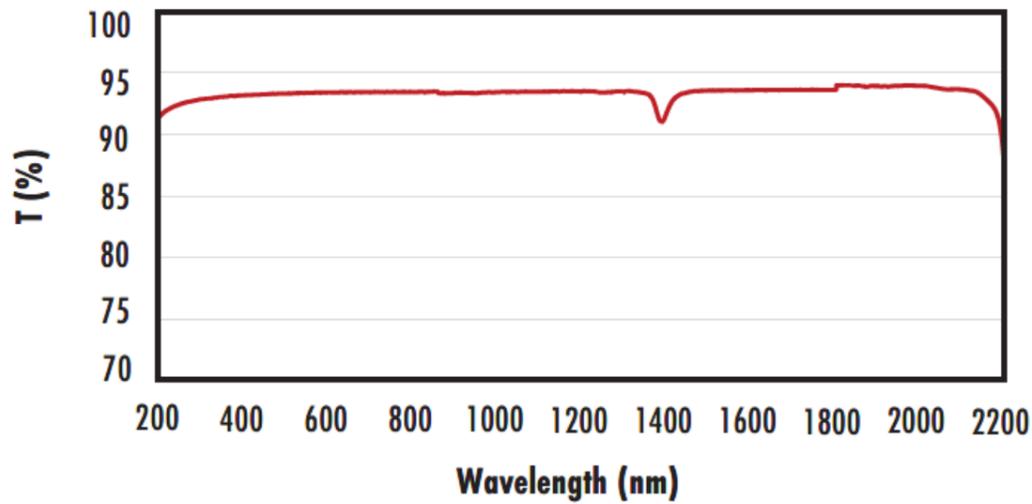


UV FS Transmission Curve



FUSED SILICA

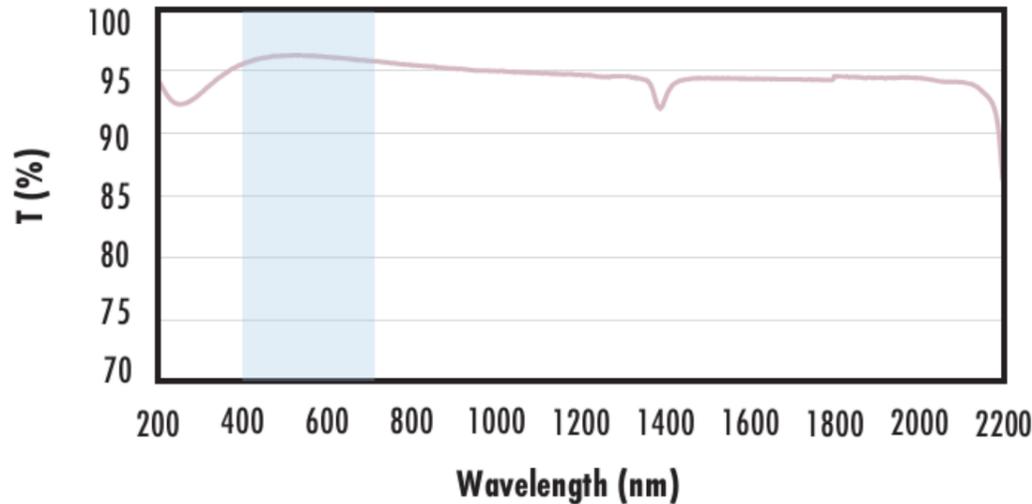
### Uncoated Fused Silica Typical Transmission



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

[Click Here to Download Data](#)

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



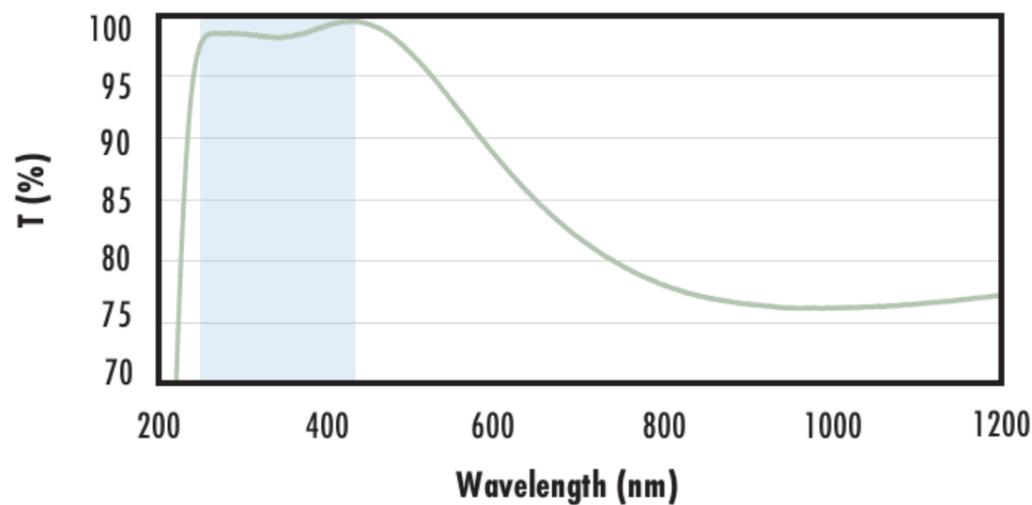
Typical transmission of a 3mm thick fused silica window with MgF<sub>2</sub> (400-700nm) coating at 0° AOI. The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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

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### 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:

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

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

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

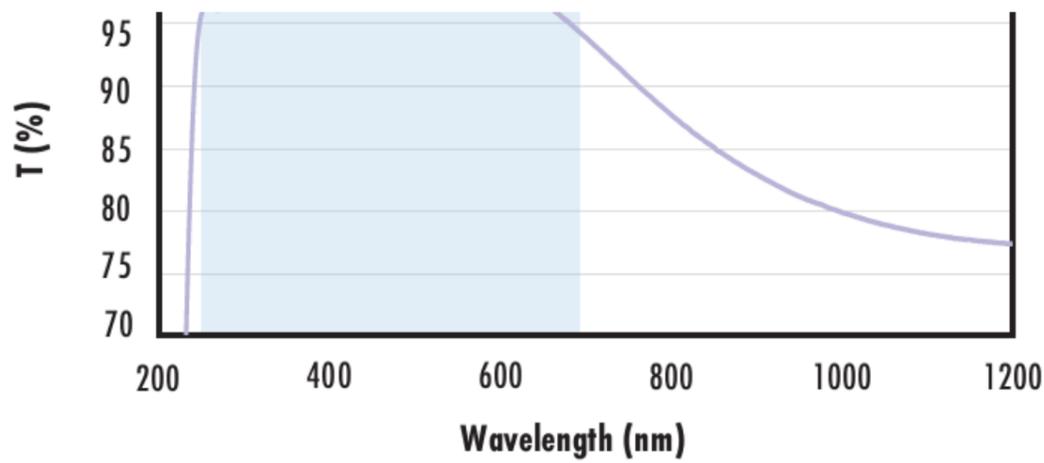
Data outside this range is not guaranteed and is for reference only.

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

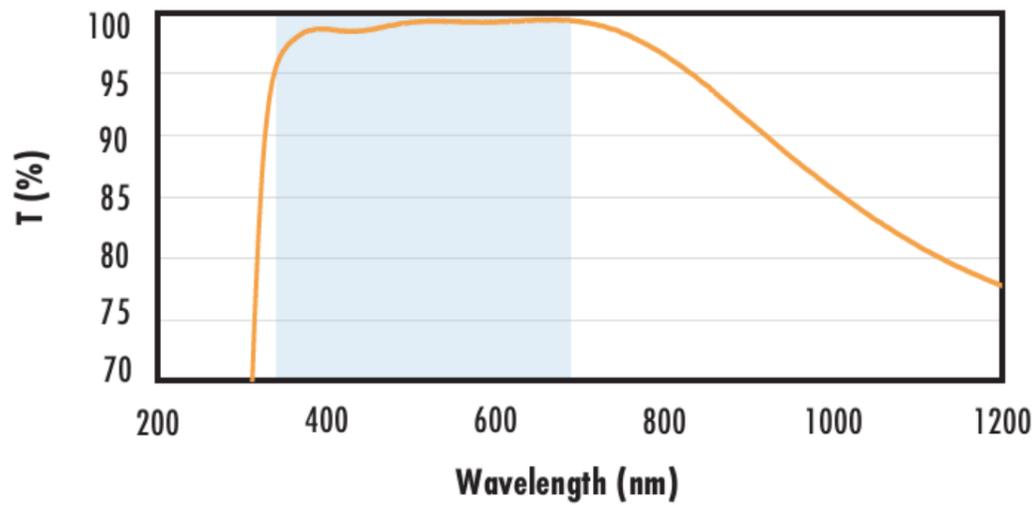


Typical transmission of a 3mm thick fused silica window with UV-



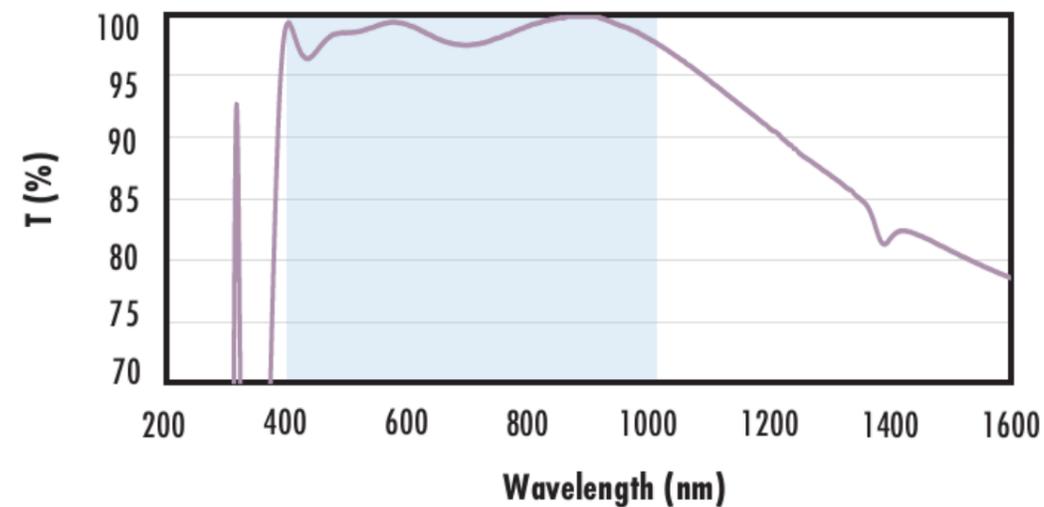
VIS (250-700nm) coating at 0° AOI.  
 The blue shaded region indicates the coating design wavelength range, with the following specification:  
 $R_{abs} \leq 1.0\%$  @ 350 - 450nm  
 $R_{avg} \leq 1.5\%$  @ 250 - 700nm  
 Data outside this range is not guaranteed and is for reference only.  
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**Fused Silica with VIS-EXT Coating  
 Typical Transmission**



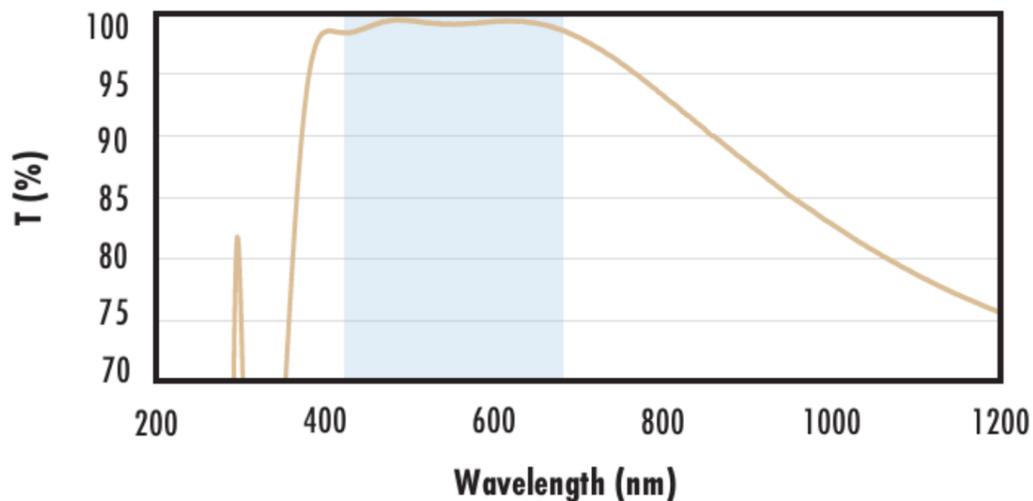
Typical transmission of a 3mm thick fused silica window with VIS-EXT (350-700nm) coating at 0° AOI.  
 The blue shaded region indicates the coating design wavelength range, with the following specification:  
 $R_{avg} \leq 0.5\%$  @ 350 - 700nm  
 Data outside this range is not guaranteed and is for reference only.  
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**Fused Silica with VIS-NIR Coating  
 Typical Transmission**



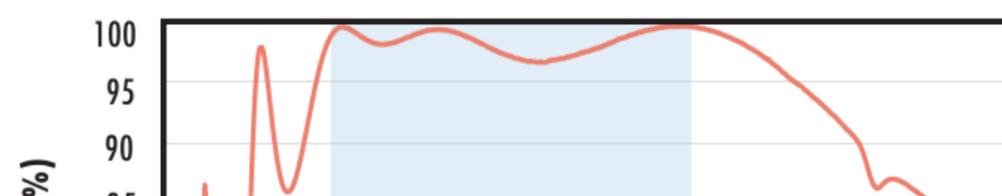
Typical transmission of a 3mm thick fused silica window with VIS-NIR (400-1000nm) coating at 0° AOI.  
 The blue shaded region indicates the coating design wavelength range, with the following specification:  
 $R_{abs} \leq 0.25\%$  @ 880nm  
 $R_{avg} \leq 1.25\%$  @ 400 - 870nm  
 $R_{avg} \leq 1.25\%$  @ 890 - 1000nm  
 Data outside this range is not guaranteed and is for reference only.  
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**Fused Silica with VIS 0° Coating  
 Typical Transmission**

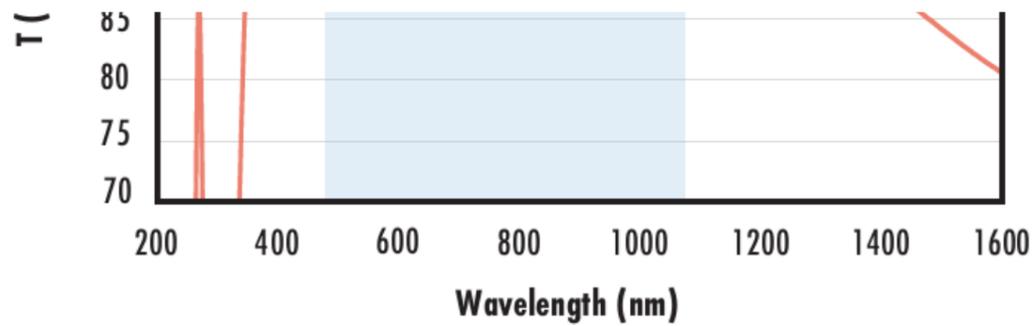


Typical transmission of a 3mm thick fused silica window with VIS 0° (425-675nm) coating at 0° AOI.  
 The blue shaded region indicates the coating design wavelength range, with the following specification:  
 $R_{avg} \leq 0.4\%$  @ 425 - 675nm  
 Data outside this range is not guaranteed and is for reference only.  
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**Fused Silica with YAG-BBAR Coating  
 Typical Transmission**



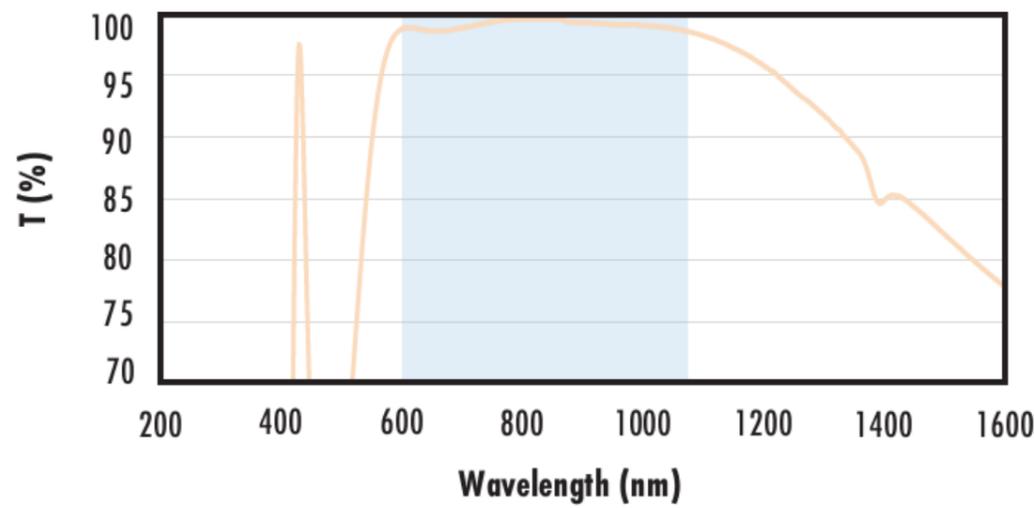
Typical transmission of a 3mm thick fused silica window with YAG-BBAR (500-1100nm) coating at 0° AOI.  
 The blue shaded region indicates the coating design wavelength range, with the following specification:  
 $R_{abs} \leq 0.25\%$  @ 532nm  
 $R_{avg} \leq 0.25\%$  @ 500 - 1100nm  
 Data outside this range is not guaranteed and is for reference only.



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

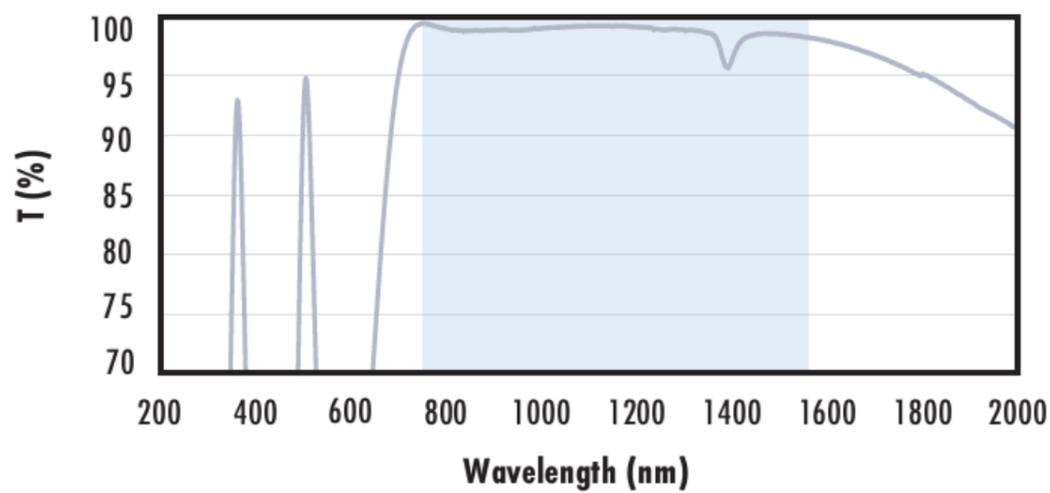
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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

[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:

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

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

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

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

[Click Here to Download Data](#)

## 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](#).

## Compatible Mounts