

**TECHSPEC® 12mm Dia. x 25mm FL, NIR I Coated, Plano-Convex Lens**



UV Fused Silica Plano-Convex (PCX) Lenses



Stock **#18-040** **8 In Stock**

⊖ 1 ⊕ **A\$256<sup>00</sup>**

**ADD TO CART**

Volume Pricing	
Qty 1-5	<b>A\$256.00</b> each
Qty 6-25	<b>A\$204.80</b> each
Qty 26-49	<b>A\$193.60</b> each
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**General**

Plano-Convex Lens **Type:**

**Physical & Mechanical Properties**

12.00-0.025 **Diameter (mm):**

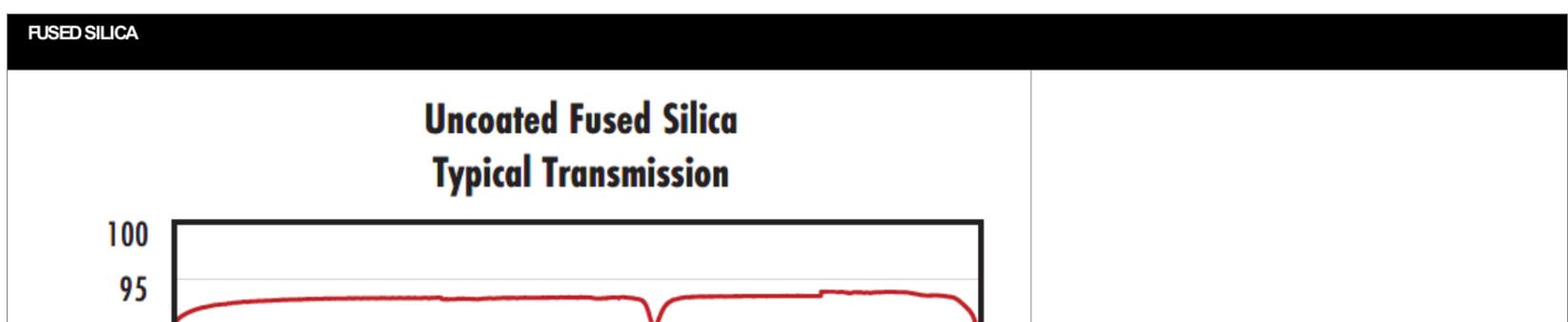
<1	Centering (arcmin):
3.92 ±0.05	Center Thickness CT (mm):
2.22	Edge Thickness ET (mm):
11	Clear Aperture CA (mm):
Protective as needed	Bevel:
<b>Optical Properties</b>	
25.00 @ 587.6nm	Effective Focal Length EFL (mm):
22.31	Back Focal Length BFL (mm):
NIR I (600-1050nm)	Coating:
R <sub>avg</sub> ≤0.5% @ 600 - 1050nm	Coating Specification:
Fused Silica (Corning 7980)	Substrate: <input type="checkbox"/>
40-20	Surface Quality:
3 Rings	Power (P-V) @ 632.8nm:
0.5 Rings	Irregularity (P-V) @ 632.8nm:
±1	Focal Length Tolerance (%):
11.46	Radius R <sub>1</sub> (mm):
2.08	f#:
0.24	Numerical Aperture NA:
600 - 1050	Wavelength Range (nm):
7 J/cm <sup>2</sup> @ 1064nm, 10ns	Damage Threshold, Reference: <input type="checkbox"/>

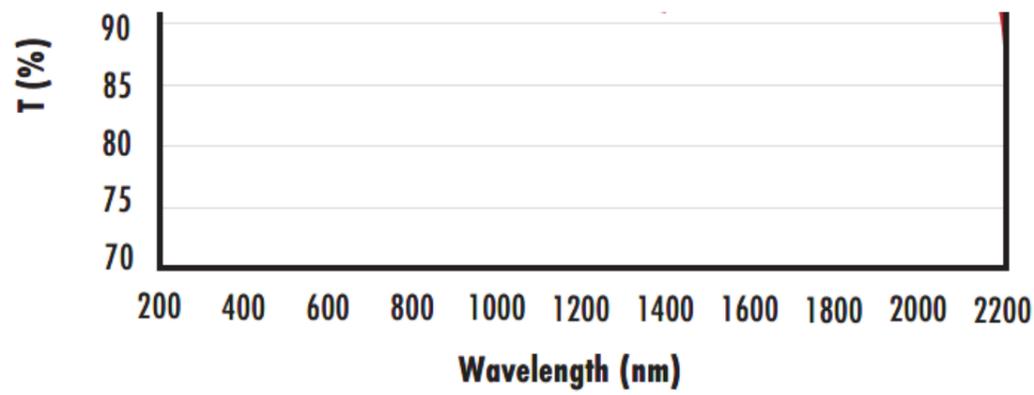
<b>Regulatory Compliance</b>	
Compliant	RoHS 2015:
View	Certificate of Conformance:
Compliant	Reach 235:

## Product Details

- AR Coated to Provide <0.5% Reflection per Surface for 600 - 1050nm
  - Precision Fused Silica Substrate
  - Various Coating Options: [Uncoated](#), [MgF<sub>2</sub>](#), [UV-AR](#), [UV-VIS](#), [VIS-EXT](#), [VIS-NIR](#), [VIS 0°](#), [YAG-BBAR](#), and [NIR II](#)
- TECHSPEC® UV Fused Silica Plano-Convex (PCX) Lenses NIR I 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 NIR I Coated feature industry leading diameter and centration specifications, making them ideal for integration into demanding imaging and targeting applications. These lenses are NIR I coated to increase their coating performance in the 600nm to 1050nm range.

## Technical Information

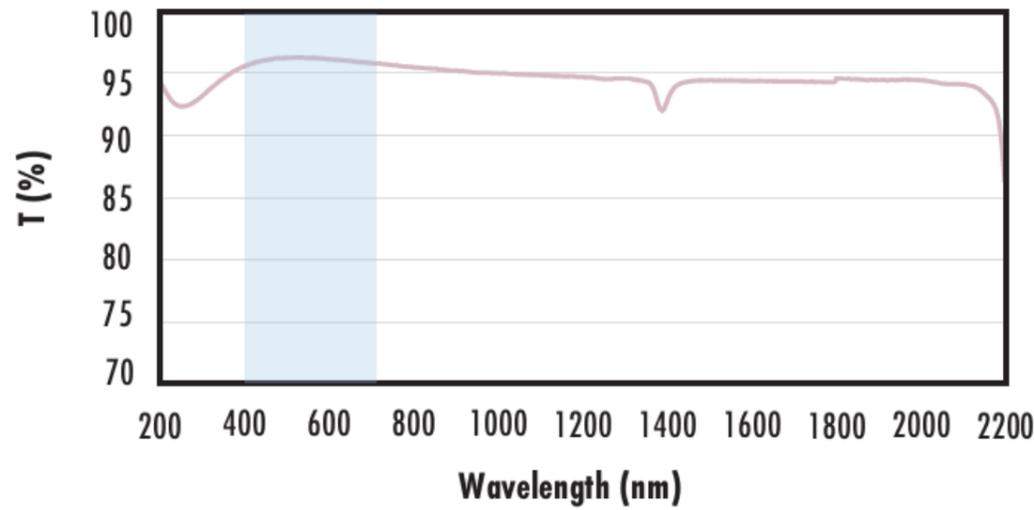




Typical transmission of a 3mm thick, uncoated fused silica window across the UV- NIR spectra.

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**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.

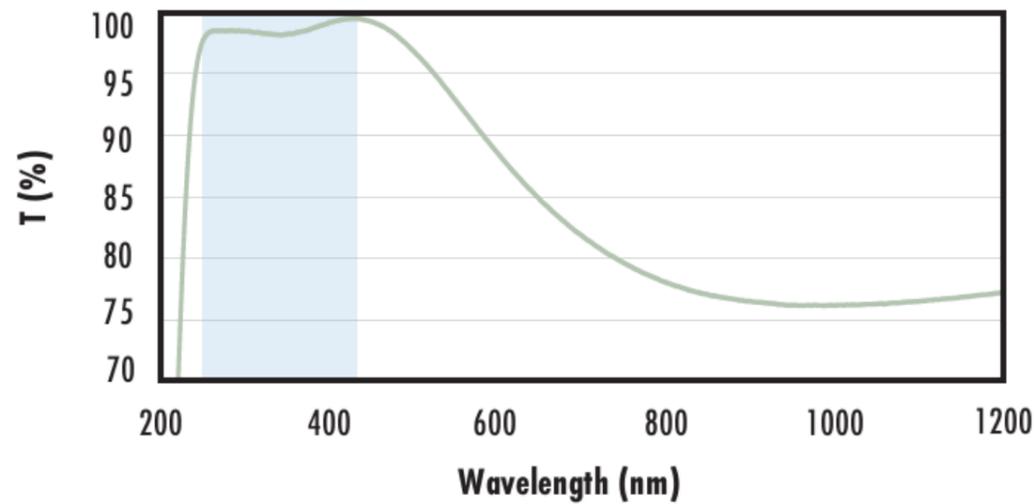
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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

[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:

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

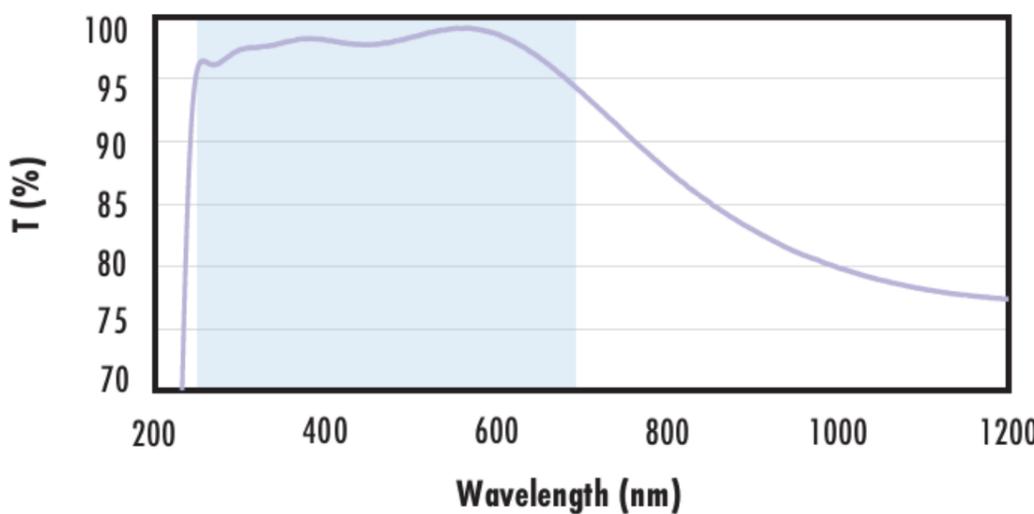
$$R_{avg} \leq 0.75\% @ 250 - 425\text{nm}$$

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

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:

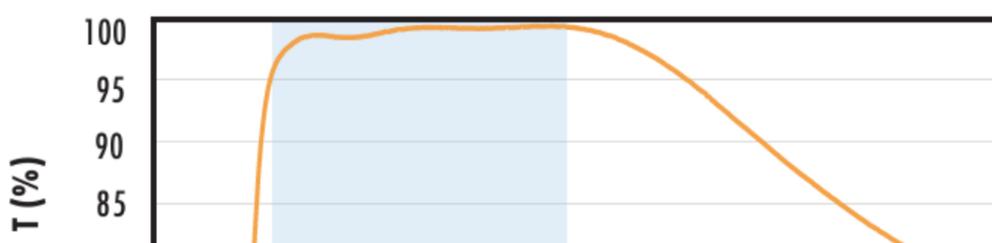
$$R_{abs} \leq 1.0\% @ 350 - 450\text{nm}$$

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

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

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

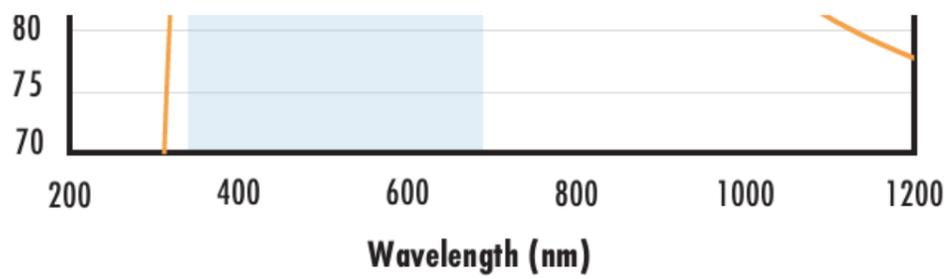


Typical transmission of a 3mm thick fused silica window with VIS-EXT (350-700nm) coating at 0° AOI.

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

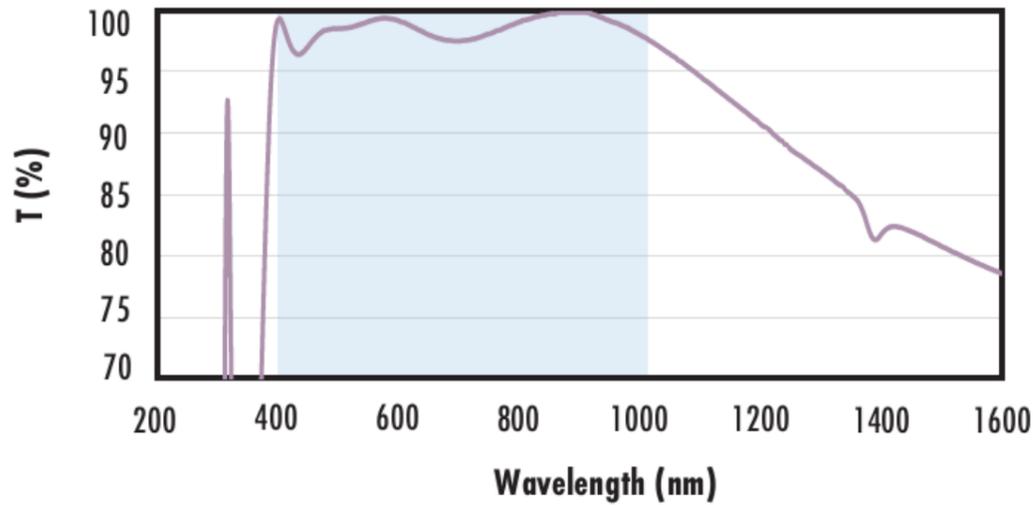
$$R_{avg} \leq 0.5\% @ 350 - 700\text{nm}$$

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



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:

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

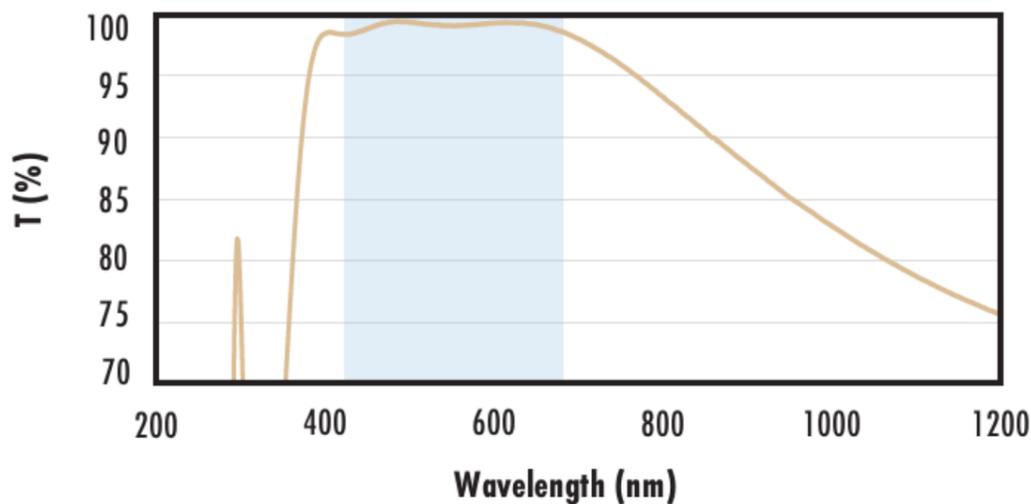
$$R_{avg} \leq 1.25\% @ 400 - 870\text{nm}$$

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

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.

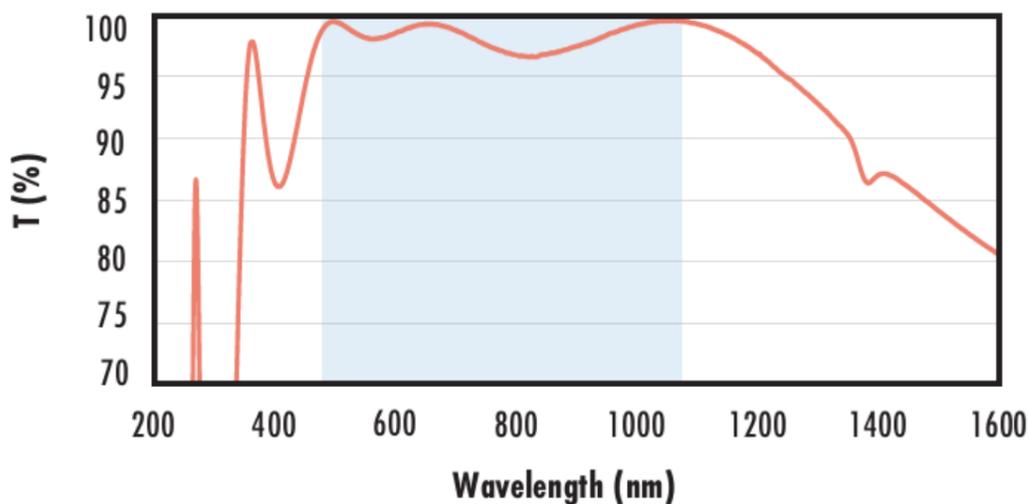
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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:

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

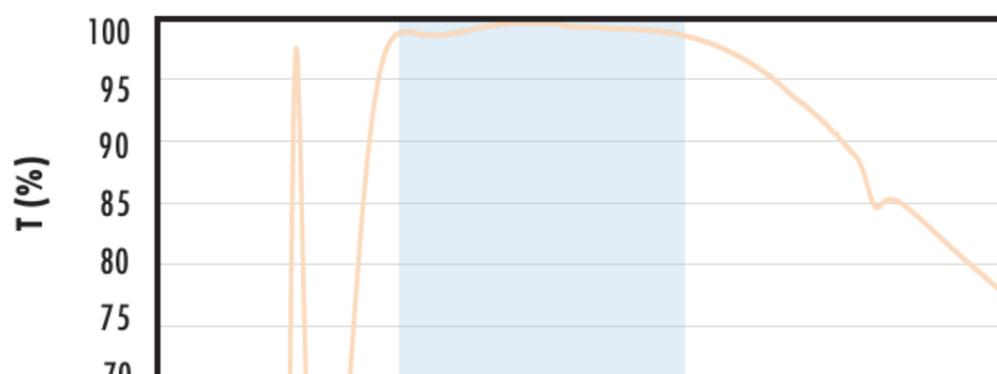
$$R_{abs} \leq 0.25\% @ 1064\text{nm}$$

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

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

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### Fused Silica with NIR I Coating Typical Transmission



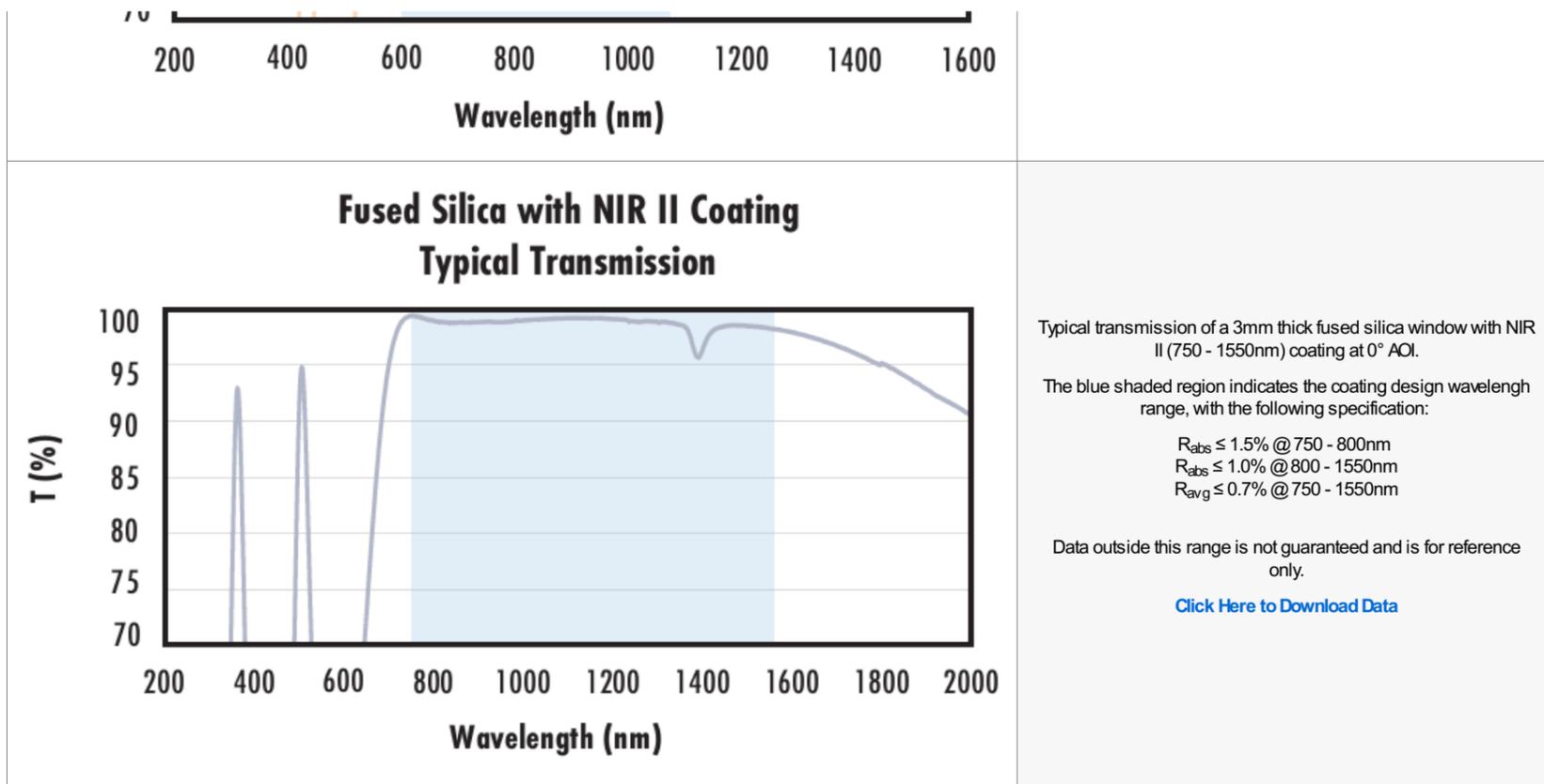
Typical transmission of a 3mm thick fused silica window with NIR I (600 - 1050nm) coating at 0° AOI.

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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## 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](#).