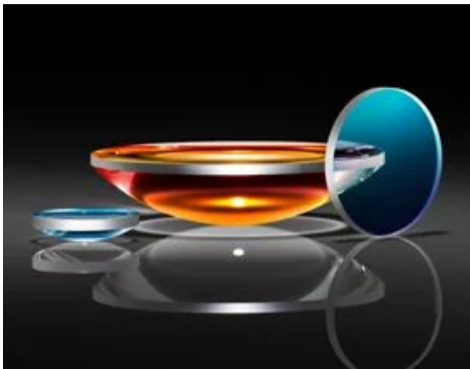


TECHSPEC® 20mm Dia. x 80mm FL Uncoated, UV Plano-Convex Lens



Stock #49-964 **3 In Stock** [Other Coating Options](#)

1 **C\$198^{.80}**

ADD TO CART

UV Fused Silica Plano-Convex (PCX) Lenses



Volume Pricing	
Qty 1-5	C\$198.80 each
Qty 6-25	C\$159.60 each
Qty 26-49	C\$149.80 each
Need More?	Request Quote

Product Downloads

- STEP:stp
- PDF Drawing:pdf
- ISO 10110 Drawing
- IGES:igs
- Zemax:zar
- Zemax:zmx
- eDrawing:eprt
- Code V:seq
- EO Spec Sheet
- Download All**

General

Type: Plano-Convex Lens

Physical & Mechanical Properties

Diameter (mm): 20.00 +0.0/-0.025	Centering (arcmin): <1
Center Thickness CT (mm): 3.00 ±0.10	Edge Thickness ET (mm): 1.61
Clear Aperture CA (mm): 19	Bevel: Protective as needed

Optical Properties

Effective Focal Length EFL (mm): 80.00 @ 587.6nm	Back Focal Length BFL (mm): 77.95
Coating: Uncoated	Substrate: Fused Silica (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 R₁ (mm): 36.68	f/#: 4
Numerical Aperture NA: 0.13	Wavelength Range (nm): 200 - 2200

Regulatory Compliance

RoHS 2015: **Compliant**

REACH 201: **Compliant**

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](#).

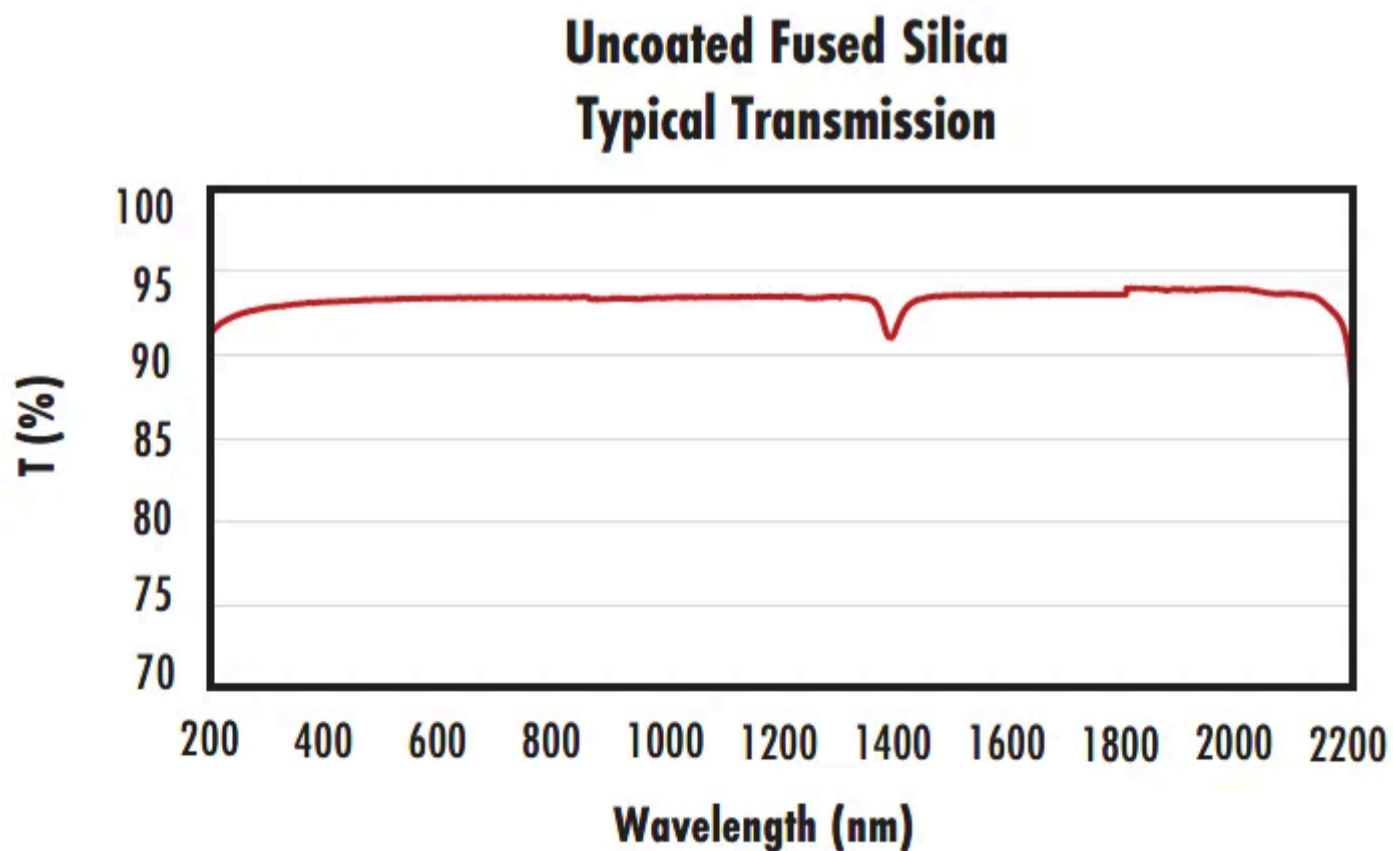
Product Details

- UV-Grade Fused Silica
- Wavelength Range of 200nm to 2.2µm
- Variety of Coating Options Available
- Various Coating Options: [MgF₂](#), [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 Uncoated 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 Uncoated feature industry leading diameter and centration specifications, making them ideal for integration into demanding imaging and targeting applications.

Technical Information

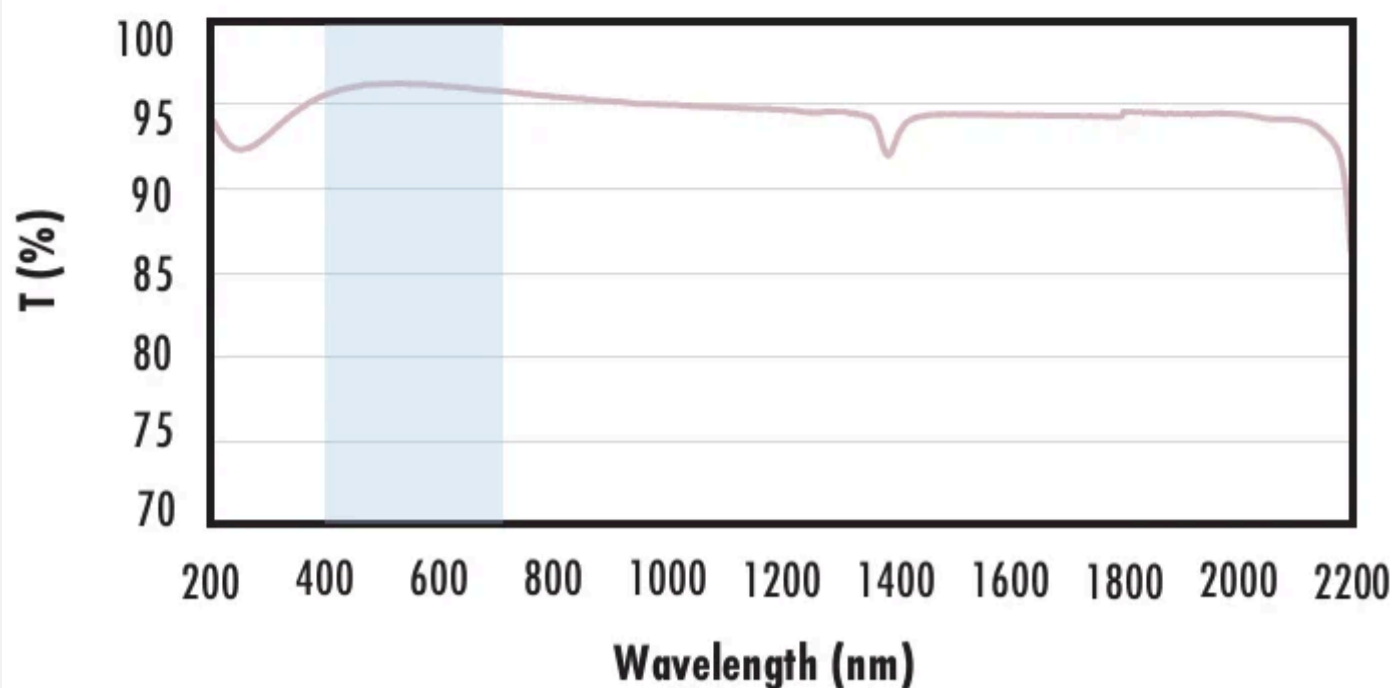
UV FS Transmission Curve



Typical transmission of a 3mm thick, 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 3mm thick fused silica window with MgF₂ (400-700nm) coating at 0° AOI.

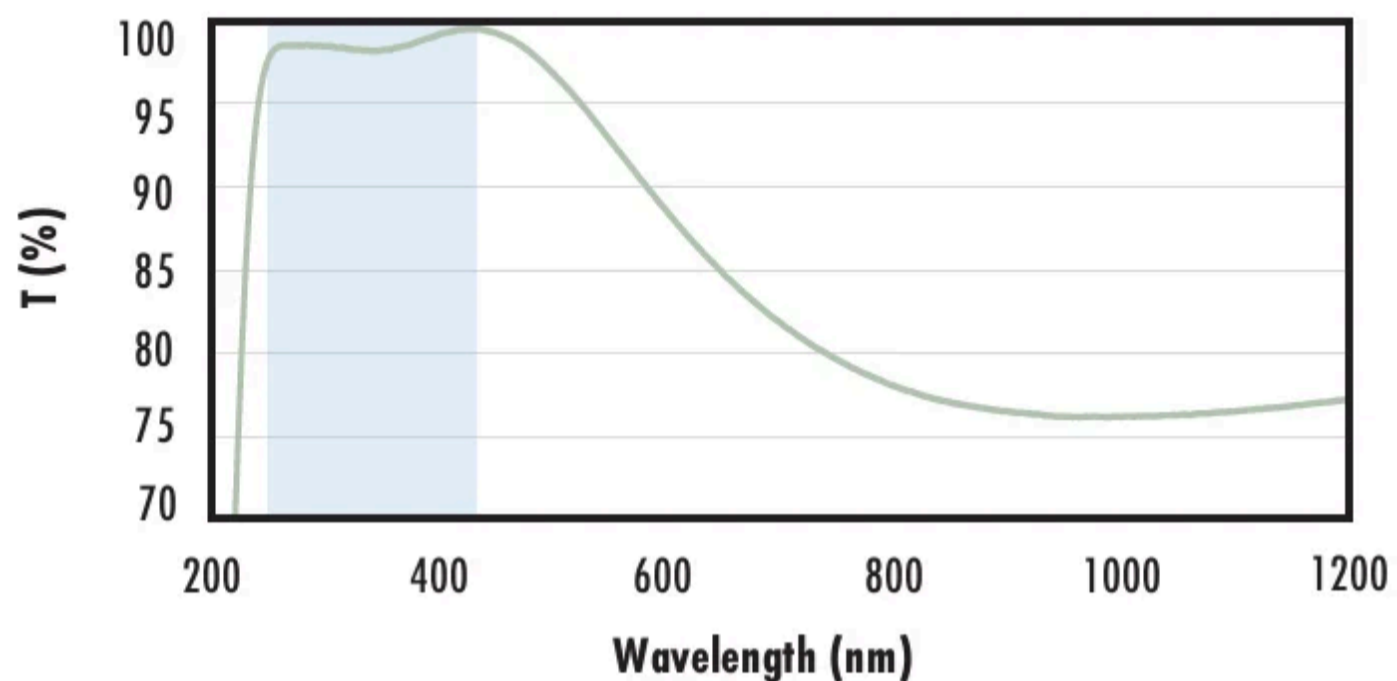
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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 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:

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

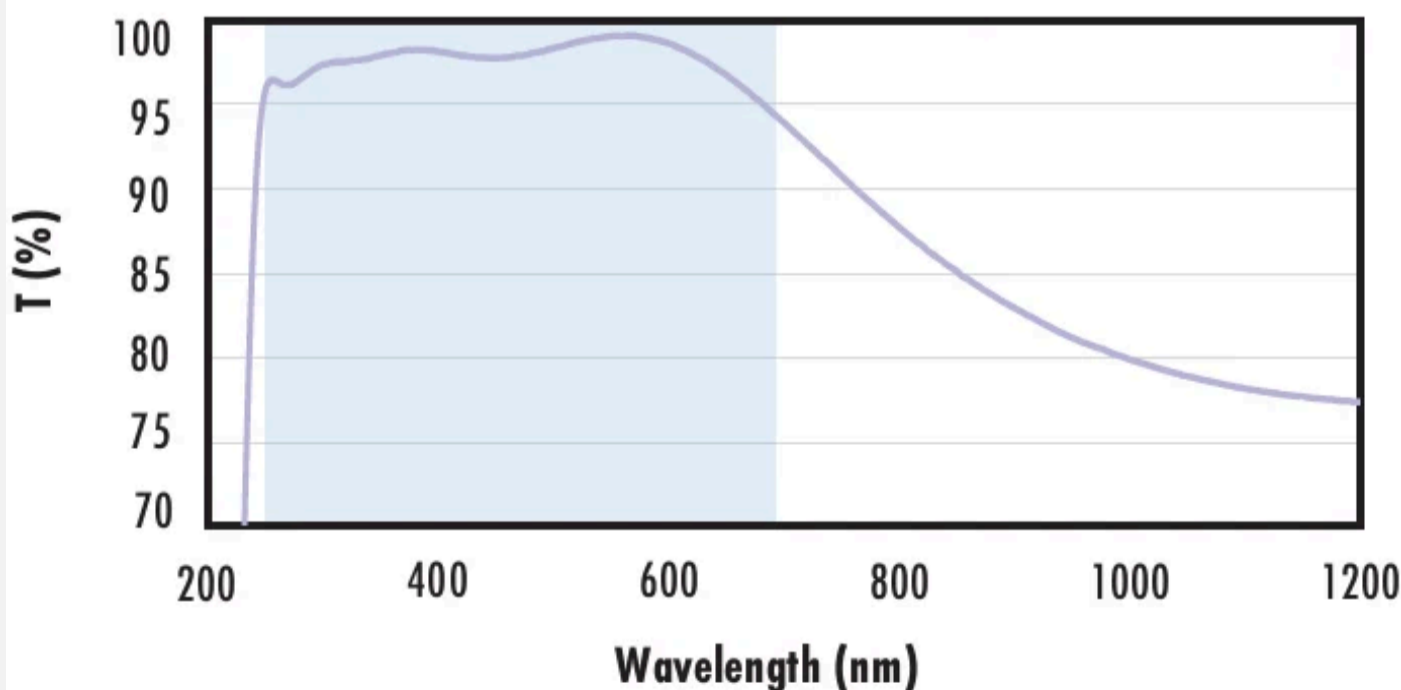
$$R_{avg} \leq 0.75\% \text{ @ } 250 - 425\text{nm}$$

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

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

[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:

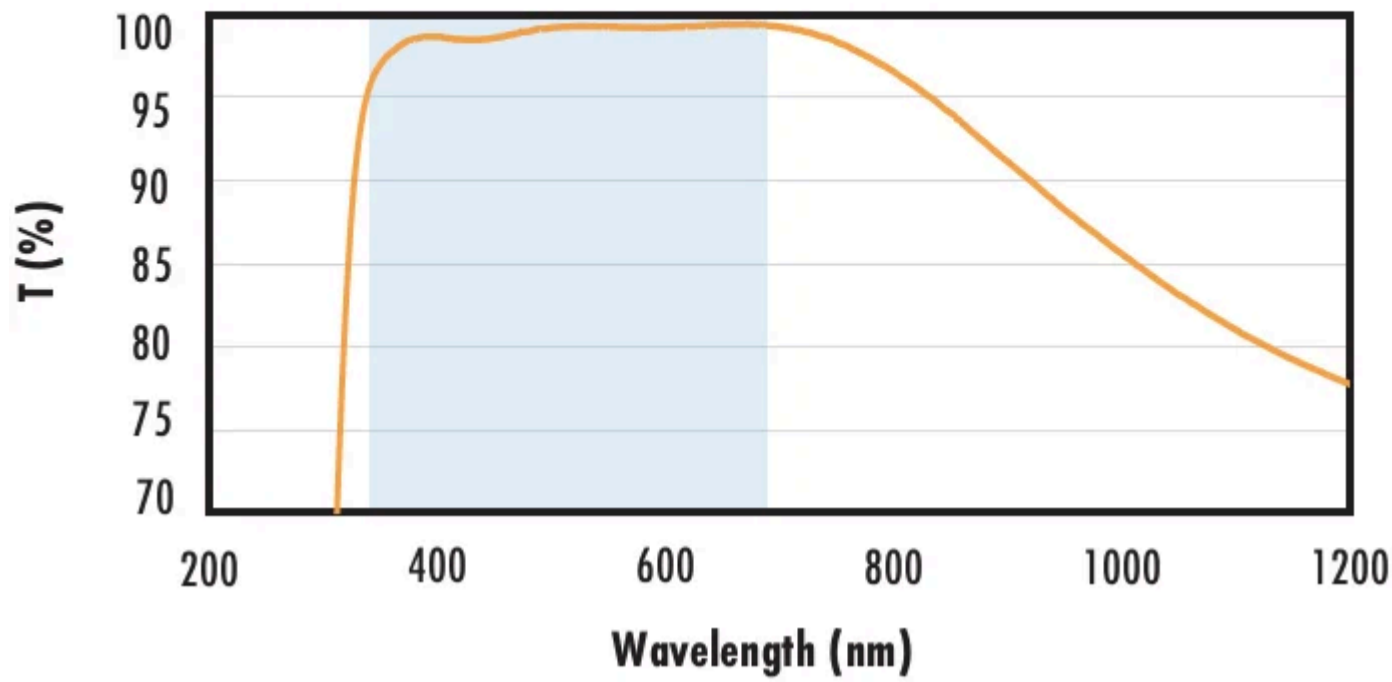
$$R_{abs} \leq 1.0\% \text{ @ } 350 - 450\text{nm}$$

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

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.

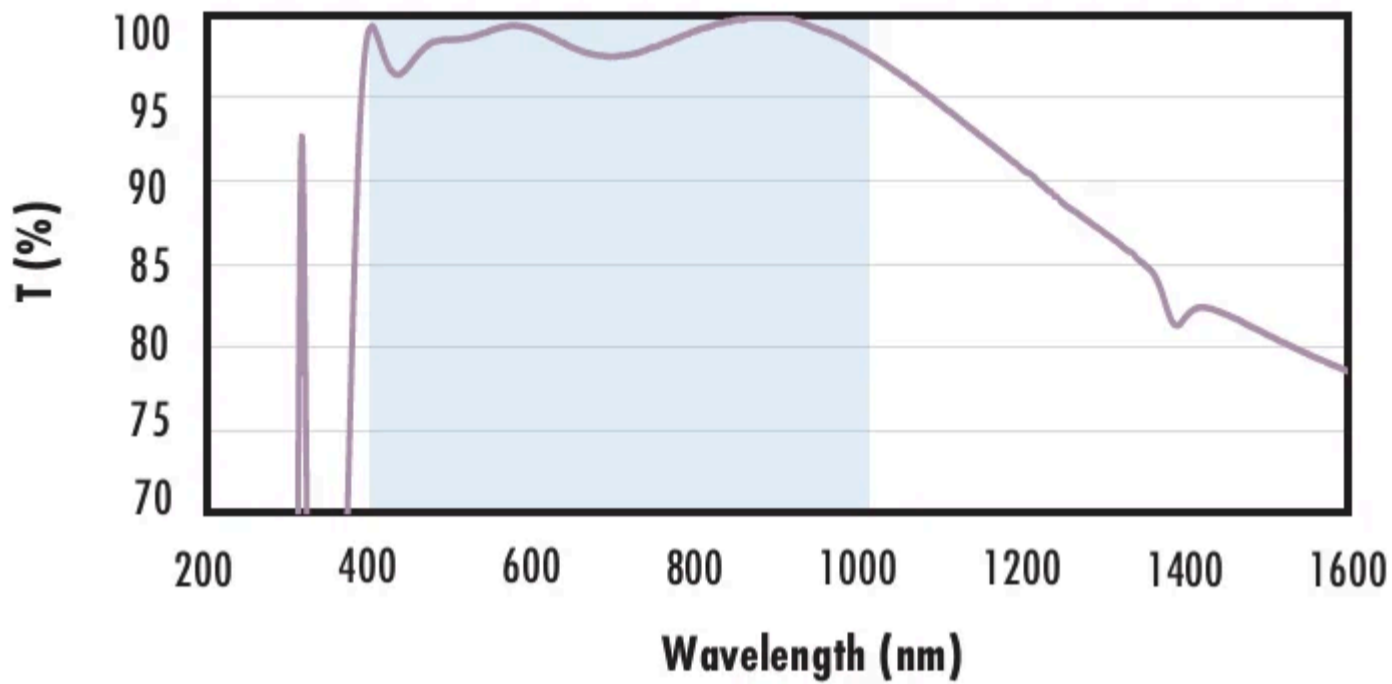
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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:

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

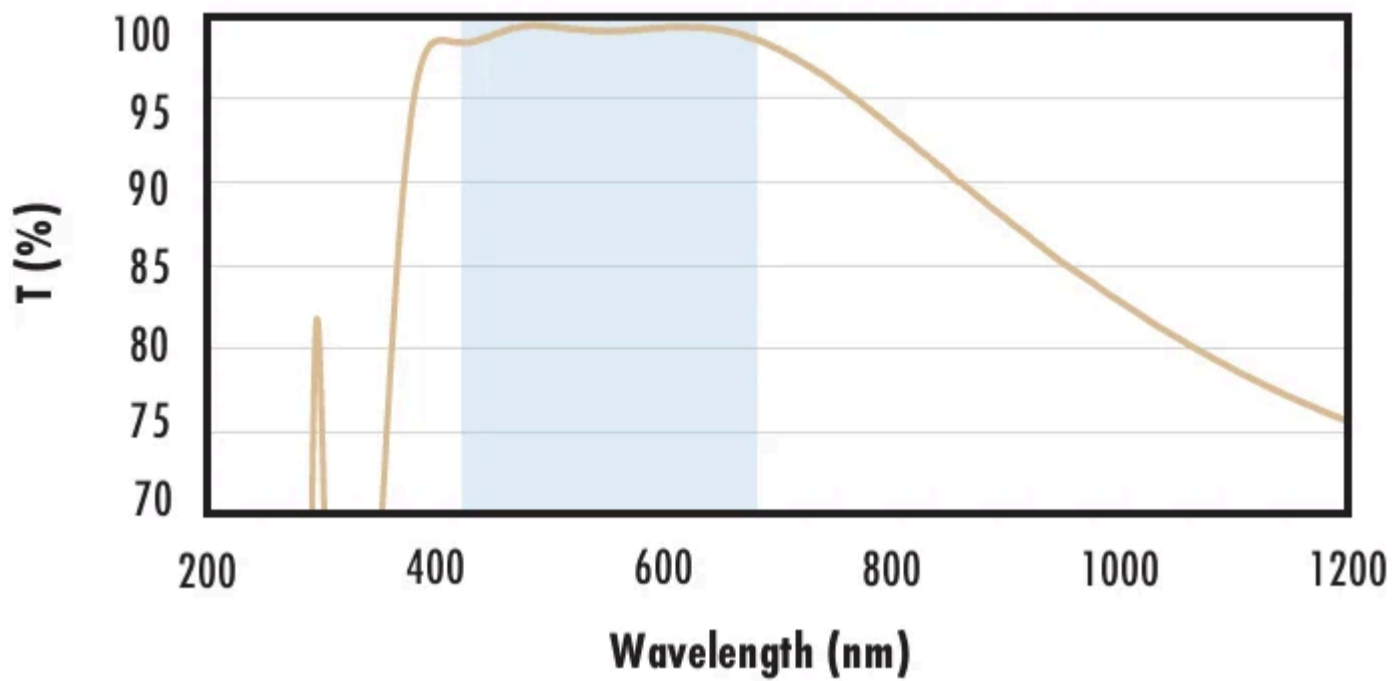
$$R_{avg} \leq 1.25\% \text{ @ } 400 - 870\text{nm}$$

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

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.

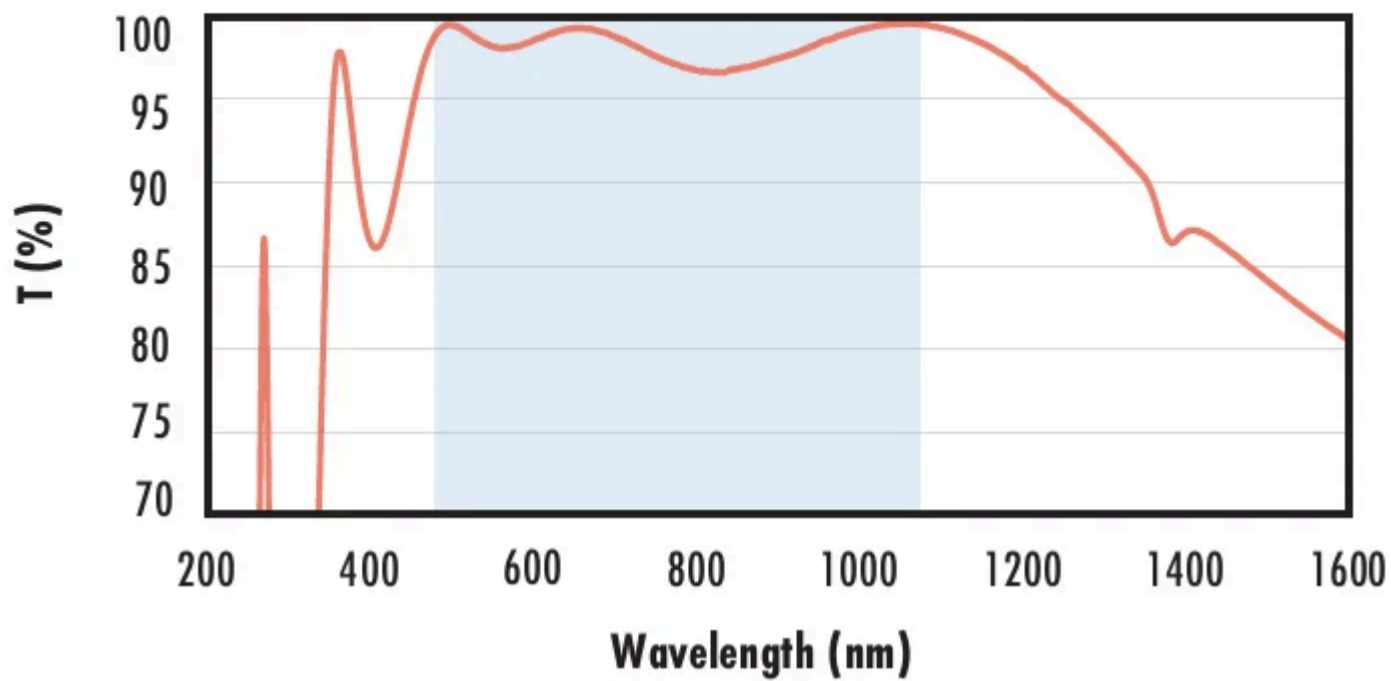
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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.

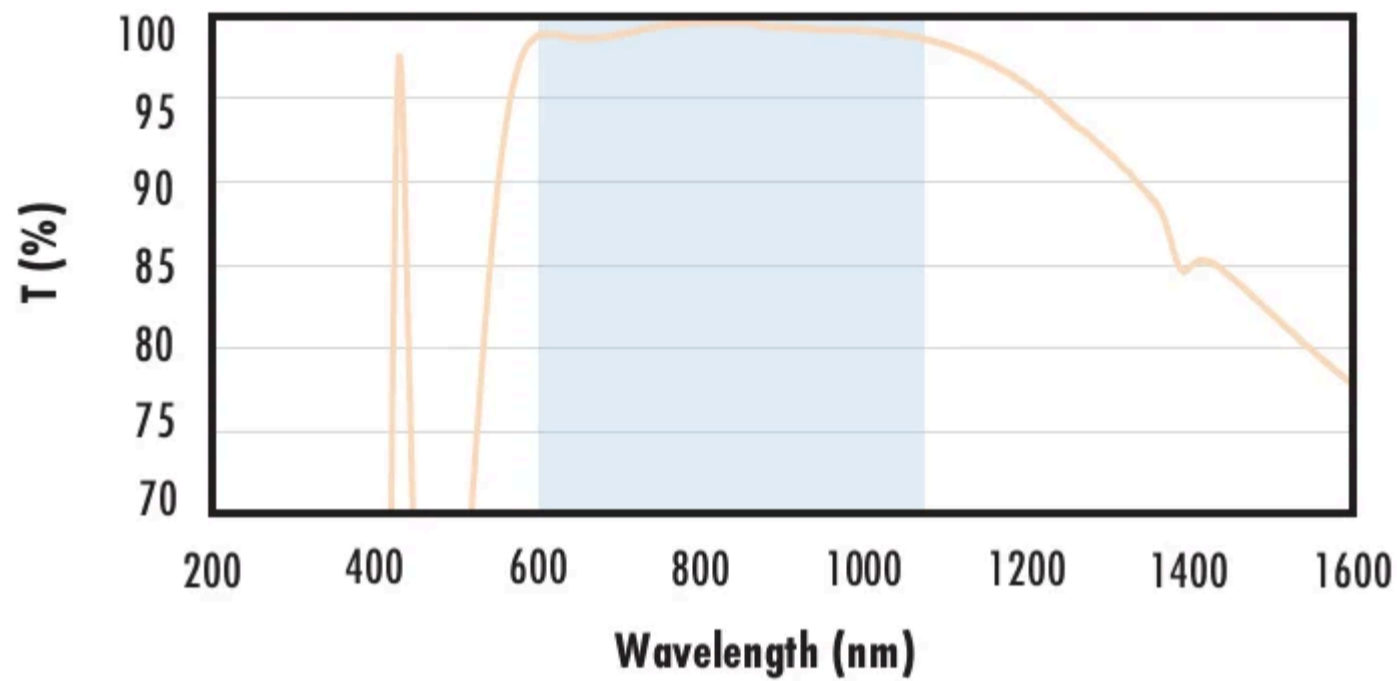
The blue shaded region indicates the coating design wavelength range, with the following specification:

- $R_{abs} \leq 0.25\%$ @ 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.

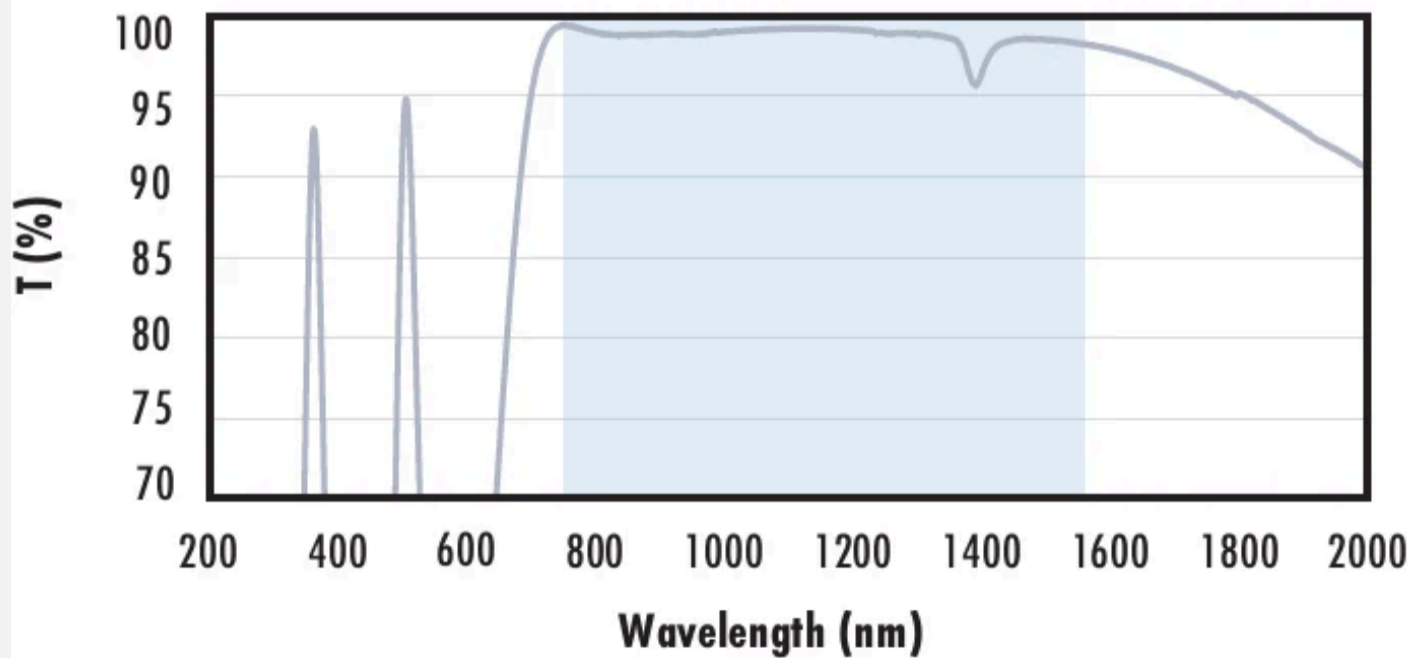
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

[Click Here to Download Data](#)

Related Products



UV Fused Silica Aspheric Lenses



Uncoated Plano-Convex (PCX) Lenses

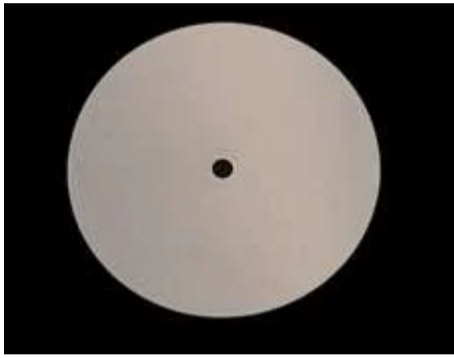


UV Fused Silica Double-Convex (DCX) Lenses



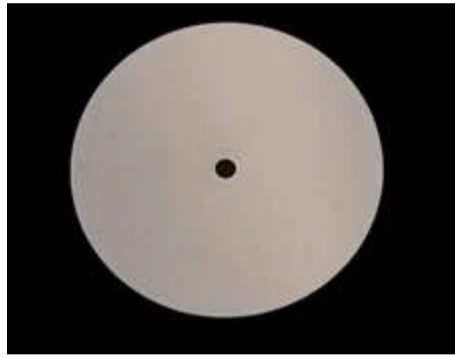
UV Fused Silica Plano-Concave (PCV) Lenses

Frequently Purchased Together



#39-729 - 500µm Aperture Diameter, Unmounted, Precision Pinhole
C\$101.50

Qty



#39-880 - 300µm Aperture Diameter, Unmounted, Precision Pinhole
C\$101.50

Qty



#32-332 - 15mm, Uncoated, N-BK7 Right Angle Prism
C\$97.30

Qty



#34-471 - 12.5mm Dia. White Diffusing Glass
C\$42.35

Qty

Compatible Mounts

	Title	Type	Compare	Stock Number	Price	Buy
	20.0mm Optic Dia., Optic Mount	Fixed		#64-559	C\$45.85 Request Quote	14 In Stock <input type="text" value="1"/>
	20mm Inner Single Optic Mount	Fixed		#38-754	C\$57.40 Request Quote	20+ In Stock <input type="text" value="1"/>
	20mm Diameter, C-Mount Thin Optic Mount	Fixed		#54-618	C\$83.30 Request Quote	20+ In Stock <input type="text" value="1"/>

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