

TECHSPEC[®] 6.0mm Dia. x -12 FL, VIS-NIR, UV Plano-Concave Lens



UV Fused Silica Plano-Concave (PCV) Lenses



Stock **#21-044** **2 In Stock**

[Other Coating Options](#)

-

1

+

£118¹⁹

ADD TO CART

Volume Pricing	
Qty 1-5	£118.19 each
Qty 6-25	£94.55 each
Qty 26-49	£88.43 each
Need More?	Request Quote

! Prices shown are exclusive of VAT/local taxes

Product Downloads

SPECIFICATIONS

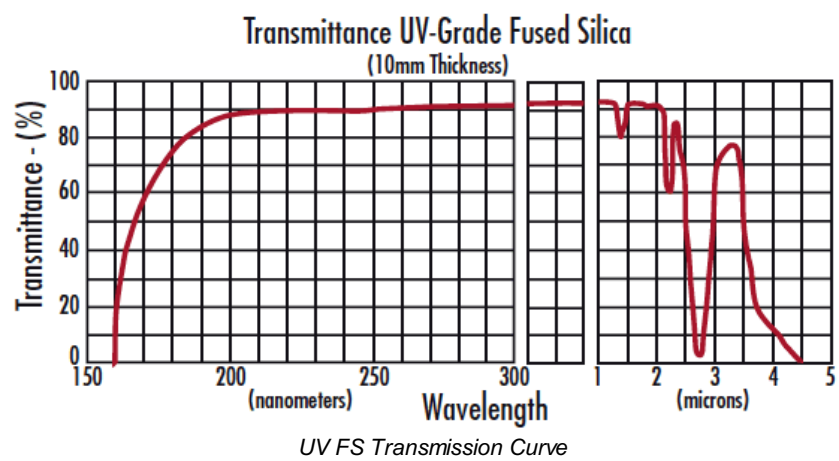
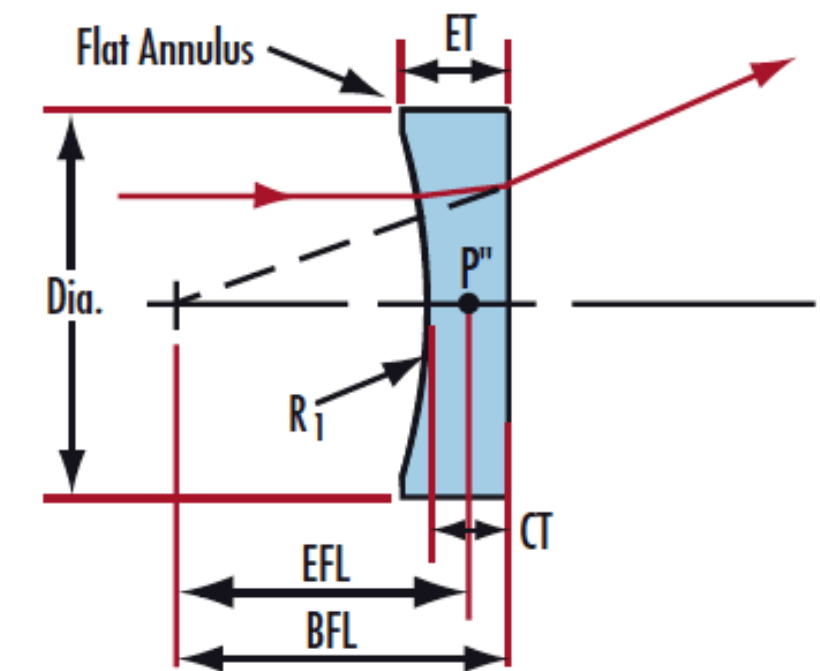
General	
Type:	Plano-Concave Lens
Note:	Max. Flat Annulus is 0.3mm
Physical & Mechanical Properties	
Diameter (mm):	6.00 +0.0/-0.025
Center Thickness CT (mm):	2.00
Center Thickness Tolerance (mm):	±0.05
Centering (arcmin):	<1
Clear Aperture CA (mm):	5.4
Edge Thickness ET (mm):	2.71
Optical Properties	
Effective Focal Length EFL (mm):	-12.00
Substrate: <input type="checkbox"/>	Fused Silica (Corning 7980)
f/#:	2.00
Numerical Aperture NA:	0.25
Coating:	MS-NIR (400-1000nm)
Wavelength Range (nm):	400 - 1000
Back Focal Length BFL (mm):	-13.38
Coating Specification:	R _{abs} ≤0.25% @ 880nm R _{avg} ≤1.25% @ 400 - 870nm R _{avg} ≤1.25% @ 890 - 1000nm
Focal Length Specification Wavelength (nm):	587.6
Focal Length Tolerance (%):	±1
Radius R ₁ (mm):	-5.50
Surface Quality:	40-20
Damage Threshold, Reference: <input type="checkbox"/>	5 J/cm ² @ 532nm, 10ns
Power (P-V) @ 632.8nm:	1.5λ
Irregularity (P-V) @ 632.8nm:	λ/4
Regulatory Compliance	
RoHS 2015:	Compliant
Certificate of Conformance:	View
Reach 235:	Compliant

PRODUCT DETAILS

- Negative Focal Lengths for Beam Expansion or Light Projection Applications
- Wavelength Range of 200 - 2200nm
- Popular UV-AR Coating Option Available

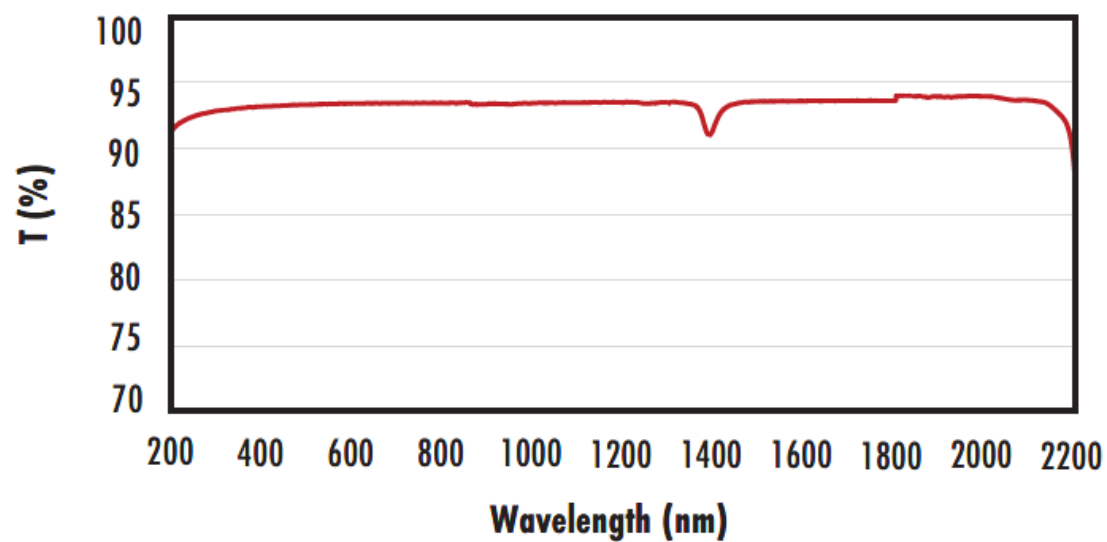
TECHSPEC® UV Fused Silica Plano-Concave (PCV) Lenses are high performance UV optic elements, manufactured utilizing state of the art CNC equipment. Zygo's GPI-XP Interferometer is used to assure the surface accuracy and performance of these UV optics. UV Grade lenses are precision manufactured using research-grade synthetic fused silica. In addition to providing excellent transmission characteristics and higher operating temperatures, synthetic fused silica also exhibits an exceptional inclusion specification and chemical purity. TECHSPEC® UV Fused Silica Plano-Concave (PCV) Lenses are an ideal choice for many laser and imaging applications, particularly those involving ultraviolet wavelengths. A broadband anti-reflection coating is available for optimized throughput in the ultraviolet spectrum.

TECHNICAL INFORMATION



FUSED SILICA

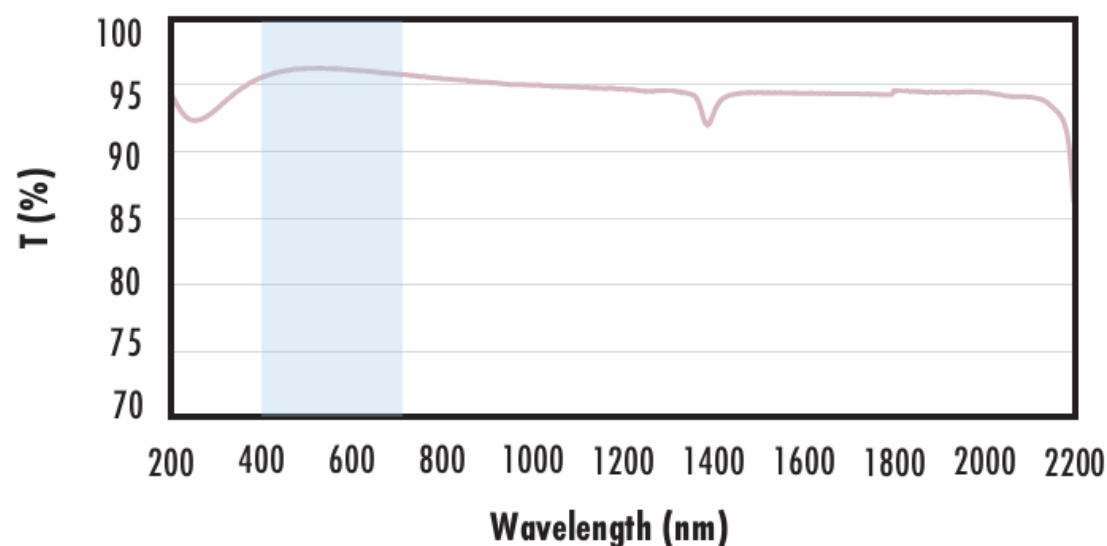
Uncoated Fused Silica
Typical Transmission



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

[Click Here to Download Data](#)

Fused Silica with MgF₂ Coating
Typical Transmission



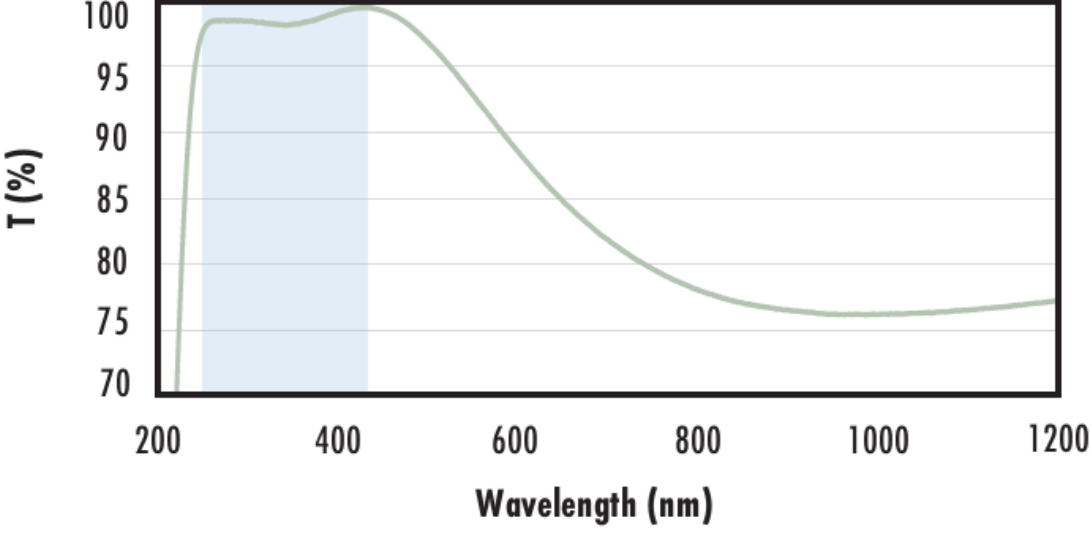
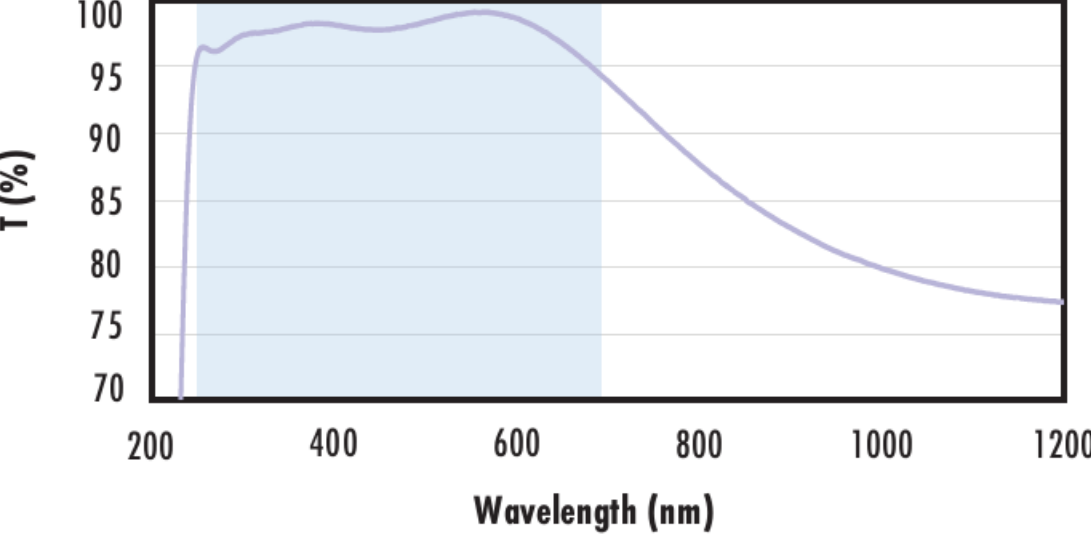
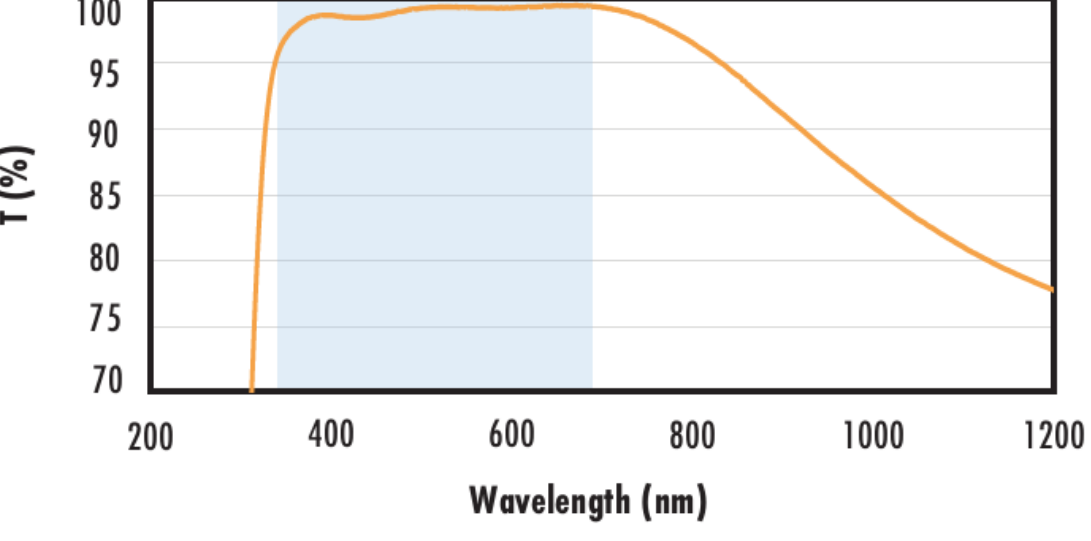
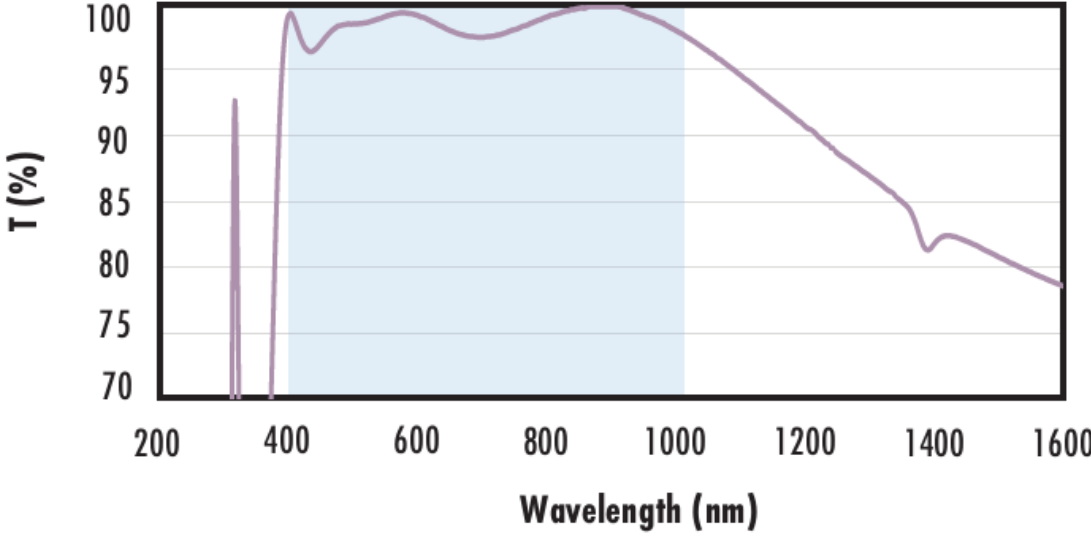
Typical transmission of a 3mm thick fused silica window with MgF₂ (400-700nm) coating at 0° AOI.

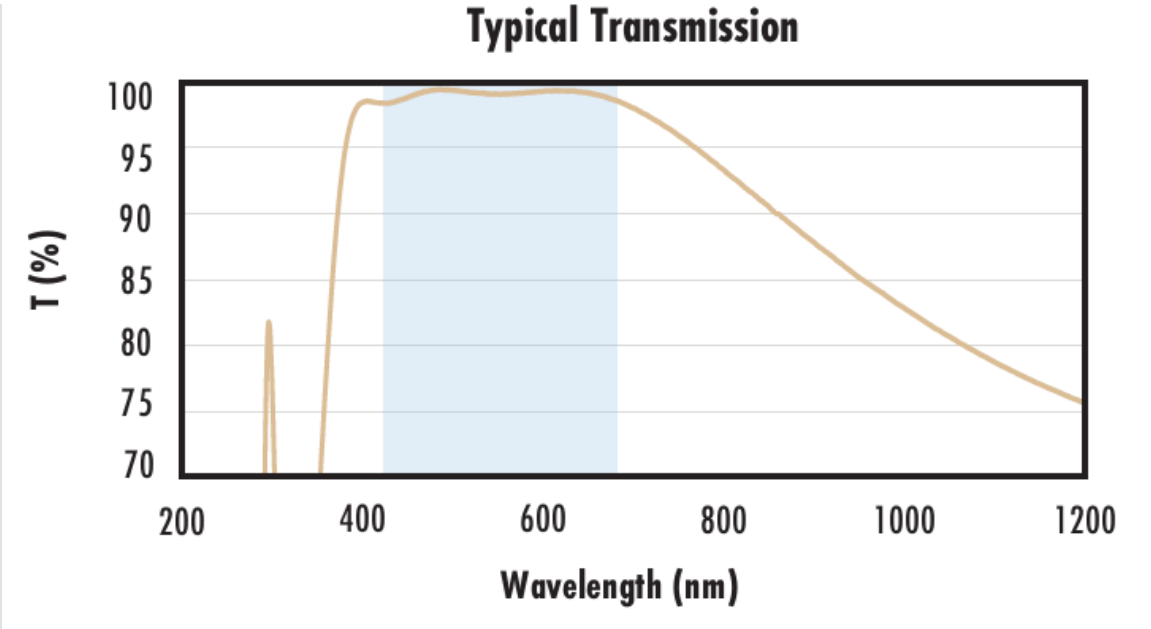
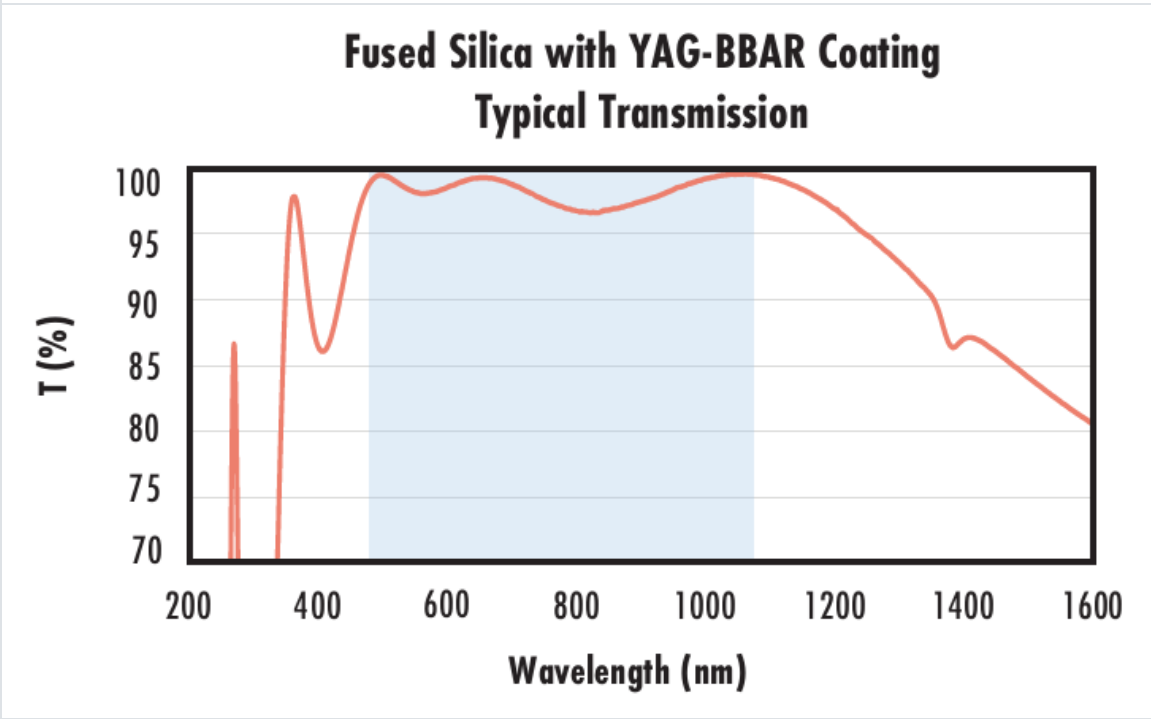
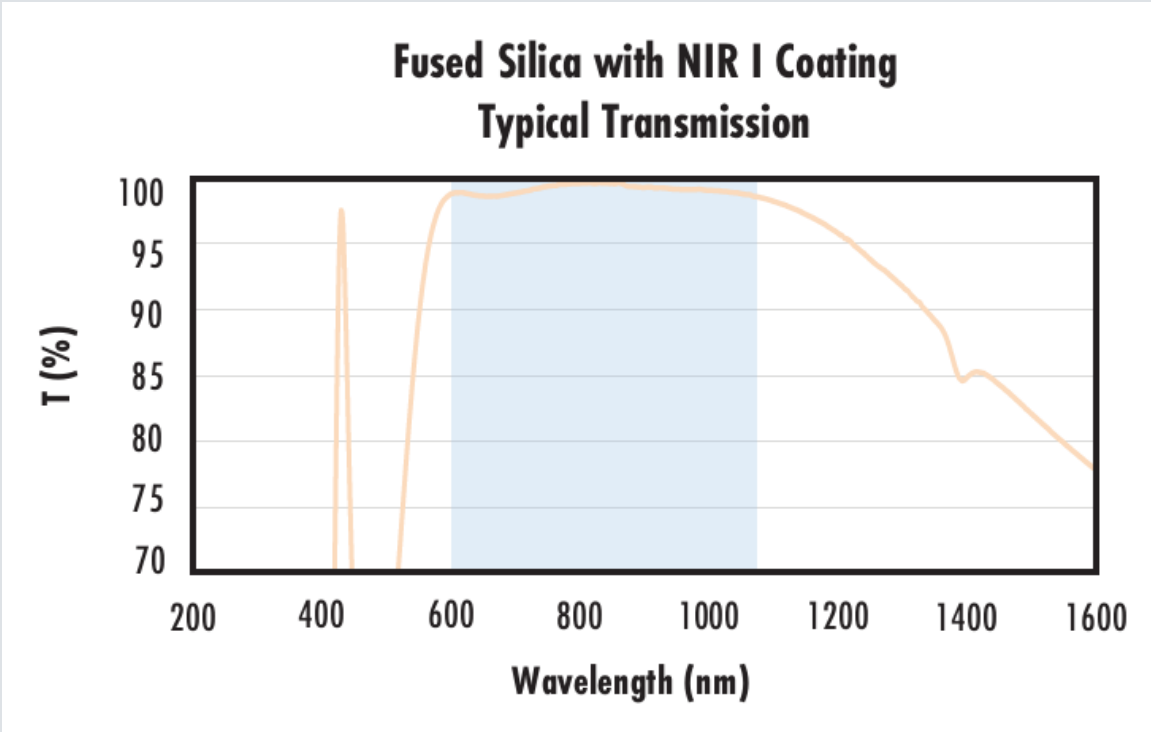
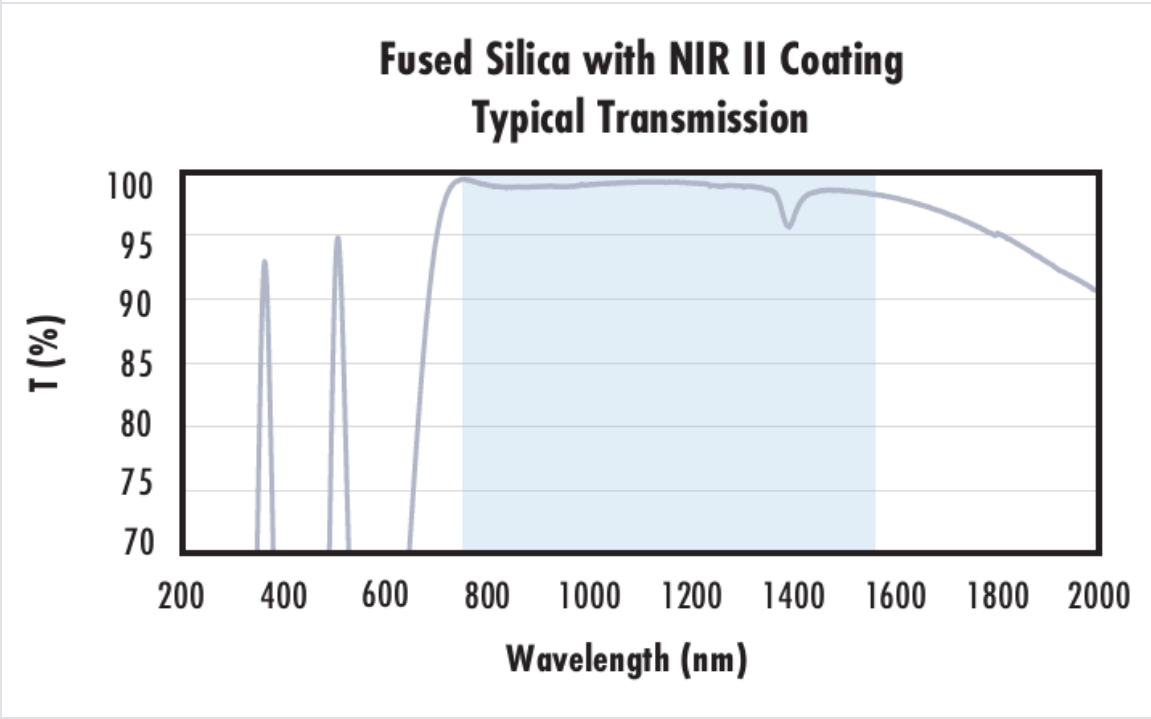
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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

[Click Here to Download Data](#)

<div><div><div>Fused Silica with UV-AR Coating</div><div>Typical Transmission</div></div></div>	<div><div>Typical transmission of a 3mm thick fused silica window with UV-AR (250-425nm) coating at 0° AOI.</div><div>The blue shaded region indicates the coating design wavelength range, with the following specification:<div><div>$R_{abs} \leq 1.0\% \text{ @ } 250 - 425\text{nm}$</div><div>$R_{avg} \leq 0.75\% \text{ @ } 250 - 425\text{nm}$</div><div>$R_{avg} \leq 0.5\% \text{ @ } 370 - 420\text{nm}$</div></div></div><div>Data outside this range is not guaranteed and is for reference only.</div><div>Click Here to Download Data</div></div>
<div><div><div>Fused Silica with UV-VIS Coating</div><div>Typical Transmission</div></div></div>	<div><div>Typical transmission of a 3mm thick fused silica window with UV-VIS (250-700nm) coating at 0° AOI.</div><div>The blue shaded region indicates the coating design wavelength range, with the following specification:<div><div>$R_{abs} \leq 1.0\% \text{ @ } 350 - 450\text{nm}$</div><div>$R_{avg} \leq 1.5\% \text{ @ } 250 - 700\text{nm}$</div></div></div><div>Data outside this range is not guaranteed and is for reference only.</div><div>Click Here to Download Data</div></div>
<div><div><div>Fused Silica with VIS-EXT Coating</div><div>Typical Transmission</div></div></div>	<div><div>Typical transmission of a 3mm thick fused silica window with VIS-EXT (350-700nm) coating at 0° AOI.</div><div>The blue shaded region indicates the coating design wavelength range, with the following specification:<div><div>$R_{avg} \leq 0.5\% \text{ @ } 350 - 700\text{nm}$</div></div></div><div>Data outside this range is not guaranteed and is for reference only.</div><div>Click Here to Download Data</div></div>
<div><div><div>Fused Silica with VIS-NIR Coating</div><div>Typical Transmission</div></div></div>	<div><div>Typical transmission of a 3mm thick fused silica window with VIS-NIR (400-1000nm) coating at 0° AOI.</div><div>The blue shaded region indicates the coating design wavelength range, with the following specification:<div><div>$R_{abs} \leq 0.25\% \text{ @ } 880\text{nm}$</div><div>$R_{avg} \leq 1.25\% \text{ @ } 400 - 870\text{nm}$</div><div>$R_{avg} \leq 1.25\% \text{ @ } 890 - 1000\text{nm}$</div></div></div><div>Data outside this range is not guaranteed and is for reference only.</div><div>Click Here to Download Data</div></div>
<div><div><div>Fused Silica with VIS 0° Coating</div></div></div>	

<div><h3>Typical Transmission</h3></div>	<p>Typical transmission of a 3mm thick fused silica window with MS 0° (425-675nm) coating at 0° AOI.</p> <p>The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p>$R_{avg} \leq 0.4\%$ @ 425 - 675nm</p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p>Click Here to Download Data</p>
<div><h3>Fused Silica with YAG-BBAR Coating Typical Transmission</h3></div>	<p>Typical transmission of a 3mm thick fused silica window with YAG-BBAR (500-1100nm) coating at 0° AOI.</p> <p>The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p>$R_{abs} \leq 0.25\%$ @ 532nm $R_{abs} \leq 0.25\%$ @ 1064nm $R_{avg} \leq 1.0\%$ @ 500 - 1100nm</p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p>Click Here to Download Data</p>
<div><h3>Fused Silica with NIR I Coating Typical Transmission</h3></div>	<p>Typical transmission of a 3mm thick fused silica window with NIR I (600 - 1050nm) coating at 0° AOI.</p> <p>The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p>$R_{avg} \leq 0.5\%$ @ 600 - 1050nm</p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p>Click Here to Download Data</p>
<div><h3>Fused Silica with NIR II Coating Typical Transmission</h3></div>	<p>Typical transmission of a 3mm thick fused silica window with NIR II (750 - 1550nm) coating at 0° AOI.</p> <p>The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p>$R_{abs} \leq 1.5\%$ @ 750 - 800nm $R_{abs} \leq 1.0\%$ @ 800 - 1550nm $R_{avg} \leq 0.7\%$ @ 750 - 1550nm</p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p>Click Here to Download Data</p>

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

