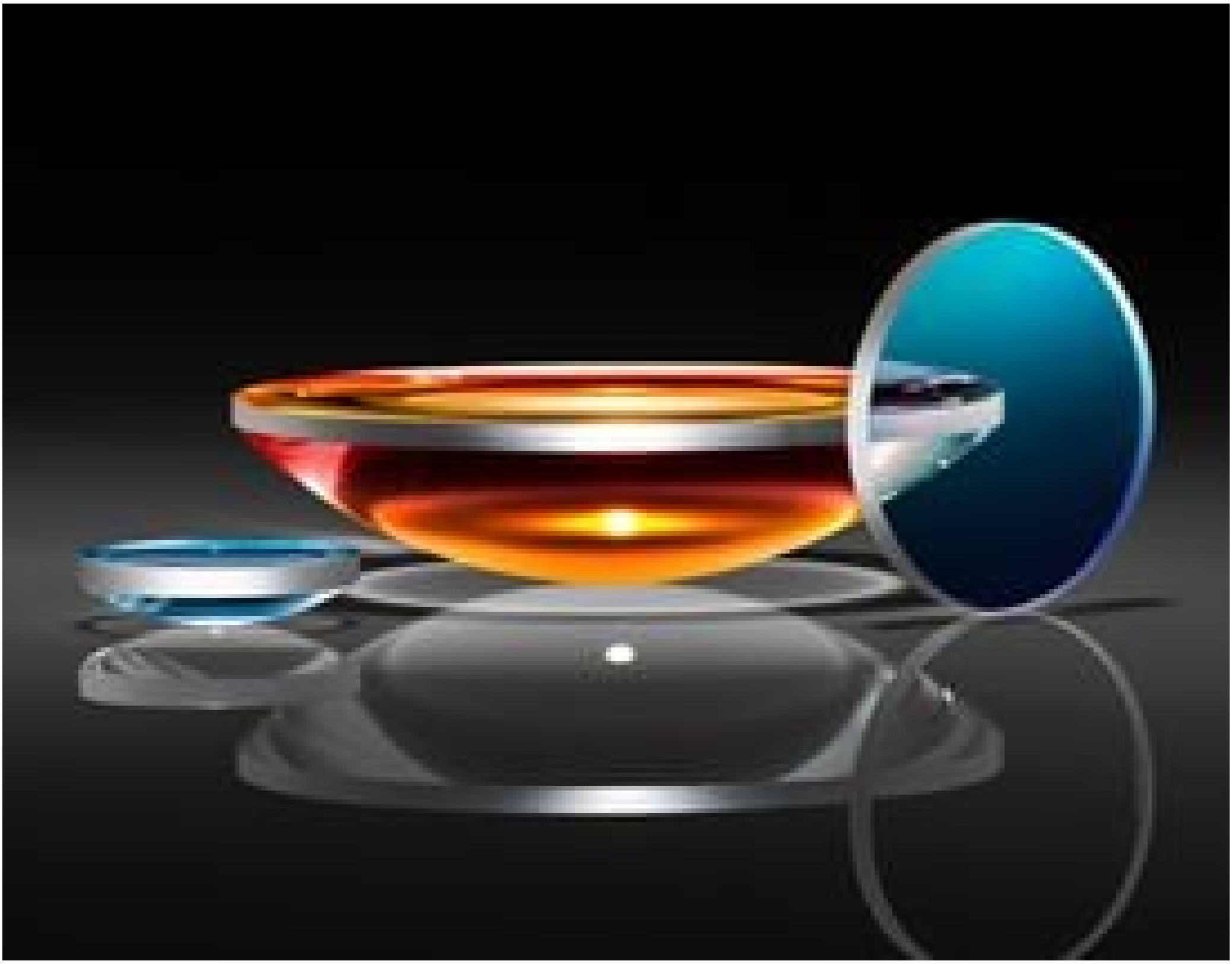
See all 51 Products in Family

TECHSPEC® 9mm Dia. x 27mm FL, NIR II Coated, Plano-Convex Lens



UV Fused Silica Plano-Convex (PCX) Lenses

Stock **#18-036** **1 In Stock**

- 1 + **C$208**.60

ADD TO CART

Volume Pricing	
Qty 1-5	**C$208.60** each
Qty 6-25	**C$166.60** each
Qty 26-49	**C$156.80** each
Need More?	Request Quote

Product Downloads

General

Type:

Plano-Convex Lens

Physical & Mechanical Properties

Diameter (mm):

9.00 -0.025

Centering (arcmin):
<1

Center Thickness CT (mm):
2.00 ±0.05

Edge Thickness ET (mm):
1.15

Clear Aperture CA (mm):
8

Bevel:
Protective as needed

Optical Properties

Effective Focal Length EFL (mm):
27.00 @ 587.6nm

Back Focal Length BFL (mm):
25.63

Coating:
NIR II (750-1550nm)

Coating Specification:
R_{abs} ≤1.5% @ 750 - 800nm
R_{abs} ≤1.0% @ 800 - 1550nm
R_{avg} ≤0.7% @ 750 - 1550nm

Substrate:
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 R_1 (mm):
12.38

f/#:
3

Numerical Aperture NA:
0.17

Wavelength Range (nm):
750 - 1550

Damage Threshold, By Design:
8 J/cm^2 @ 1064nm, 10ns

Regulatory Compliance

RoHS 2015:
Compliant

Certificate of Conformance:
View

Reach 235:
Compliant

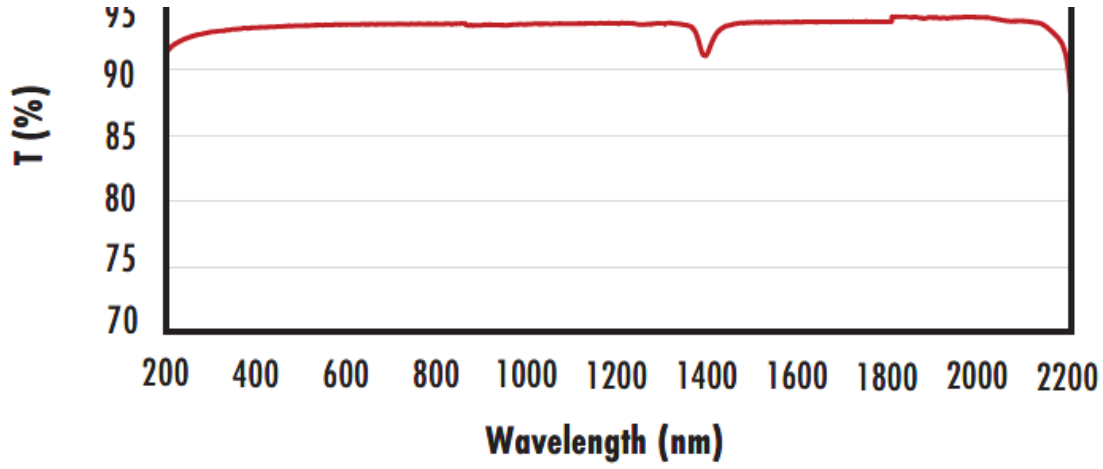
Product Details

- AR Coated to Provide <0.7% Reflection per Surface for 750 - 1550nm
- Precision Fused Silica Substrate
- Various Coating Options: Uncoated, MgF_2, UV-AR, UV-VIS, VIS-EXT, VIS-NIR, VIS 0°, YAG-BBAR, and NIR I

TECHSPEC® UV Fused Silica Plano-Convex (PCX) Lenses NIR II 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 II Coated feature industry leading diameter and centration specifications, making them ideal for integration into demanding imaging and targeting applications. These lenses are NIR II coated to increase their coating performance in the 750 to 1550nm range.

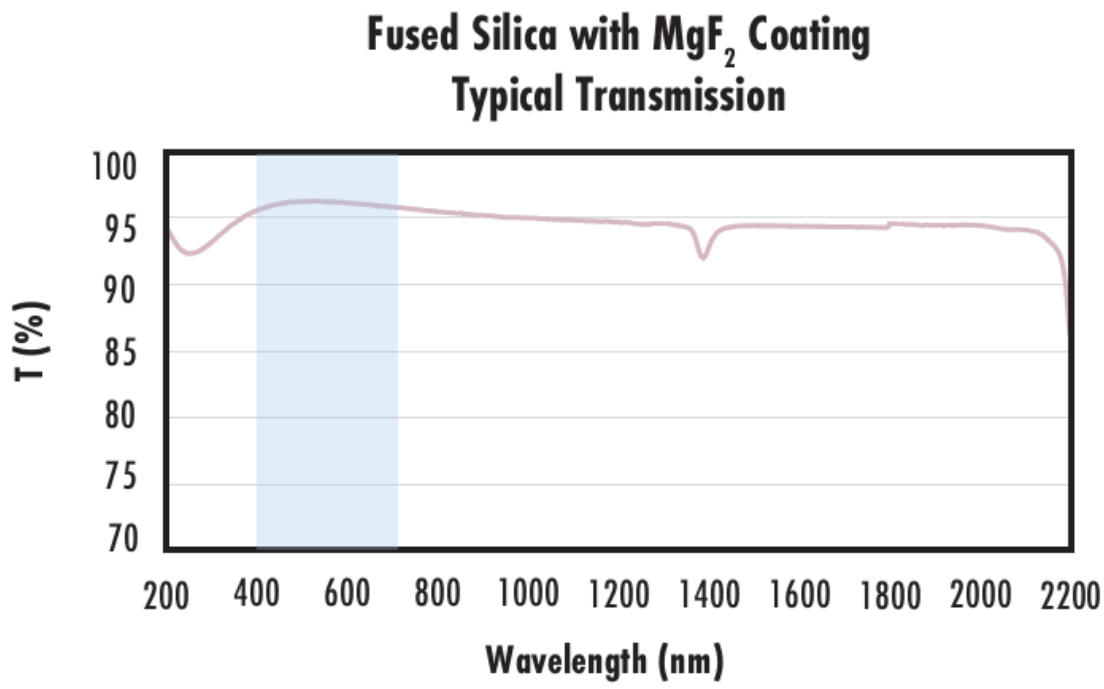
Technical Information

FUSED SILICA



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

Click Here to Download Data



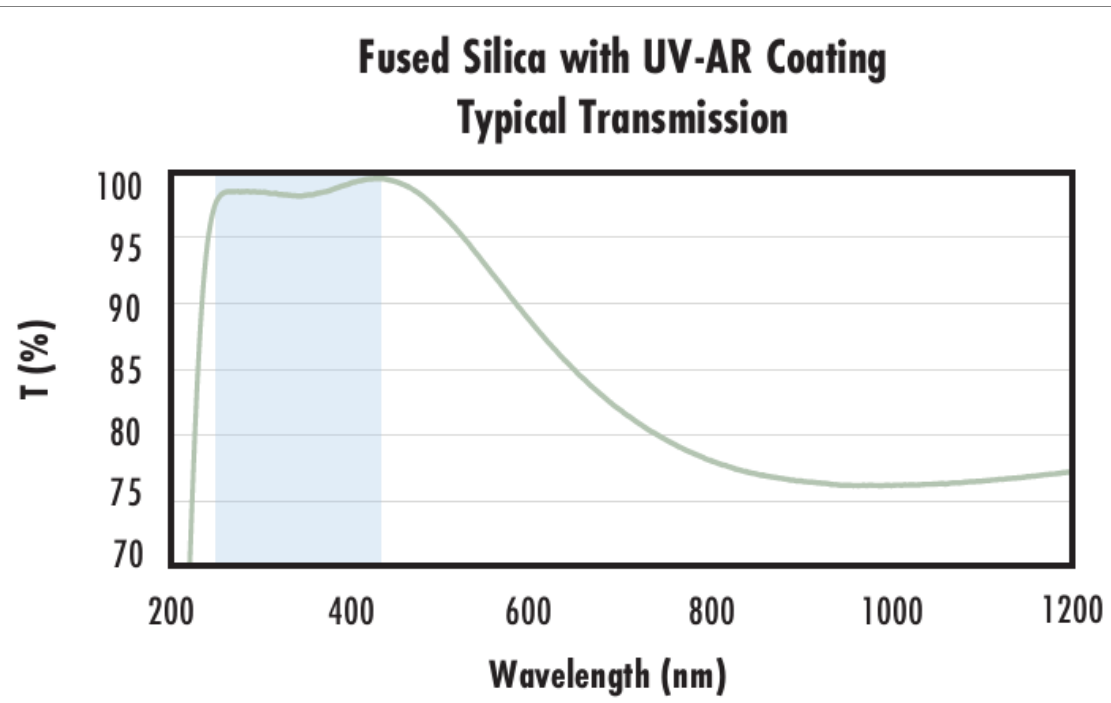
Typical transmission of a 3mm thick fused silica window with MgF2 (400-700nm) coating at 0° AOI.

The blue shaded region indicates the coating design wavelengh 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



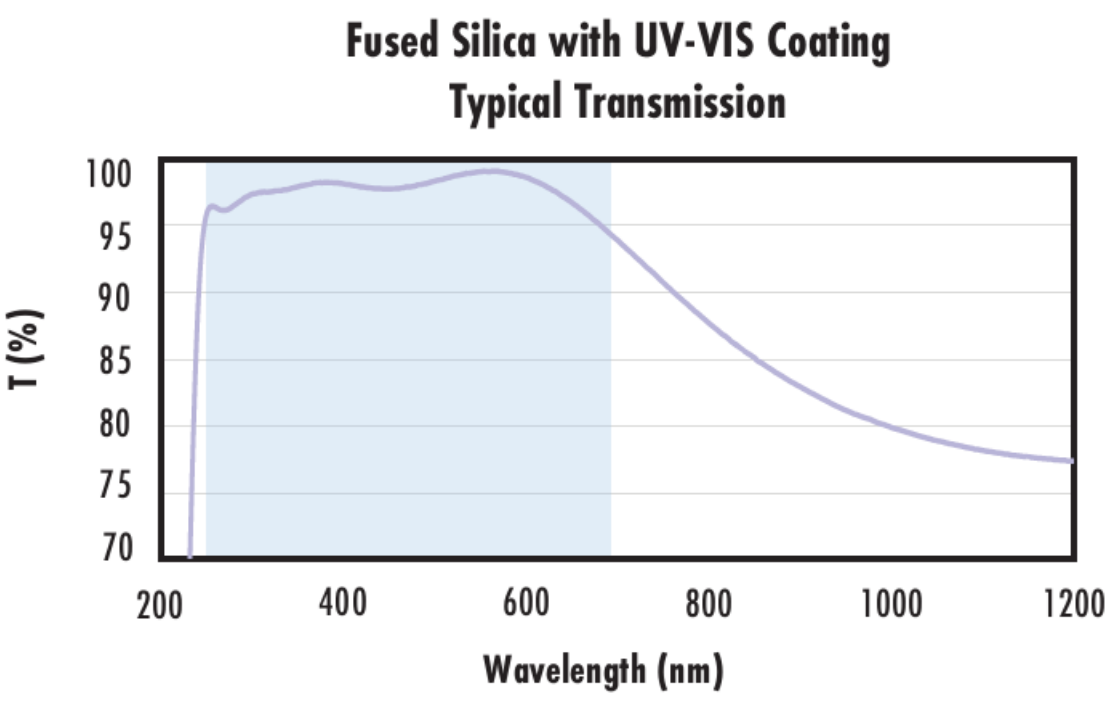
Typical transmission of a 3mm thick fused silica window with UV-AR (250-425nm) coating at 0° AOI.

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

$R_{abs} \leq 1.0\%$ @ 250 - 425nm
$R_{avg} \leq 0.75\%$ @ 250 - 425nm
$R_{avg} \leq 0.5\%$ @ 370 - 420nm

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

Click Here to Download Data



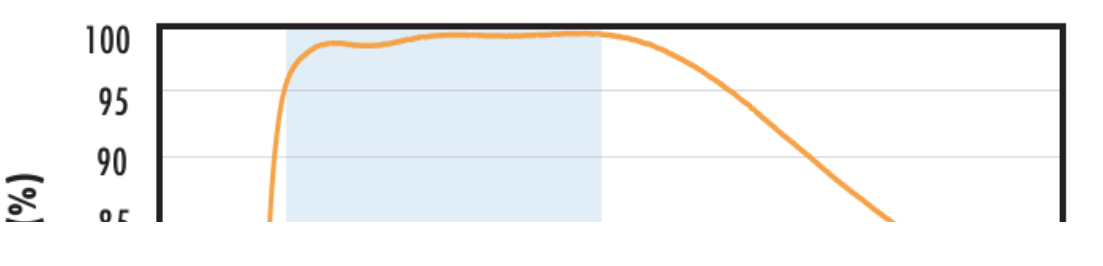
Typical transmission of a 3mm thick fused silica window with UV-VIS (250-700nm) coating at 0° AOI.

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

$R_{abs} \leq 1.0\%$ @ 350 - 450nm
$R_{avg} \leq 1.5\%$ @ 250 - 700nm

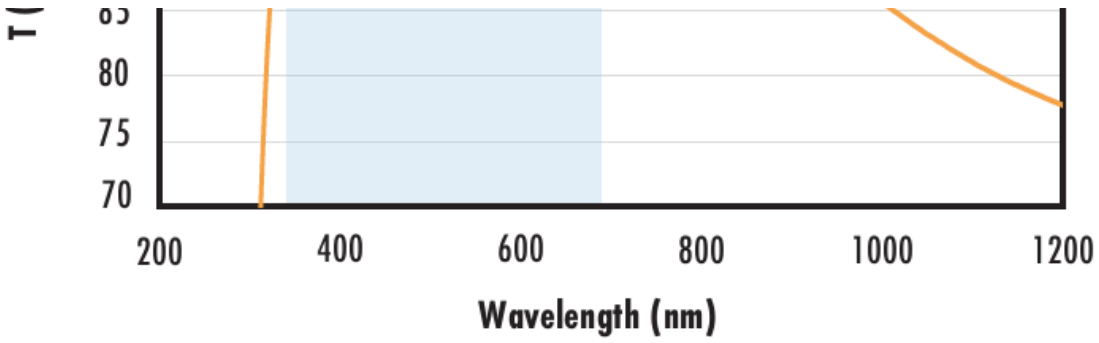
Data outside this range is not guaranteed and is for reference only.

Click Here to Download Data



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

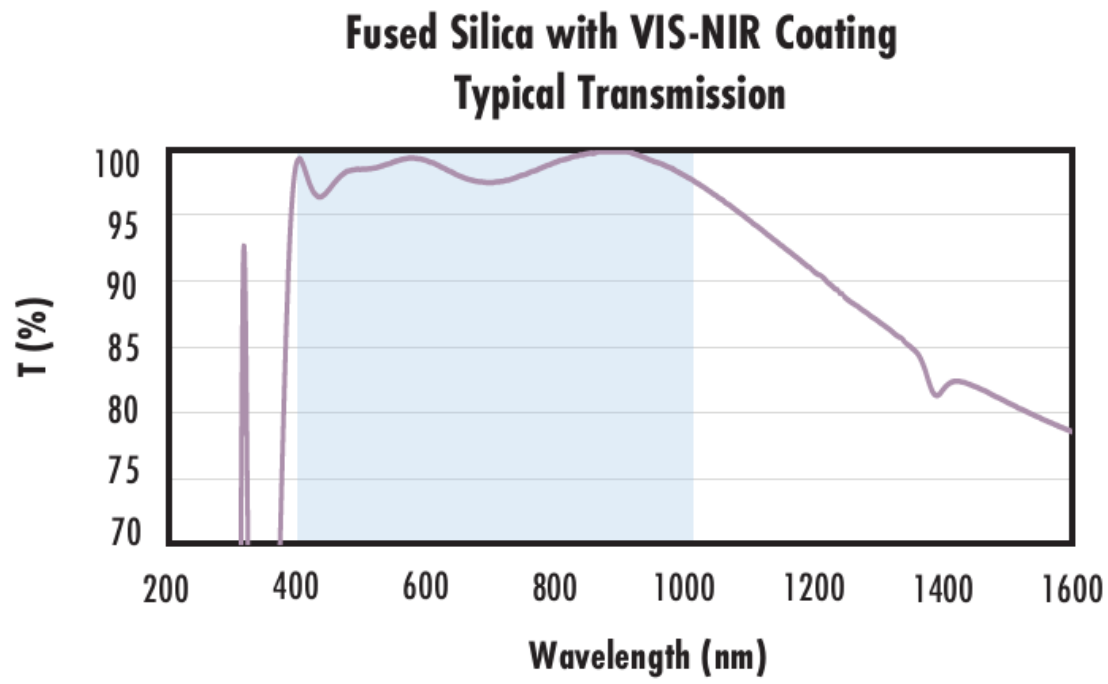
The blue shaded region indicates the coating design wavelengh range, with the following specification:



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

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

Click Here to Download Data



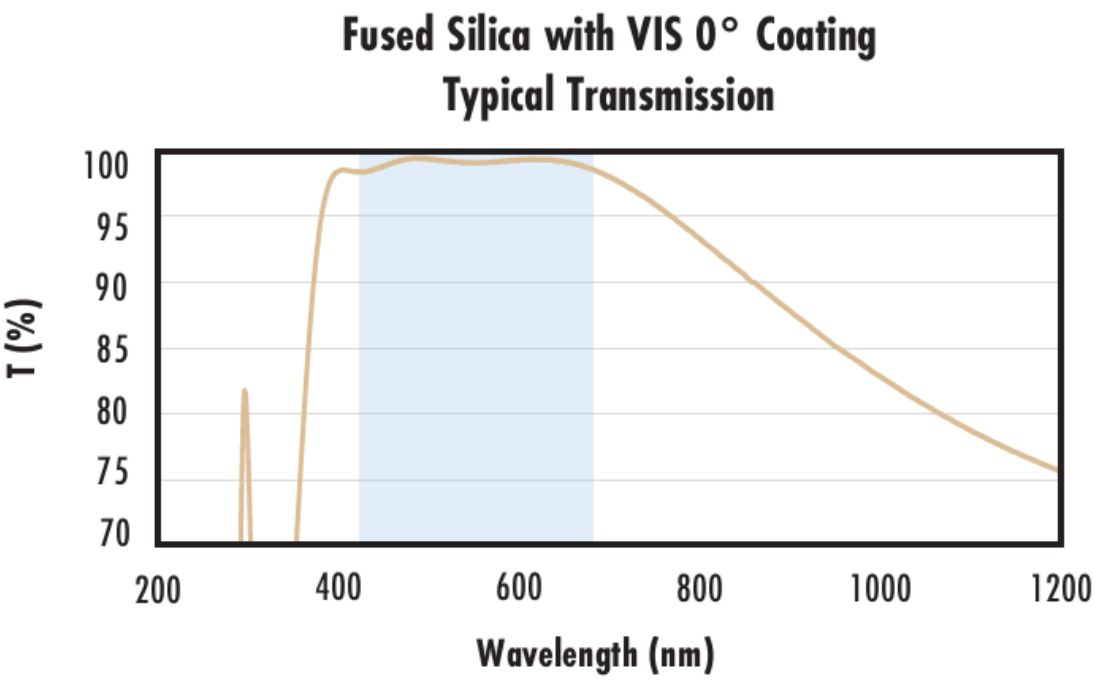
Typical transmission of a 3mm thick fused silica window with VIS-NIR (400-1000nm) coating at 0° AOI.

The blue shaded region indicates the coating design wavelengh 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



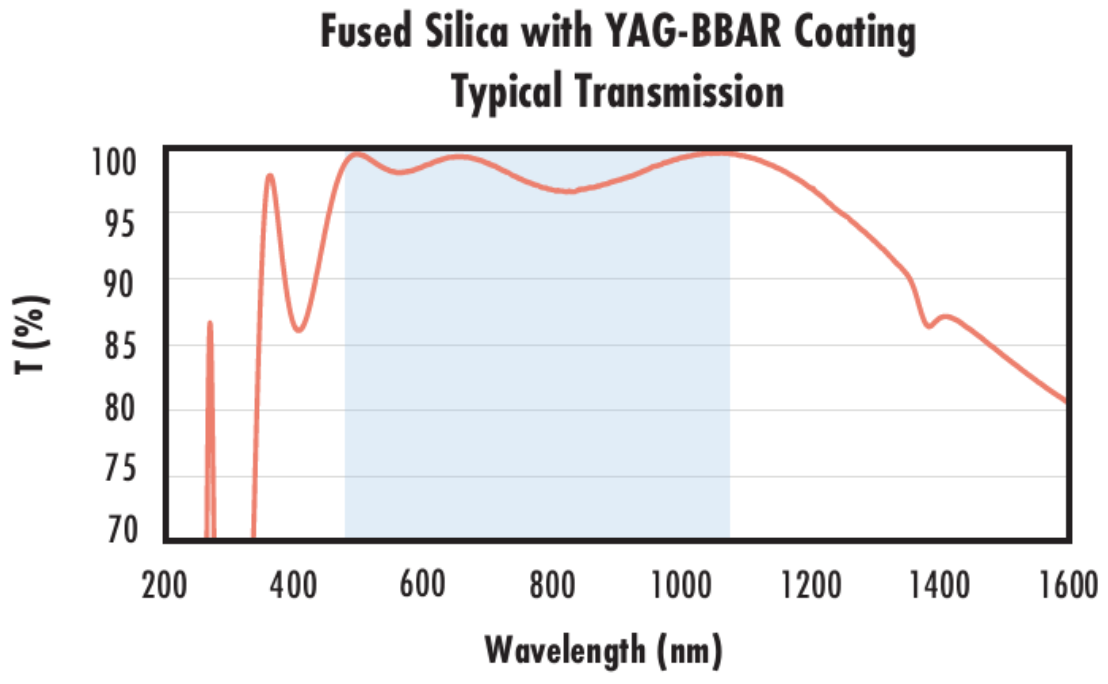
Typical transmission of a 3mm thick fused silica window with VIS 0° (425-675nm) coating at 0° AOI.

The blue shaded region indicates the coating design wavelengh 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



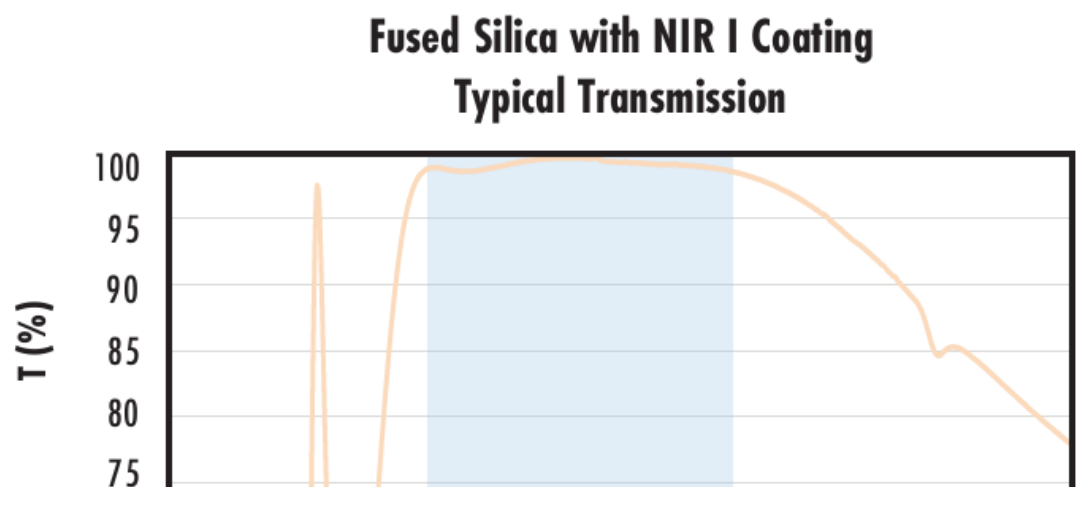
Typical transmission of a 3mm thick fused silica window with YAG-BBAR (500-1100nm) coating at 0° AOI.

The blue shaded region indicates the coating design wavelengh 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



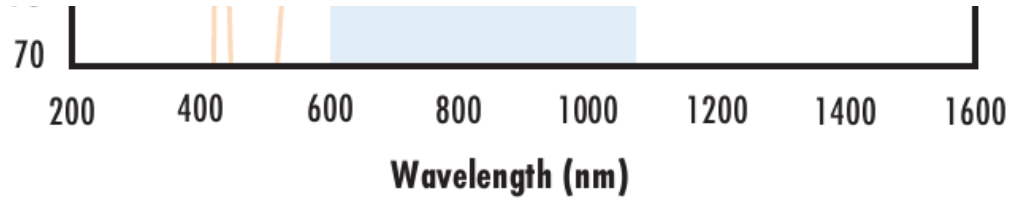
Typical transmission of a 3mm thick fused silica window with NIR I (600 - 1050nm) coating at 0° AOI.

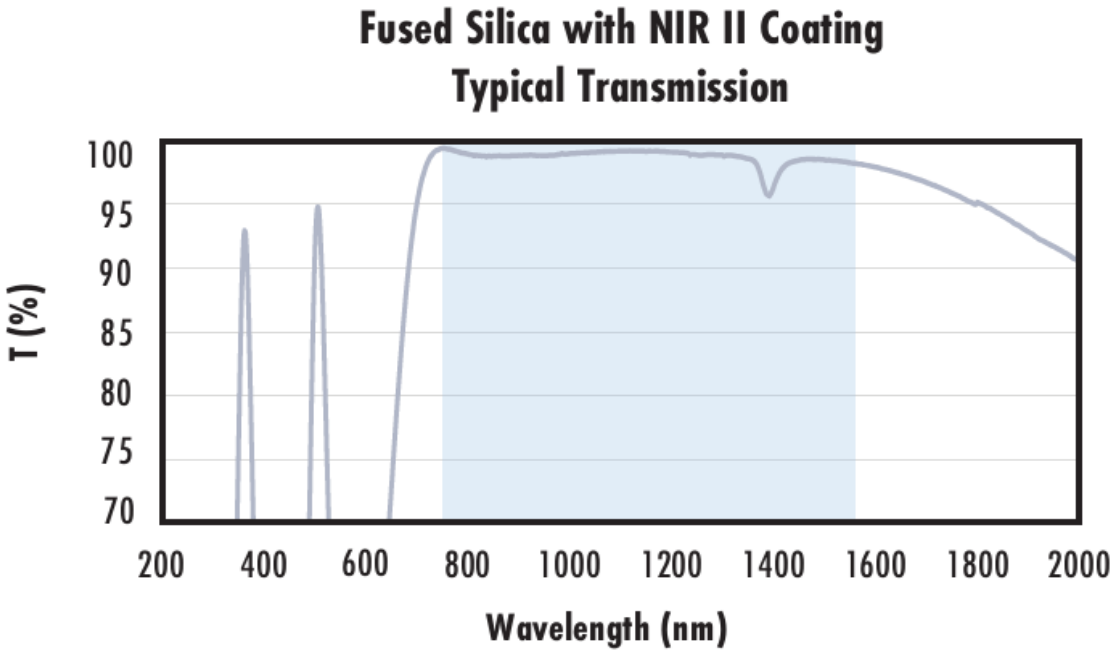
The blue shaded region indicates the coating design wavelengh range, with the following specification:

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

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

Click Here to Download Data





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 wavelengh 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

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.**

;