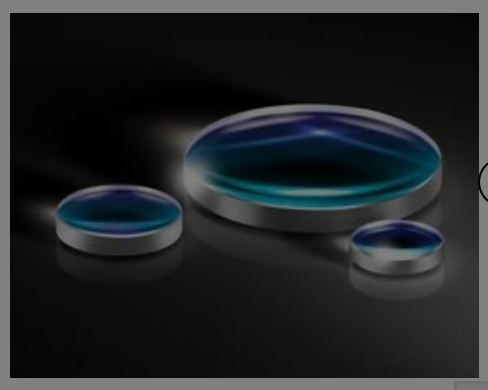
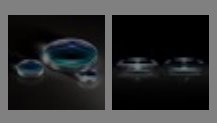
TECHSPEC® 9mm D le-Convex Lens



UV Fused Silica Double-Convex (DCX) Lenses



Options

- 1 +

€124,00

ADD TO CART

Volume Pricing	
Qty 1-5	**€124,00** each
Qty 6-25	**€99,00** each
Qty 26-49	**€92,50** each
Need More?	**Request Quote**

Prices shown are exclusive of VAT/local taxes

Product Downloads

STEP:step | PDF Drawing:pdf | ISO 10110 Drawing | IGES:igs | Zemax:zar | Zemax:zmx | eDrawing:eprt | Code V:seq | EO Spec Sheet

Download All

General

Type:	Double-Convex Lens

Physical & Mechanical Properties

Diameter (mm):	9.00 +0.0/-0.025	**Centering (arcmin):**	<1
Bevel:	Protective as needed	**Center Thickness CT (mm):**	2.00 ±0.05
Edge Thickness ET (mm):	1.38	**Clear Aperture CA (mm):**	8.1

Optical Properties

Back Focal Length BFL (mm):	35.31	**Effective Focal Length EFL (mm):**	36.00
Coating:	Uncoated	**Coating Specification:**	Uncoated
Substrate: ⓘ	**Fused Silica** (Corning 7980)	**Surface Quality:**	40-20
Power (P-V) @ 632.8nm:	1.5λ	**Irregularity (P-V) @ 632.8nm:**	λ/4
Radius R_1=-R_2 (mm):	32.69	**f/#:**	4.00
Focal Length Specification Wavelength (nm):	587.6	**Focal Length Tolerance (%):**	±1

Numerical Aperture NA:	0.13	**Wavelength Range (nm):**	200 - 2200

Regulatory Compliance

RoHS 2015:	**Compliant**
Certificate of Conformance:	**View**

Please select your shipping country to view the most accurate inventory information, and to determine the correct Edmund Optics sales office for your order.

Select Your Country/Region:

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.**

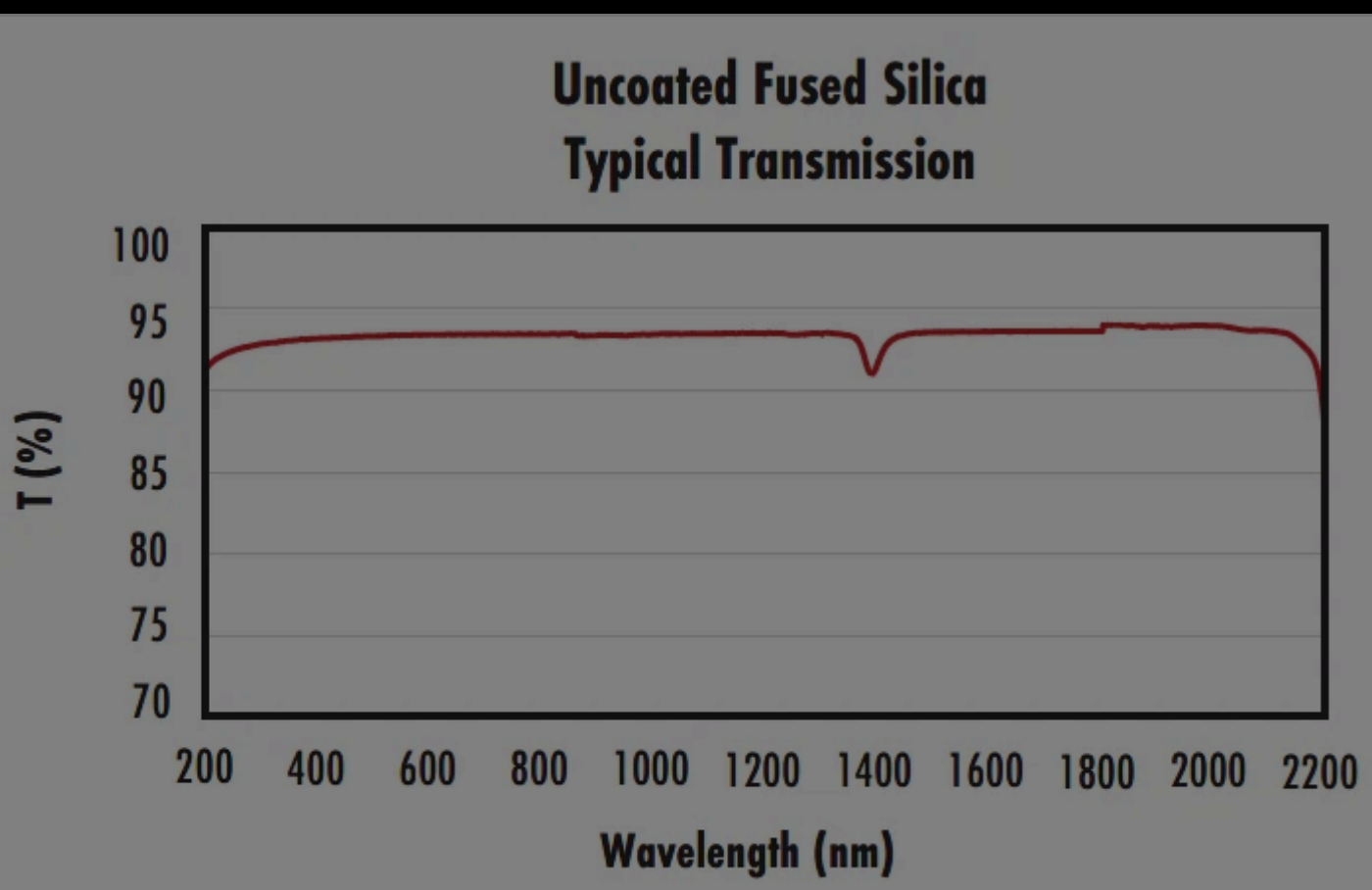
Product Details

- Ideal for Imaging Applications
- Minimize Aberrations Including Spherical and Coma
- Precision Fused Silica Substrate

TECHSPEC® UV Fused Silica Double-Convex (DCX) Lenses, also referred to as bi-convex lenses, have two positive, symmetrical faces with equal radii on both sides. These lenses are generally recommended for finite imaging applications with a conjugate ratio (ratio between object distance and image distance) between 0.2 and 5. At a conjugate ratio of 1, aberrations such as spherical aberration, chromatic aberration, coma, and distortion are minimized or canceled due to the symmetric lens design. TECHSPEC® UV Fused Silica Double-Convex (DCX) Lenses have a precision fused silica substrate. These lenses are available uncoated or with UV-AR, UV-VIS, VIS-EXT, VIS-NIR, VIS 0°, NIR I, or NIR II coatings.

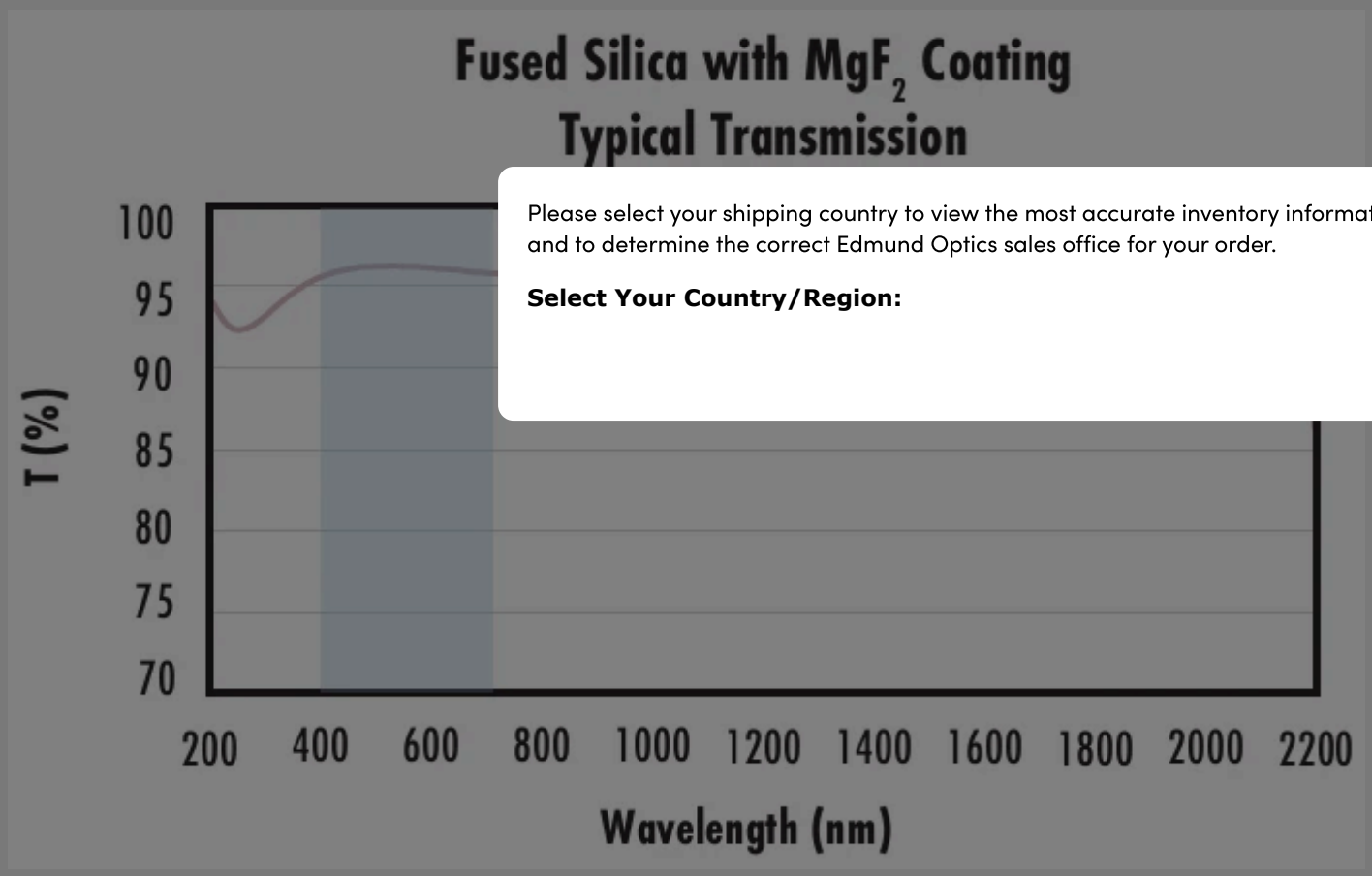
Technical Information

UV FS Transmission Curve



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

Click Here to Download Data



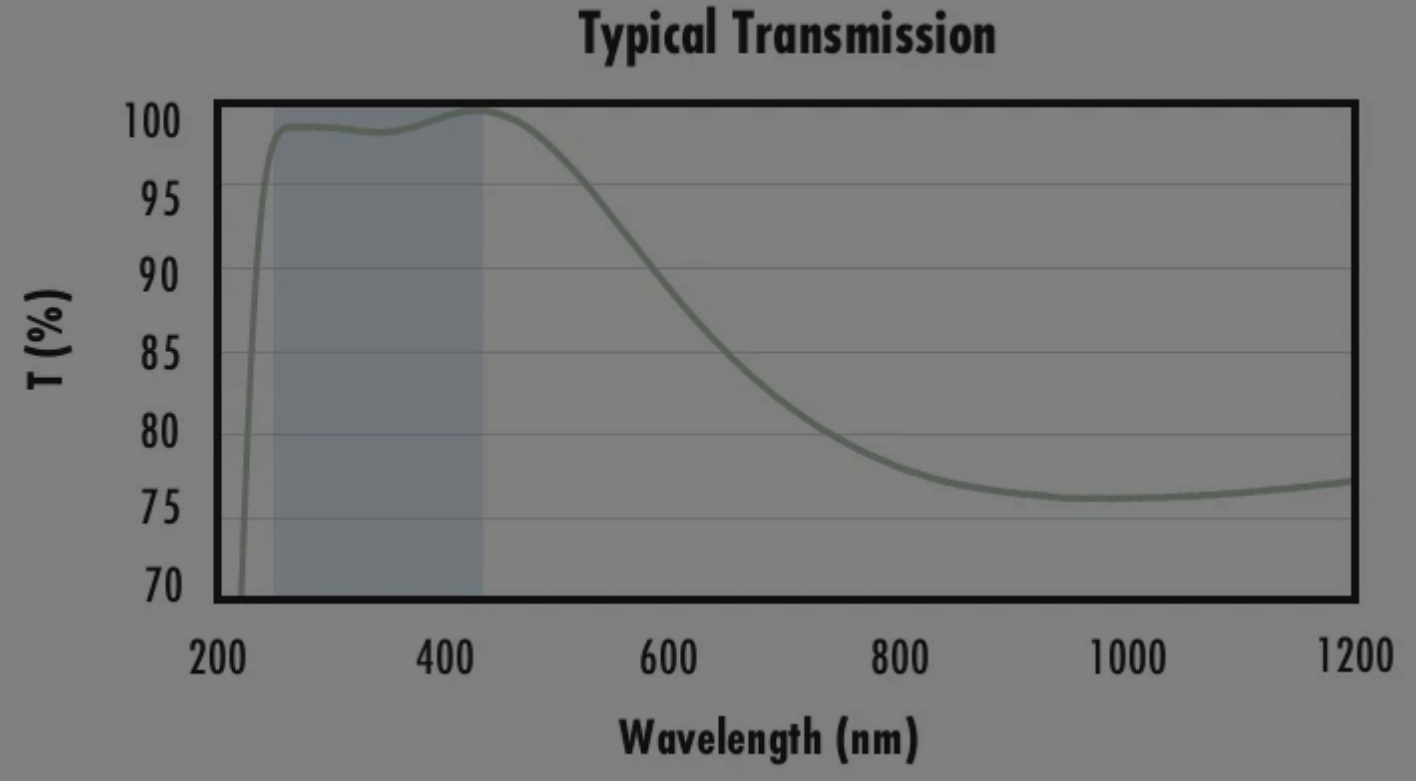
ical transmission of a 3mm thick fused silica wind with MgF2 (400-700nm) coating at 0° AOI.

he blue shaded region indicates the coating desig wavelengh range, with the following specification:

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

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

Click Here to Download Data



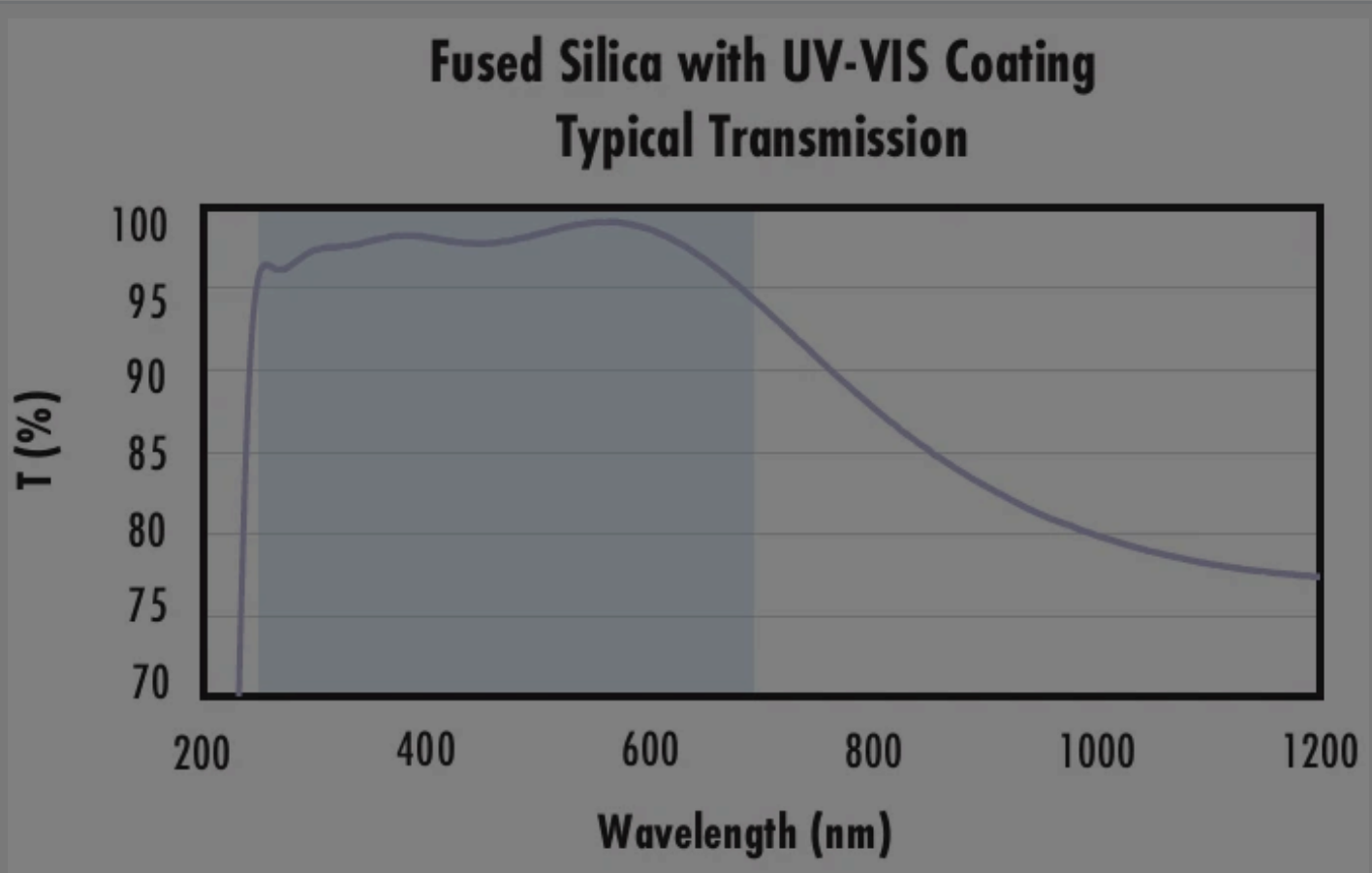
Typical transmission of a 3mm thick fused silica wind with UV-AR (250-425nm) coating at 0° AOI.

The blue shaded region indicates the coating desig 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 fo reference only.

Click Here to Download Data



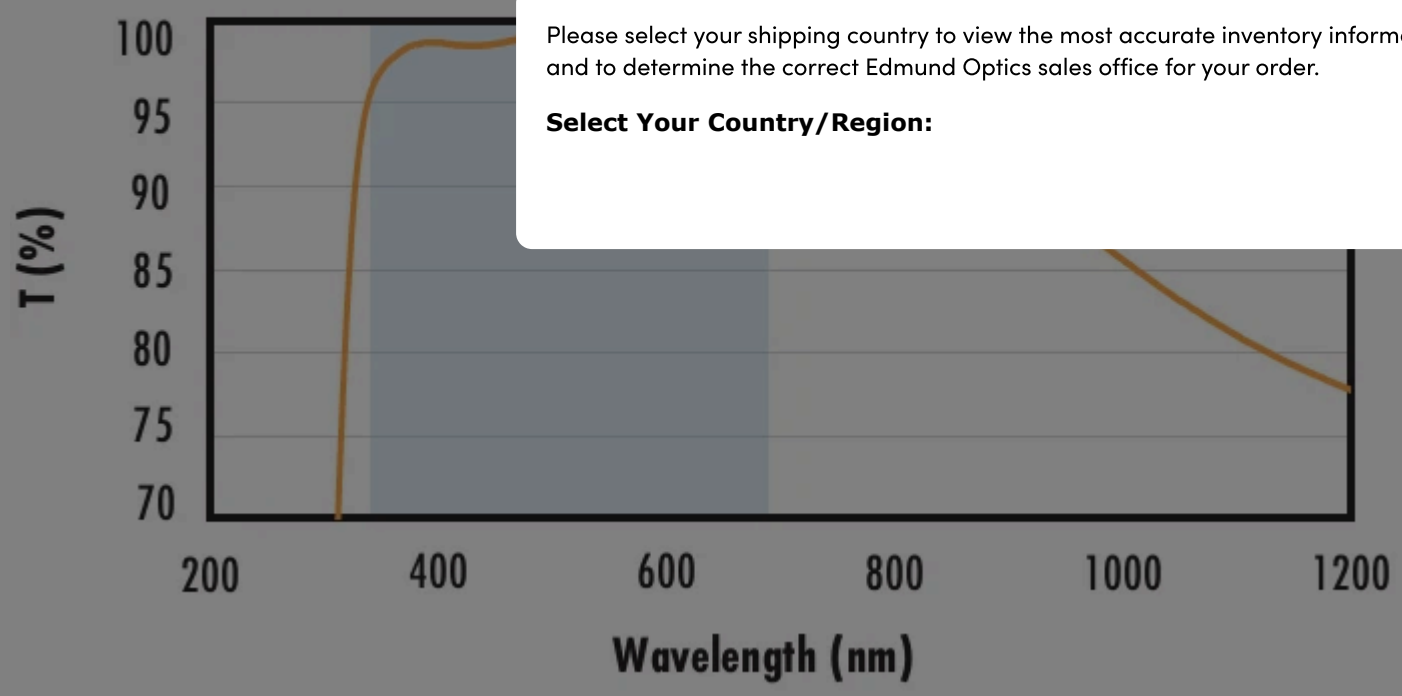
Typical transmission of a 3mm thick fused silica wind with UV-VIS (250-700nm) coating at 0° AOI.

The blue shaded region indicates the coating desig 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 fo reference only.

Click Here to Download Data



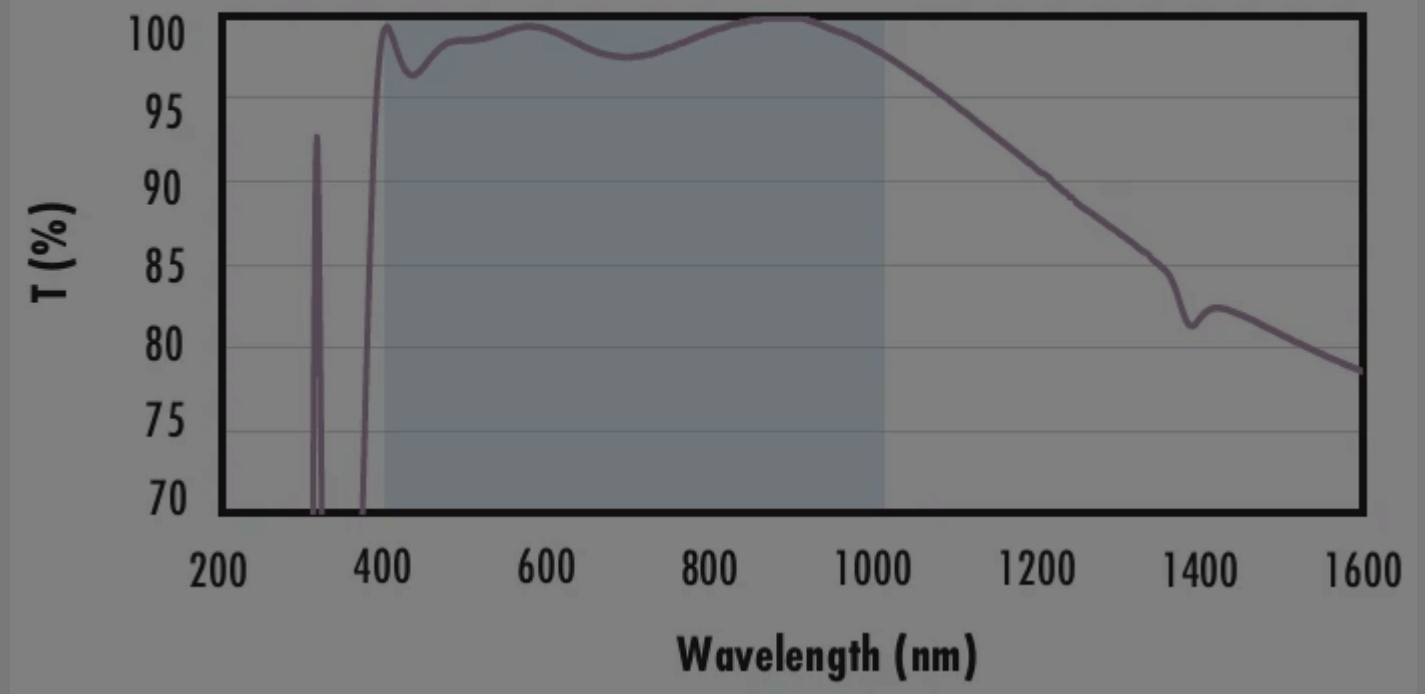
ical transmission of a 3mm thick fused silica wind
with VIS-EXT (350-700nm) coating at 0° AOI.

he blue shaded region indicates the coating desig
wavelengh range, with the following specification:

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

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

Click Here to Download Data



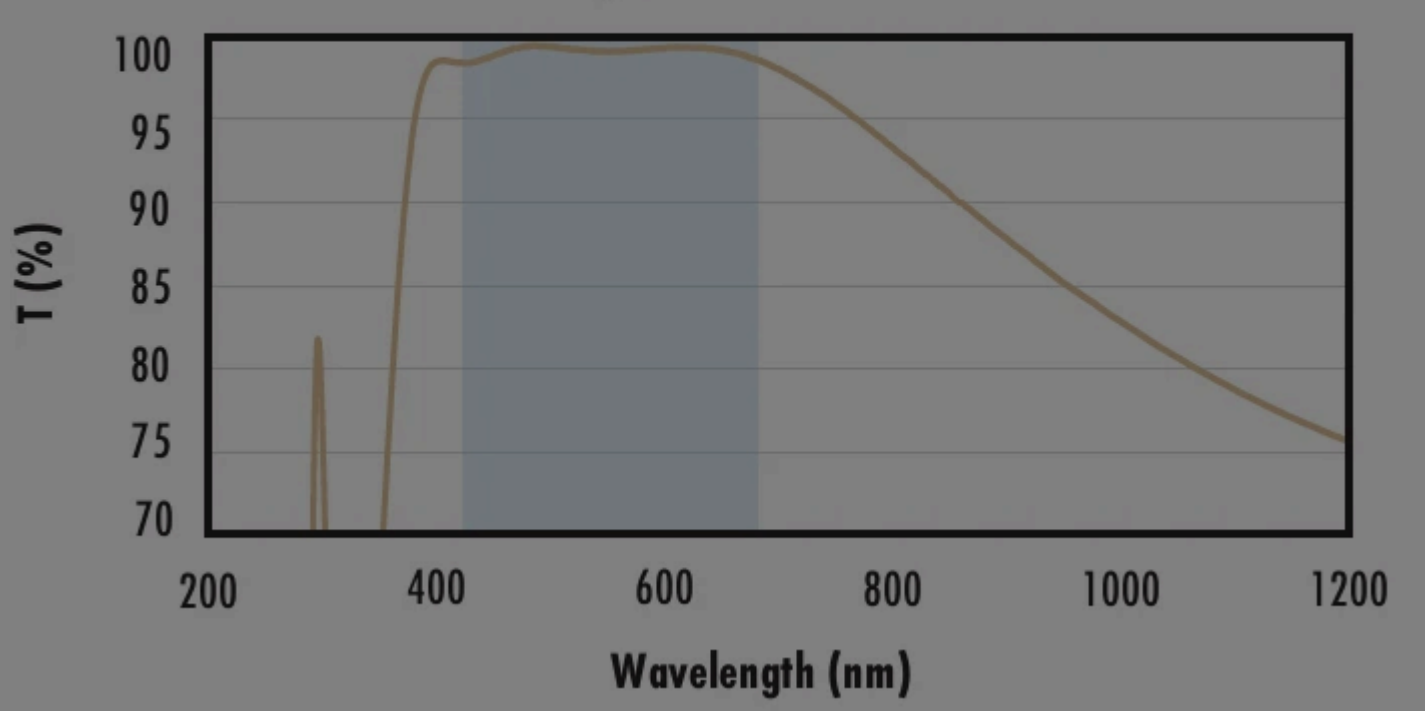
Typical transmission of a 3mm thick fused silica wind
with VIS-NIR (400-1000nm) coating at 0° AOI.

The blue shaded region indicates the coating desig
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 fo
reference only.

Click Here to Download Data



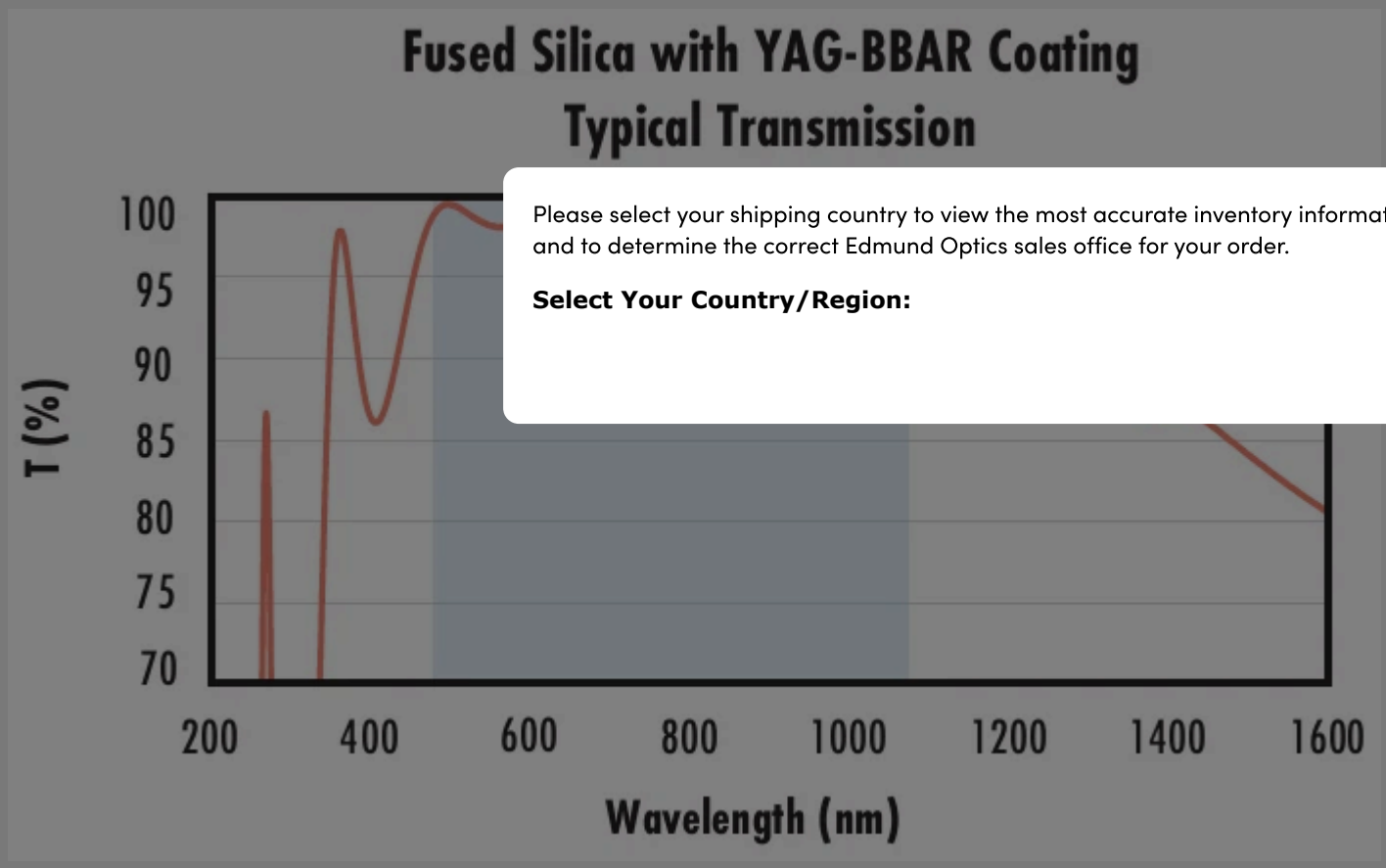
Typical transmission of a 3mm thick fused silica wind
with VIS 0° (425-675nm) coating at 0° AOI.

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

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

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

Click Here to Download Data



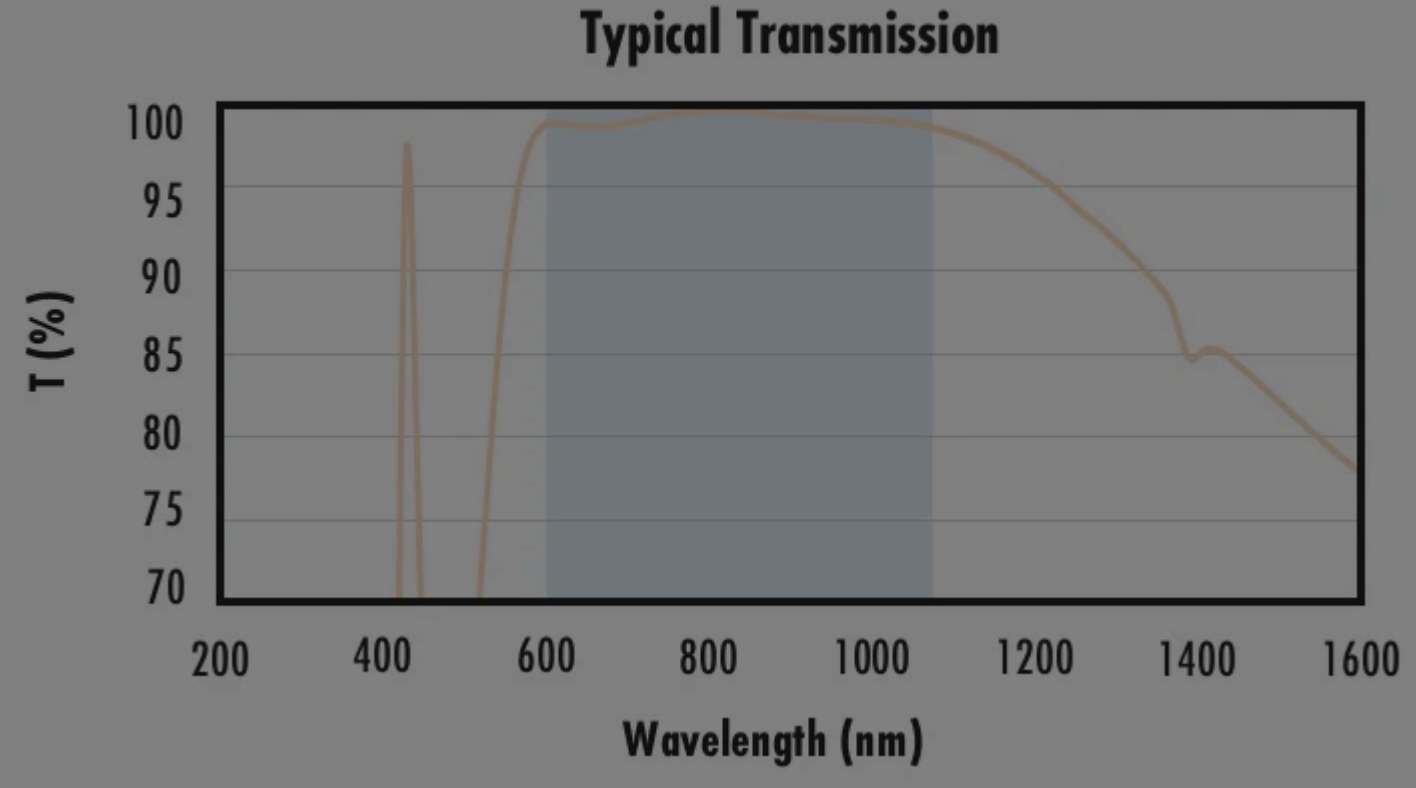
ical transmission of a 3mm thick fused silica wind
with YAG-BBAR (500-1100nm) coating at 0° AOI.

he blue shaded region indicates the coating desig
wavelengh range, with the following specification:

R_{abs} ≤ 0.25% @ 532nm
R_{abs} ≤ 0.25% @ 1064nm
R_{avg} ≤ 1.0% @ 500 - 1100nm

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

Click Here to Download Data



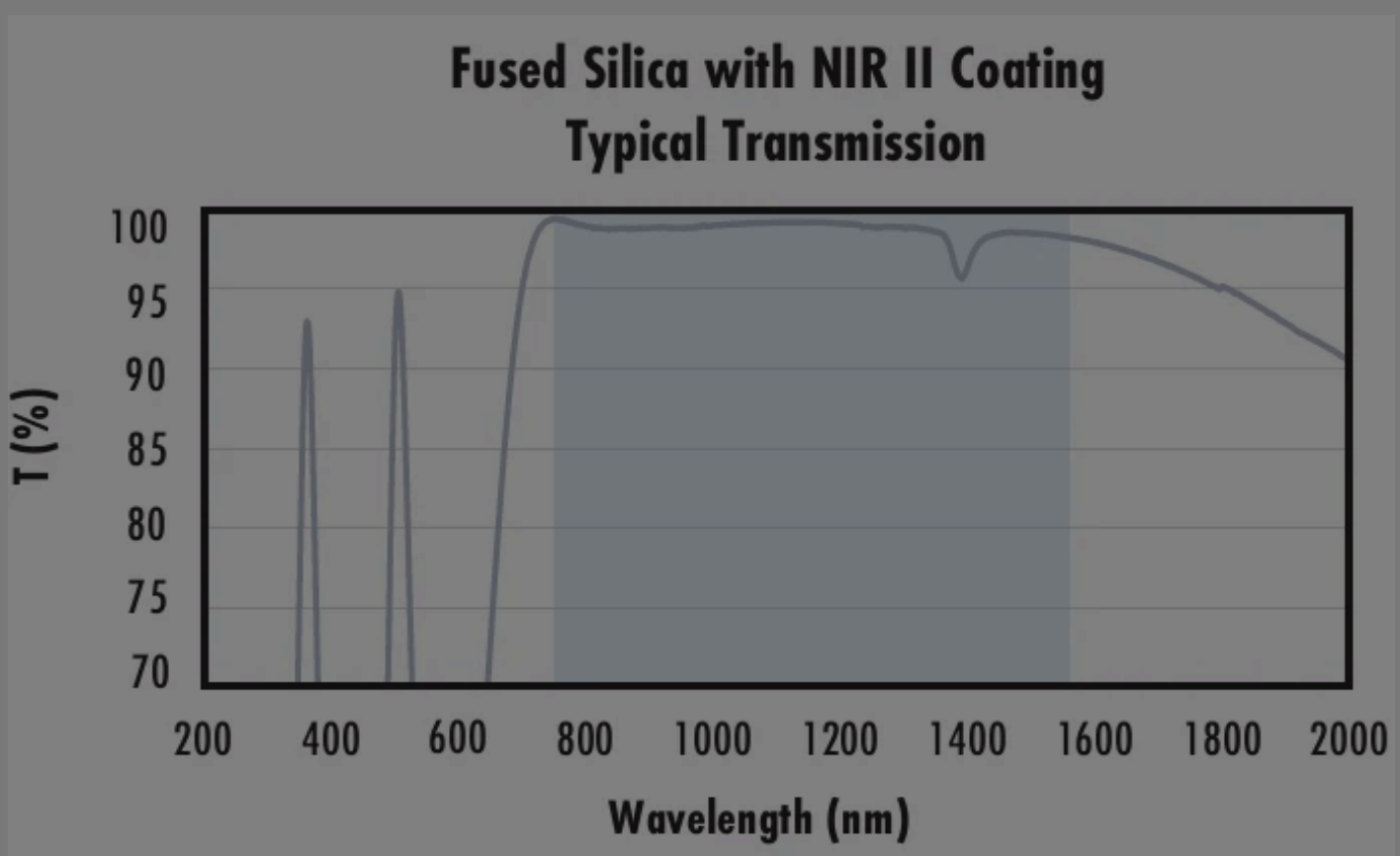
Typical transmission of a 3mm thick fused silica wind
with NIR I (600 - 1050nm) coating at 0° AOI.

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

R_{avg} ≤ 0.5% @ 600 - 1050nm

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

Click Here to Download Data



Typical transmission of a 3mm thick fused silica wind
with NIR II (750 - 1550nm) coating at 0° AOI.

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

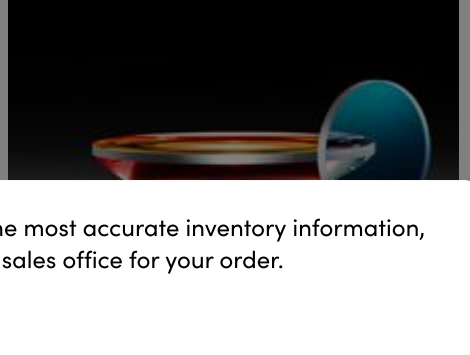
R_{abs} ≤ 1.5% @ 750 - 800nm
R_{abs} ≤ 1.0% @ 800 - 1550nm
R_{avg} ≤ 0.7% @ 750 - 1550nm

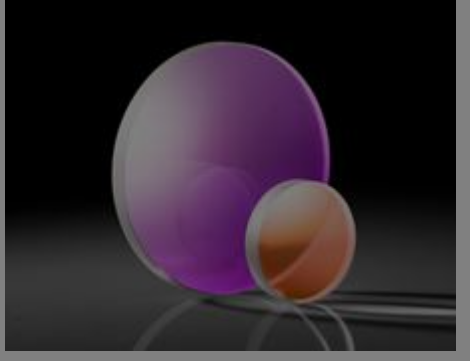
Data outside this range is not guaranteed and is fo
reference only.

Click Here to Download Data

Related Products

UV Fused Silica Aspheric Lenses



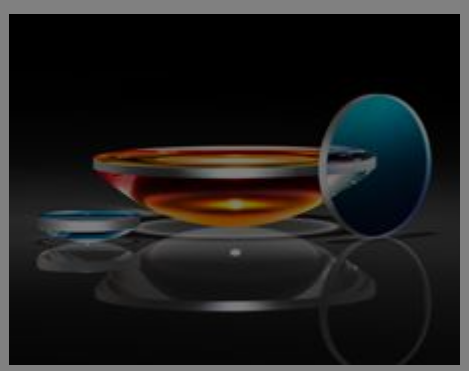


Laser Grade Plano-Convex (PCX) Lenses

Please select your shipping country to view the most accurate inventory information, and to determine the correct Edmund Optics sales office for your order.

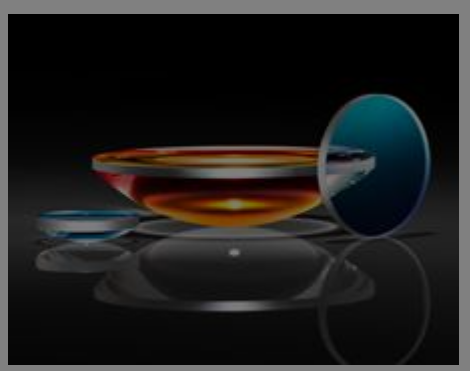
Select Your Country/Region:

Frequently Purchased Together

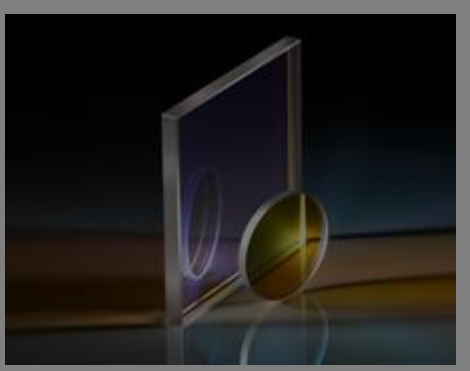


#48-667 - 9mm Dia. x 36mm FL Uncoated, UV Plano-Convex Lens
€126,00
Qty

#08-084 - 18mm Dia. x 40mm FL, Uncoated, UV Double-Convex Lens
€138,00
Qty



#45-695 - 9mm Dia. x 27mm FL Uncoated, UV Plano-Convex Lens
€126,00
Qty



#48-191 - 50R/50T 25 x 25mm, UV Plate Beamsplitter
€152,00
Qty

Compatible Mounts

	Title	Type	Compare	Stock Number	Price ☐	Buy
MORE+ 	9.0mm Optic Dia., Optic Mount	Fixed		#64-553	€32,75 Request Quote	8 In Stock 1

Check out our full selection of mounts **here**.

Resources

Media Type

- ☐ Application Note
- ☐ Technical Tool
- ☐ Trending in Optics
- ☐ FAQ
- ☐ Glossary
- ☐ Video

APPLICATION NOTE
Anti-Reflection (AR) Coatings

APPLICATION NOTE
An Introduction to Optical Coatings

APPLICATION NOTE
Understanding Optical Specifications

APPLICATION NOTE
Lens Geometry Performance Comparison

APPLICATION NOTE
UV vs. IR Grade Fused Silica

TECHNICAL TOOL
SAG Calculator

Please select your shipping country to view the most accurate inventory information, and to determine the correct Edmund Optics sales office for your order.

Select Your Country/Region: