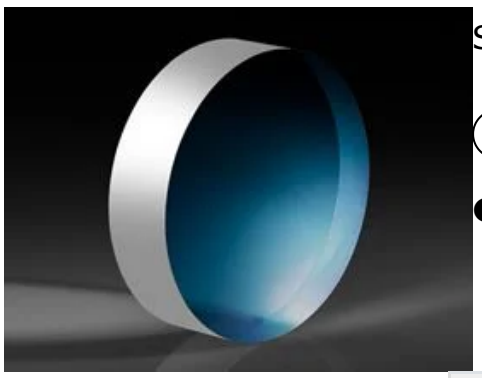
# TECHSPEC® 15mm Dia. 1mm Thick VIS 0°, 1λ Fused Silica Window



Stock #23-311 4 In Stock

- 1 +

MRP ₹10,594

Price inclusive of all taxes

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| Volume Pricing | |
|---|---|
| Qty 1-5 | ₹10,594 each |
| Qty 6-25 | ₹8,475 each |
| Qty 26-49 | ₹7,920 each |
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Product Downloads

STEP:step | Curve:pdf | PDF Drawing:pdf | IGES:igs | Curve (xslx):xlsx | eDrawing:eprt | EO Spec Sheet | Download All

## General

| | | | |
|---|---|---|---|
| **Type:** | Protective Window | **Type of Window:** | Glass |

## Physical & Mechanical Properties

| | | | |
|---|---|---|---|
| **Clear Aperture CA (mm):** | 13.50 | **Diameter (mm):** | 15.00 +0.00/-0.20 |
| **Thickness (mm):** | 1.00 ±0.38 | **Parallelism (arcmin):** | <5 |
| **Bevel:** | Protective as needed | **Clear Aperture (%):** | 90 |
| **Edges:** | Fine Ground | **Poisson's Ratio:** | 0.16 |
| **Young's Modulus (GPa):** | 73 | **Knoop Hardness (kg/mm²):** | 522.00 |

## Optical Properties

| | | | |
|---|---|---|---|
| **Coating:** | VIS 0° (425-675nm) | **Substrate:** ⓘ | Fused Silica (Corning 7980) |
| **Index of Refraction ($n_d$):** | 1.458 | **Surface Quality:** | 60-40 |
| **Transmitted Wavefront, P-V:** | 1λ | **Abbe Number ($v_d$):** | 67.8 |
| **Coating Specification:** | $R_{avg}$ ≤0.4% @ 425 - 675nm | **Wavelength Range (nm):** | 425 - 675 |
| **Damage Threshold, Reference:** ⓘ | 5 J/cm² @ 532nm, 10ns | | |

## Material Properties

| | | | |
|---|---|---|---|
| **Density ($g/cm^3$):** | 2.20 | **Coefficient of Thermal Expansion CTE ($10^{-6}$/°C):** | 0.52 (+5 to +35°C)<br>0.57 (0 to +200°C)<br>0.48 (-100 to +200°C) |
| **Fused Silica Grade:** | 7980 0G | | |

## Regulatory Compliance

| | | | |
|---|---|---|---|
| **RoHS 2015:** | **Compliant** | **Certificate of Conformance:** | **View** |
| **Reach 235:** | **Compliant** | | |
| **Country of Origin:** | Vietnam | **Imported By:** | Edmund Optics India Private Limited<br>267, Greystone Building,<br>Second Floor,<br>6th Cross Rd,<br>Binnamangala,<br>Stage 1,<br>Indiranagar,<br>Bengaluru,<br>Karnataka,<br>India 560038<br>Phone: +91-80-6845 0000 |

## 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

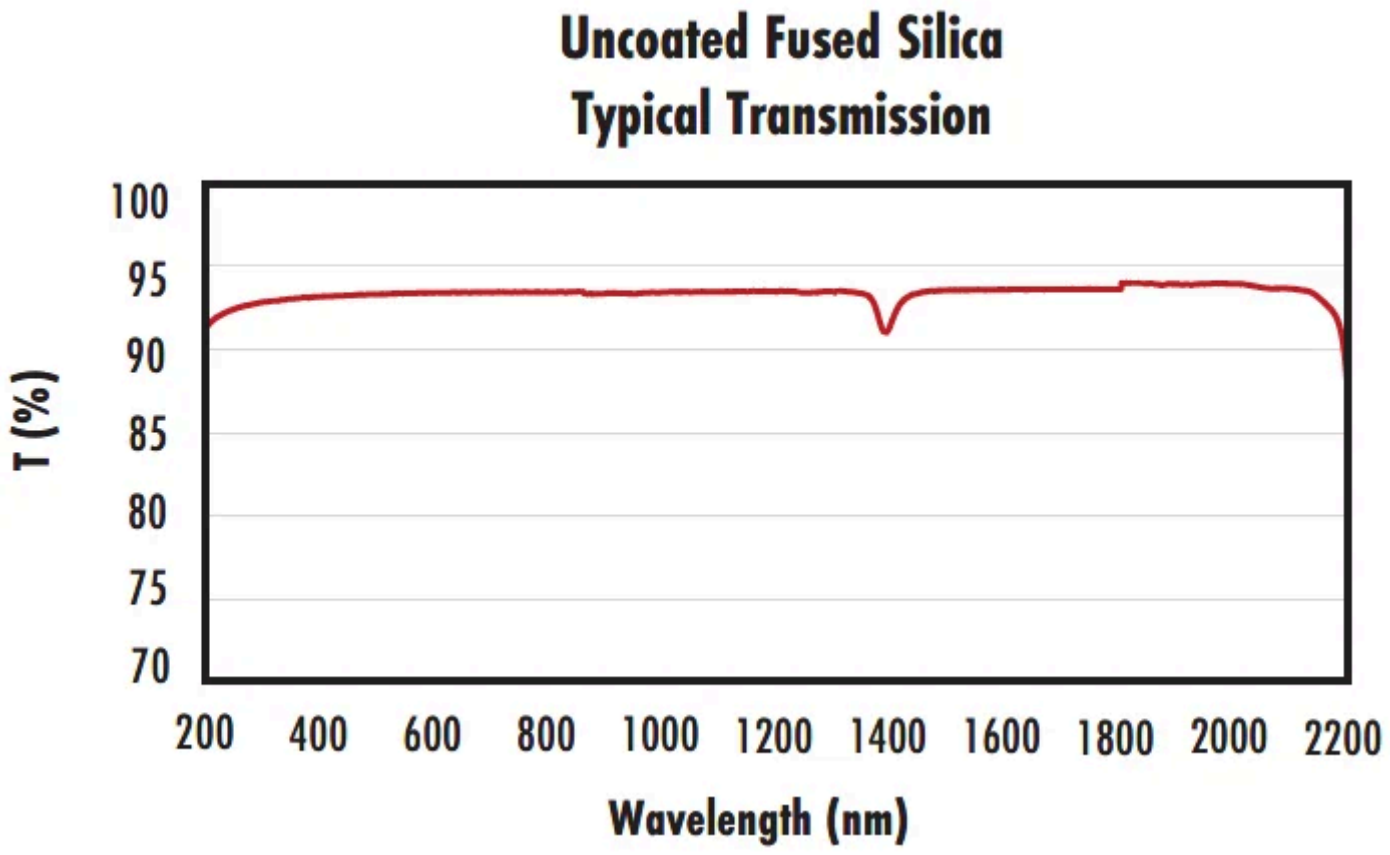
- Available Uncoated or with Broadband Anti-Reflection Coatings
- Ideal for Cost Sensitive Broadband Applications
- Circular and Square Sizes from 5mm to 100mm
- **λ/4** or **λ/10** UV Fused Silica Windows Also Available

TECHSPEC® 1λ UV Fused Silica Windows are precision manufactured using UV-grade synthetic fused silica. In addition to superior transmission, the synthetic fused silica of these optical windows exhibits higher thermal properties, exceptional purity, and excellent environmental durability for demanding applications. The windows are ideal for cost-sensitive broadband applications and are available uncoated or with broadband anti-reflection coatings. TECHSPEC® 1λ UV Fused Silica Windows have circular and square sizes ranging from 5mm to 100mm. **λ/4** or **λ/10** UV Fused Silica Windows are also available.

**Note:** New additions to this product family may be specified with a transmitted wavefront distortion (TWD) specification instead of a surface flatness. For more information on the difference between these two specifications, see our application note on **Understanding Optical Windows**.

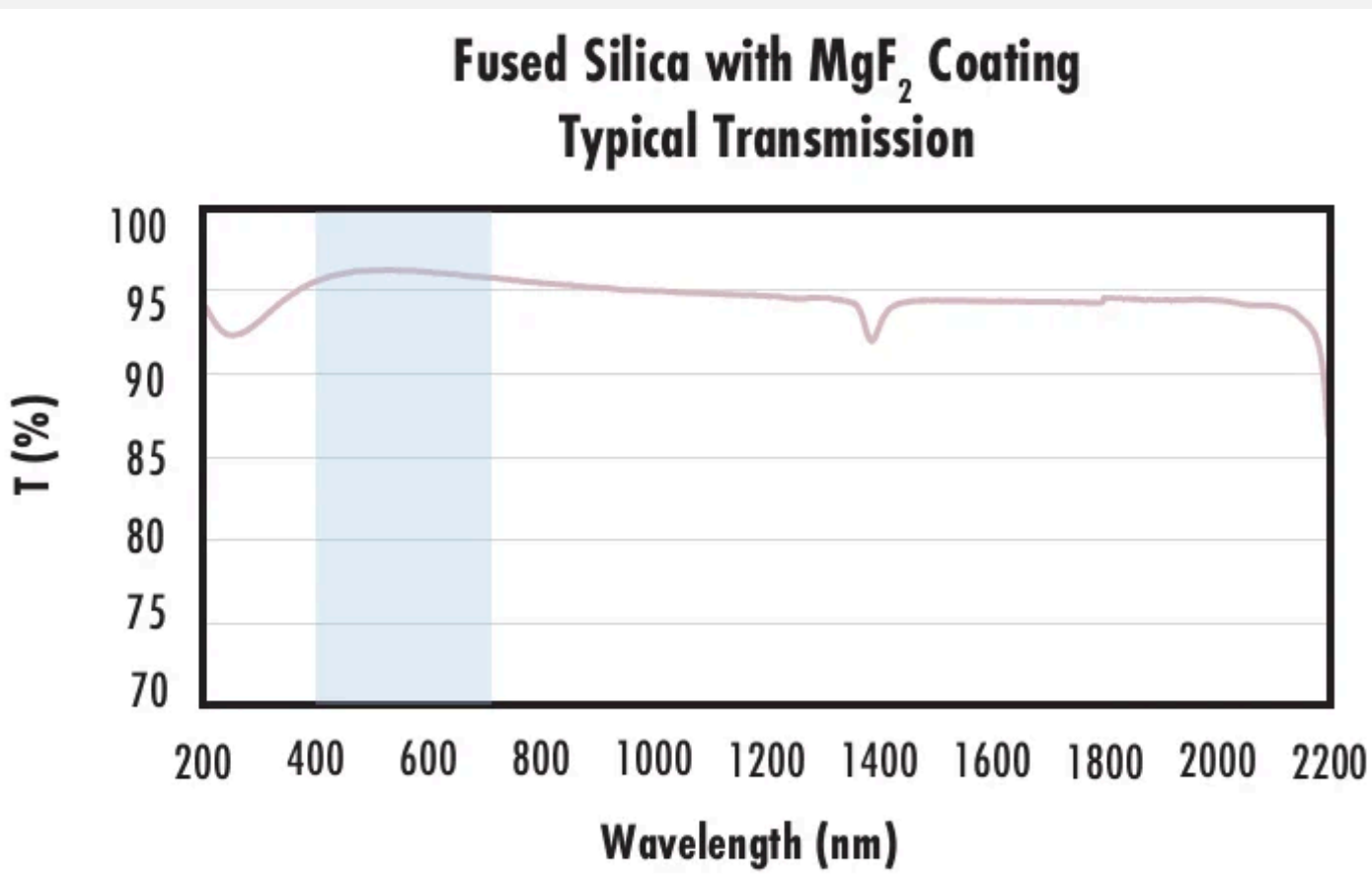
# Technical Information

*UV FS Transmission Curve*




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

**Click Here to Download Data**




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

The 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.

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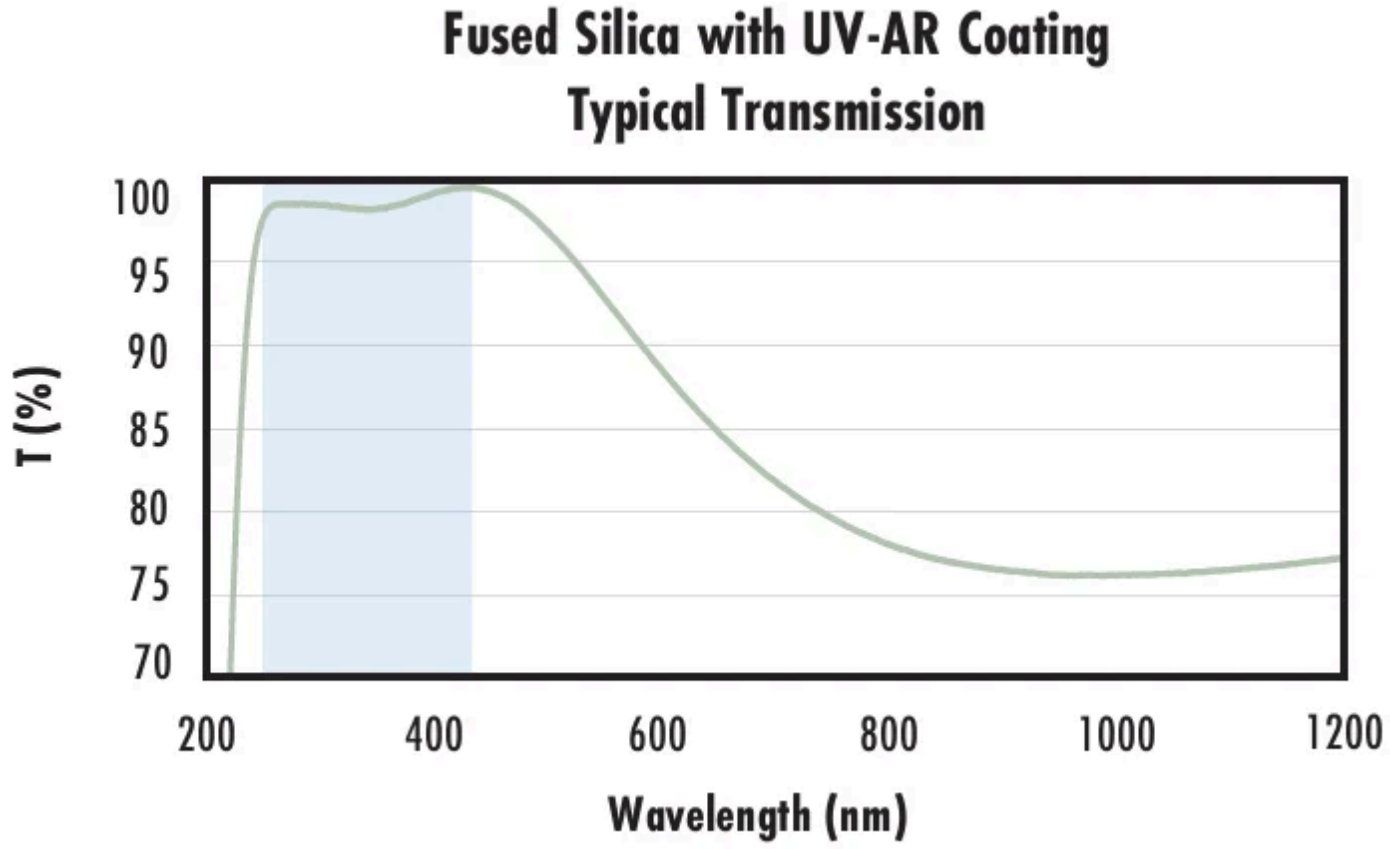


Typical transmission of a 3mm thick fused silica wind with UV-AR (250-425nm) coating at 0° AOI.

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.

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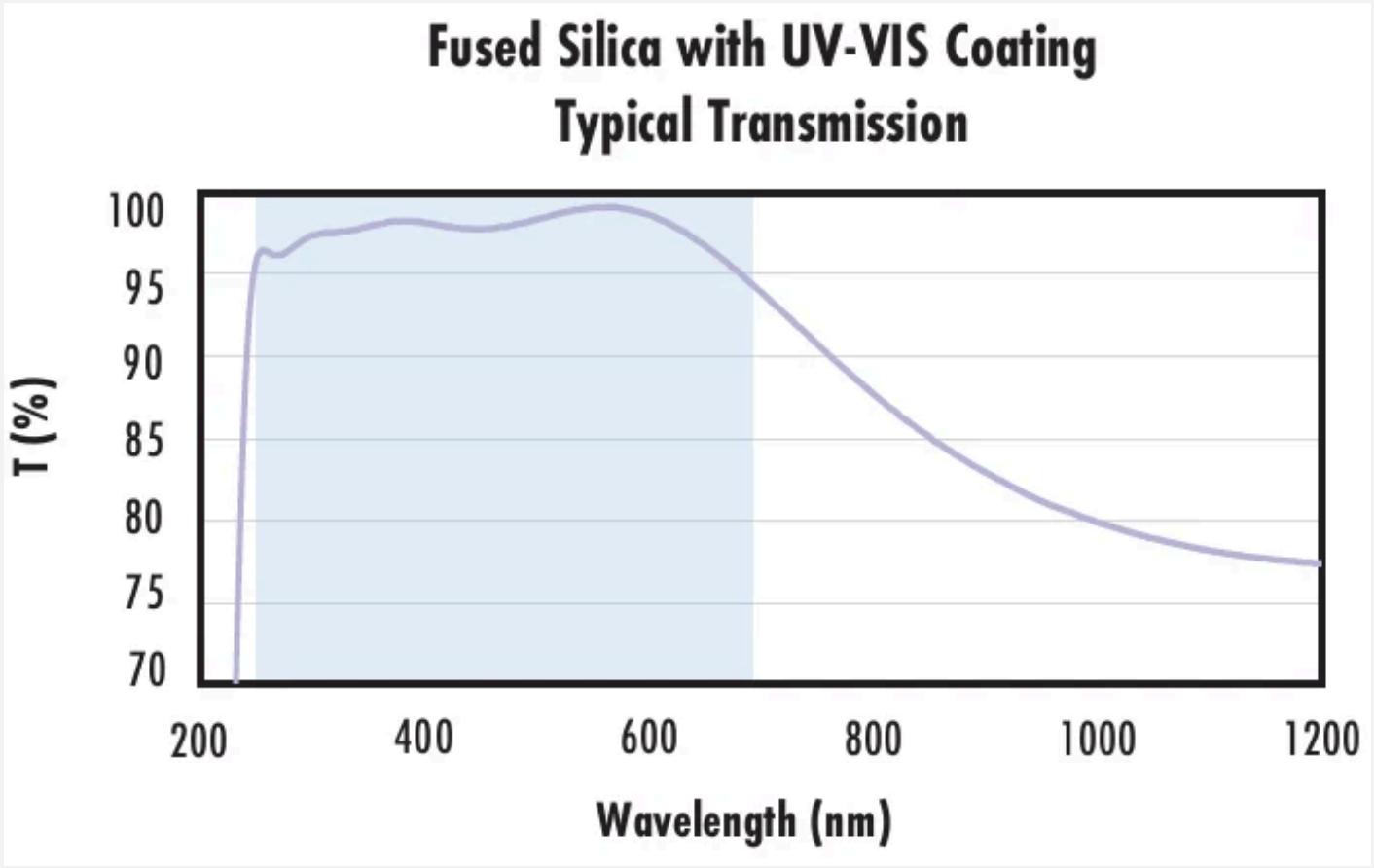


Typical transmission of a 3mm thick fused silica wind with UV-VIS (250-700nm) coating at 0° AOI.

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.

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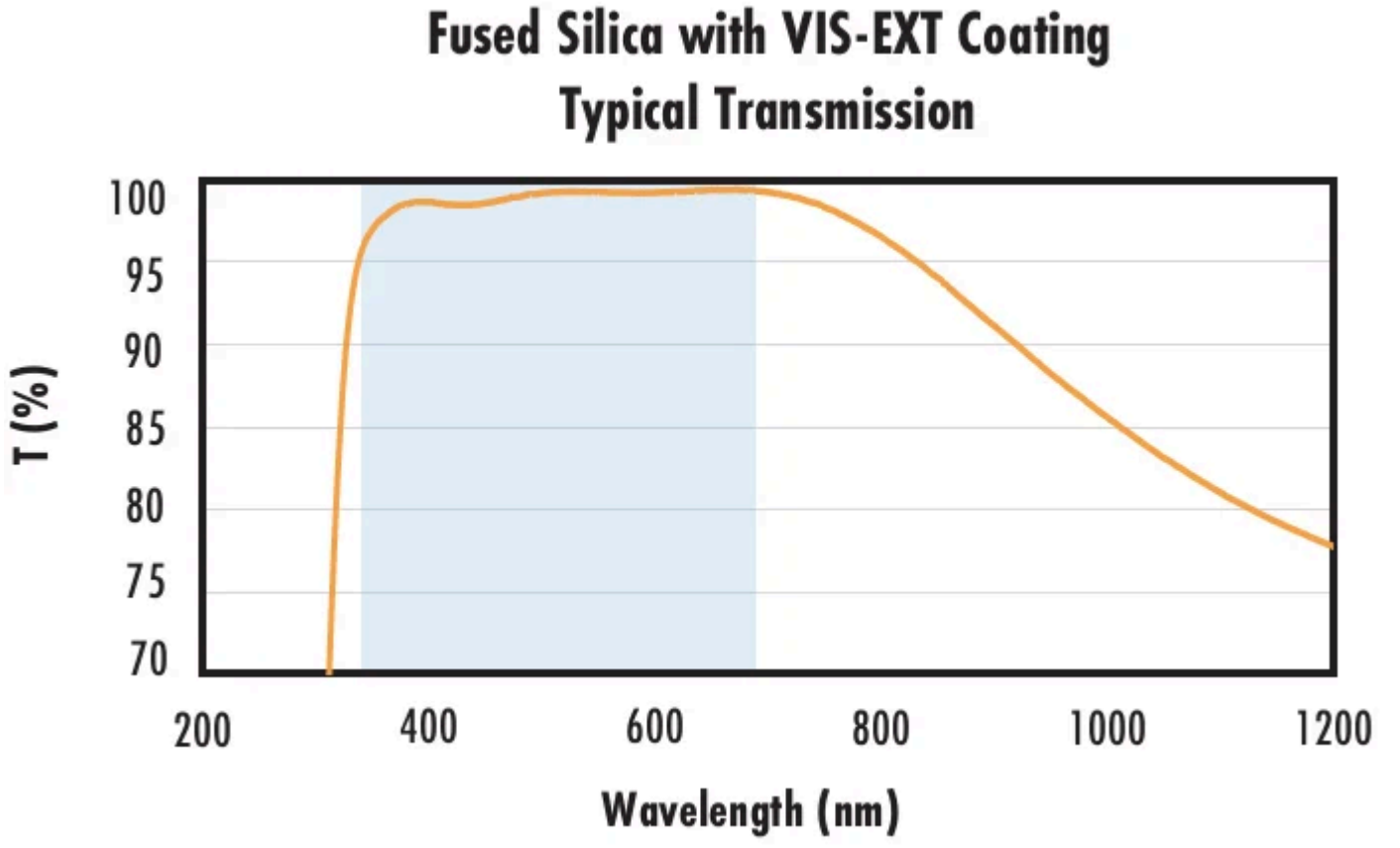


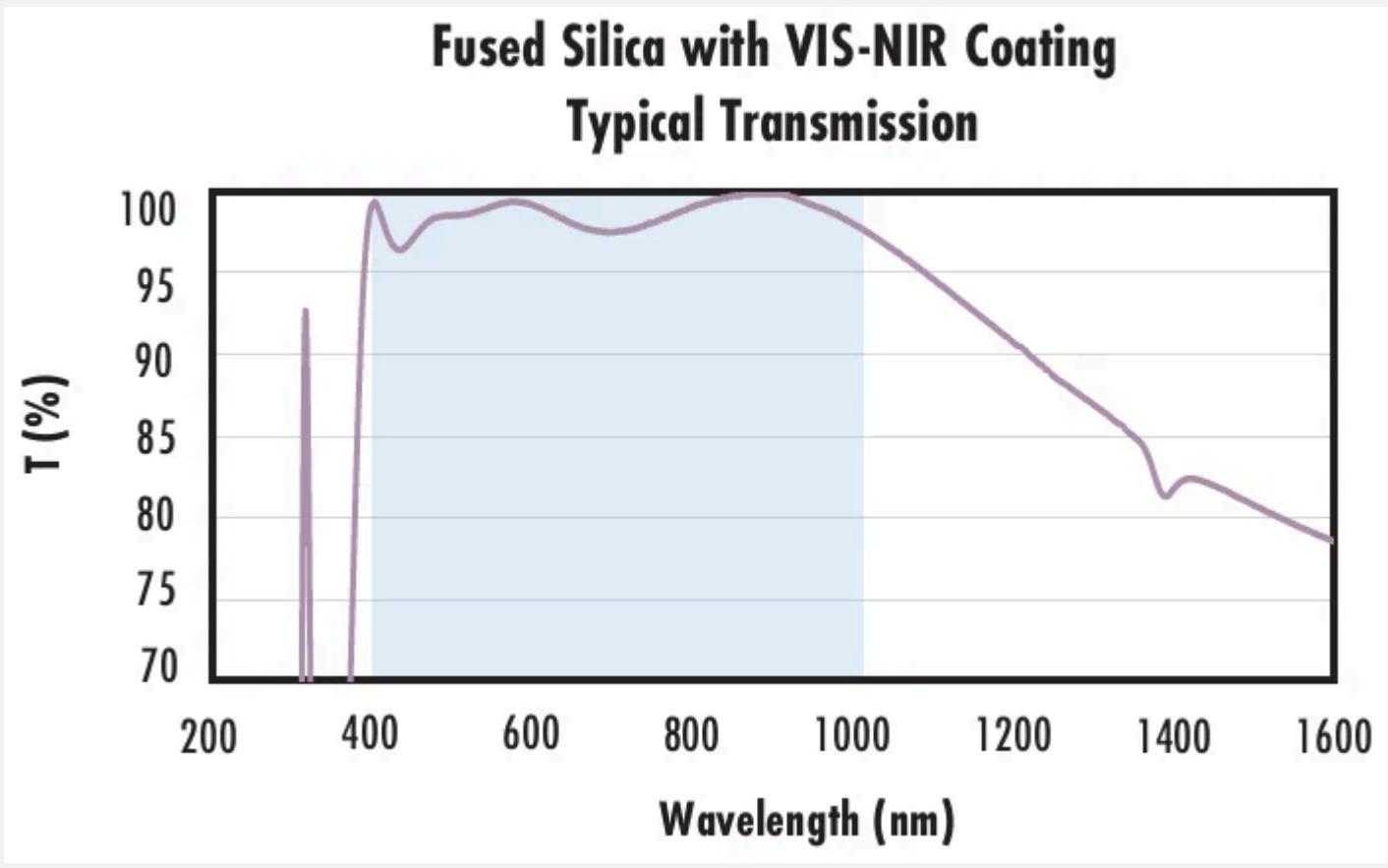

Typical transmission of a 3mm thick fused silica wind with VIS-EXT (350-700nm) coating at 0° AOI.

The 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.

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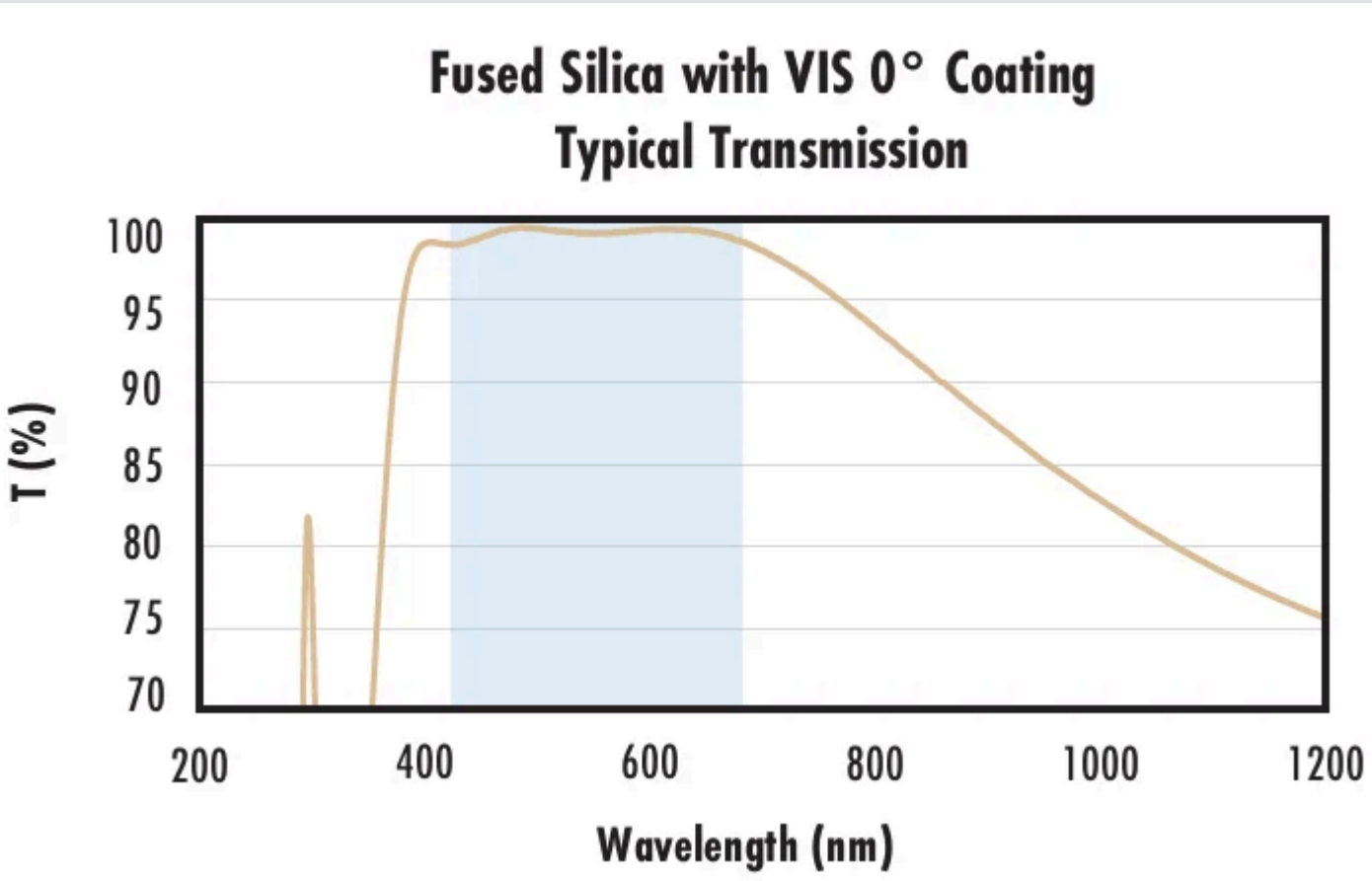


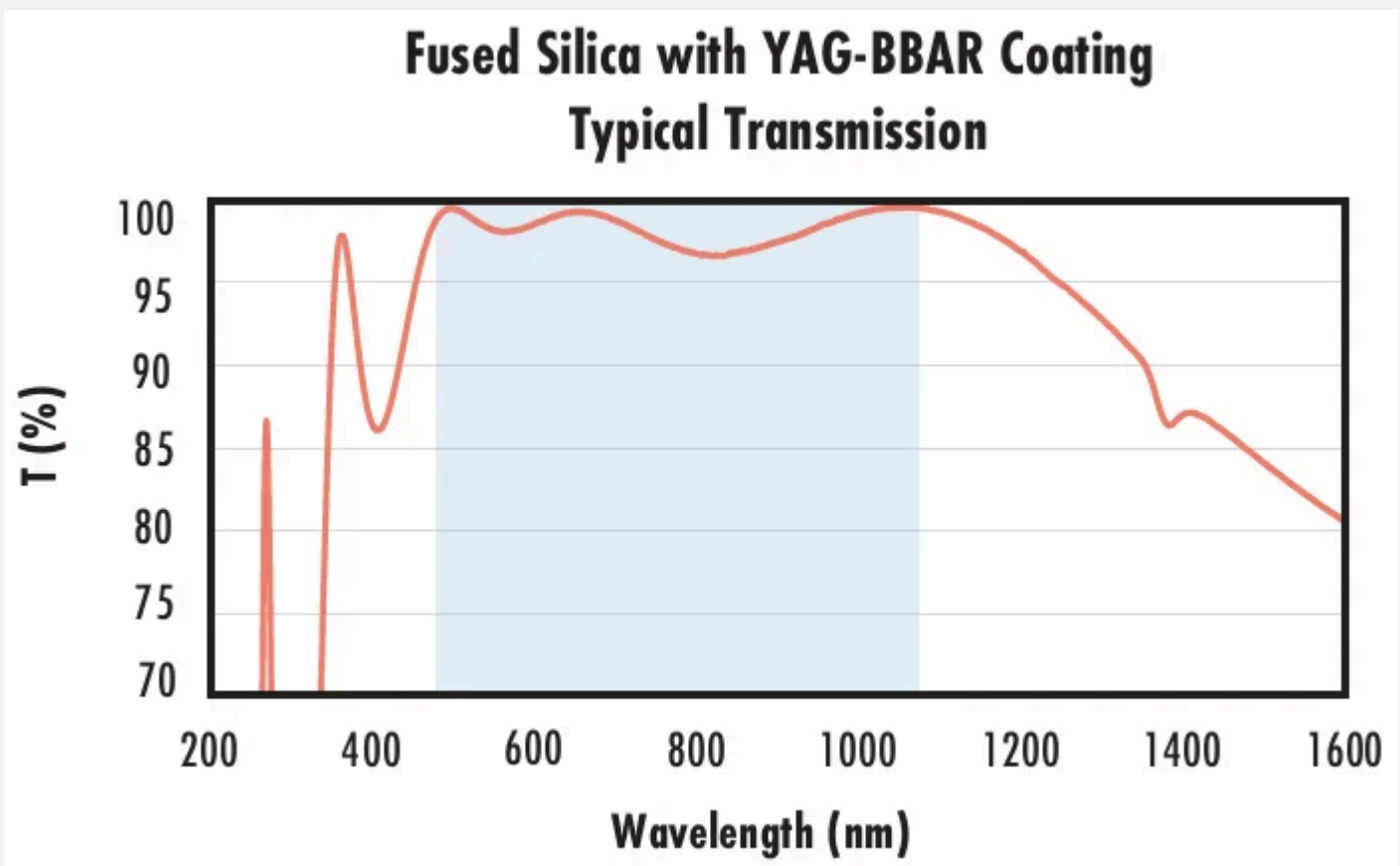

Typical transmission of a 3mm thick fused silica wind with VIS 0° (425-675nm) coating at 0° AOI.

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**



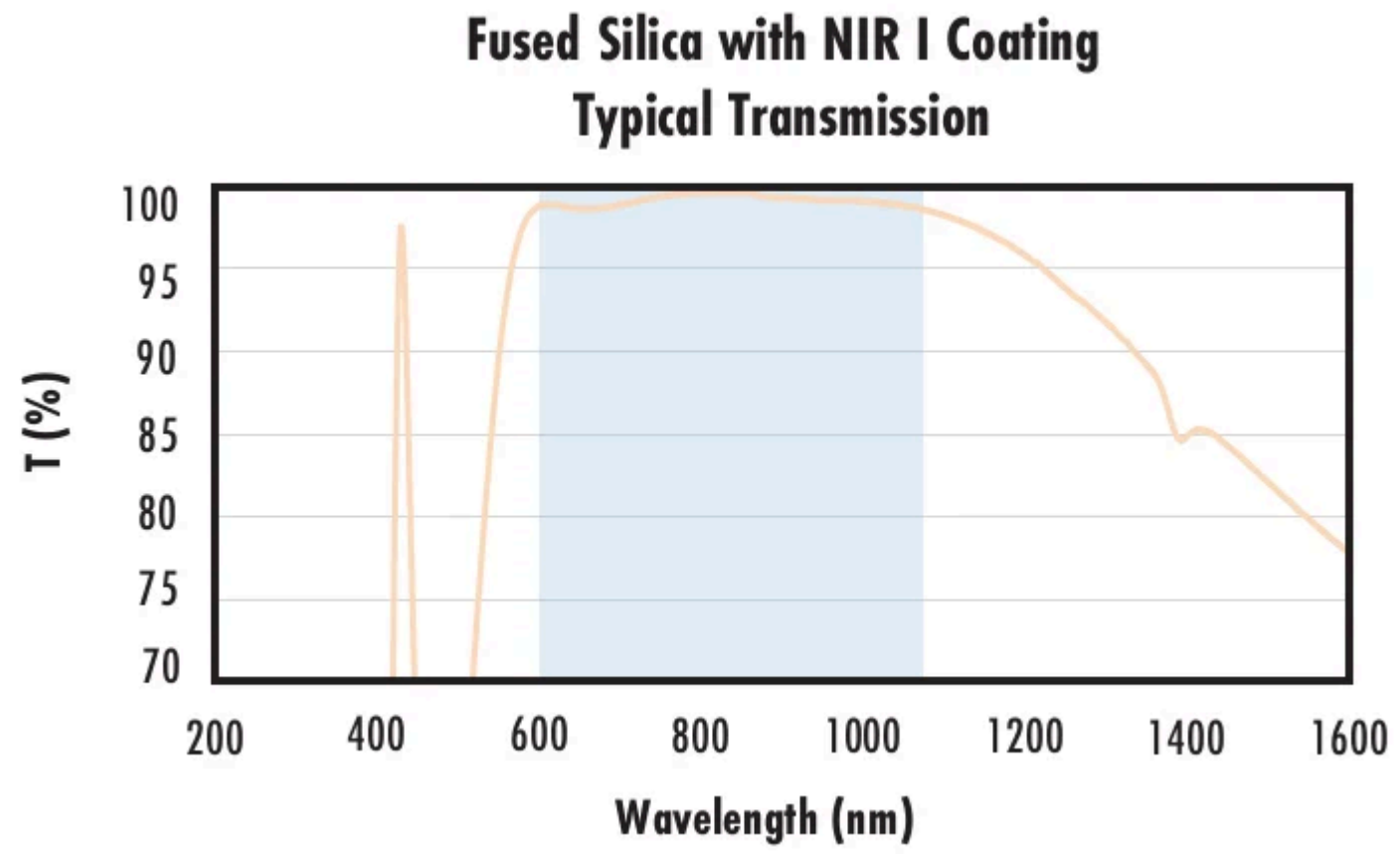

Typical transmission of a 3mm thick fused silica wind with YAG-BBAR (500-1100nm) coating at 0° AOI.

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

**Click Here to Download Data**



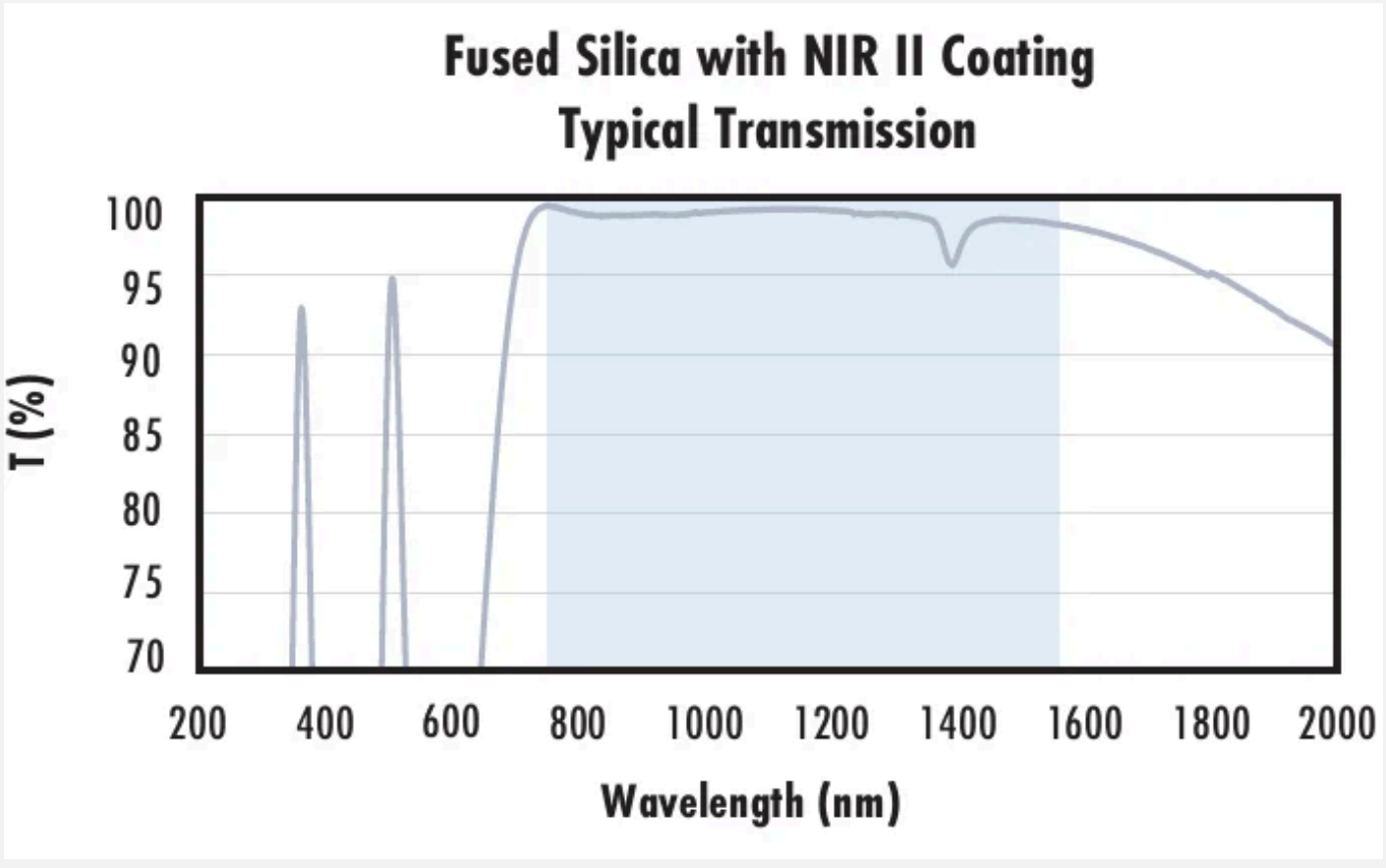

Typical transmission of a 3mm thick fused silica wind with NIR I (600 - 1050nm) coating at 0° AOI.

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

$R_{avg} \leq 0.5\%$ @ 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:

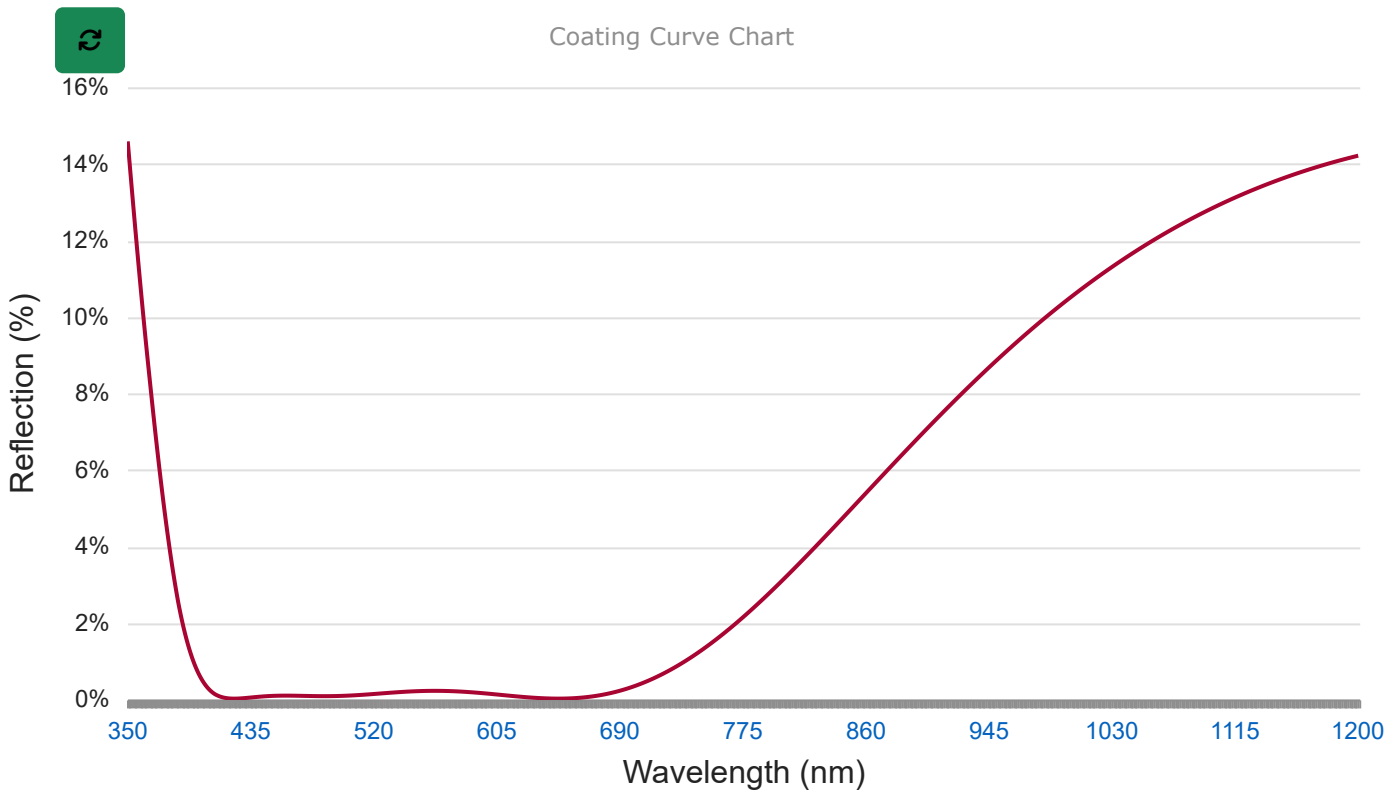
$R_{abs} \leq 1.5\%$ @ 750 - 800nm
$R_{abs} \leq 1.0\%$ @ 800 - 1550nm
$R_{avg} \leq 0.7\%$ @ 750 - 1550nm

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

**Click Here to Download Data**

## Coating Curves

VIS 0° (425-675nm)




SHIFT + SELECT an area on CURVE to zoom

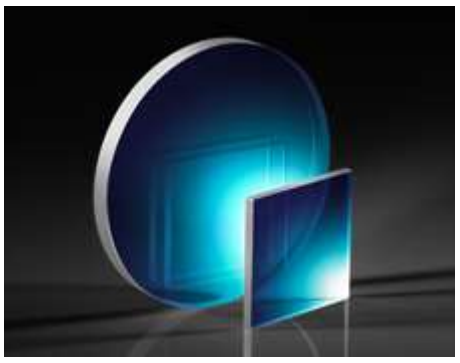
*Please note that coating performance outside each product's specified design range is theoretical and may vary.*

## Related Products

Cage System Optical Lens Mounts

C, S, and T-Mount Circular Optic Mounts

PUROSOL™ Optical Cleaner



λ/10 UV Fused Silica Windows

# Compatible Mounts

| | Title | Type | Compare | Stock Number | Price ☐ | Buy |
|---|---|---|---|---|---|---|
| MORE+  | 15.0mm Optic Dia., Optic Mount | Fixed | | #64-557 | ₹3,305 Request Quote | 10 In Stock 1 |
| MORE+  | 5.0 - 25.0mm Optic Height, Metric Bar-Type Optic Holder | Fixed | | #55-529 | ₹10,291 Request Quote | 20+ In Stock 1 |
| MORE+  | 7.0 - 40.0 Optic Height, English Bar-Type Optic Holder | Fixed | | #03-676 | ₹10,694 Request Quote | 2 In Stock 1 |
| MORE+  | 10.0 - 60.0mm Optic Height, Metric Bar-Type Optic Holder | Fixed | | #55-530 | ₹10,896 Request Quote | CONTACT US 1 |
| MORE+  | 7.0 - 67.0 Optic Height, English Bar-Type Optic Holder | Fixed | | #03-669 | ₹11,703 Request Quote | 6 In Stock 1 |
| MORE+  | 8.0 - 118.0 Optic Height, English Bar-Type Optic Holder | Fixed | | #03-666 | ₹12,107 Request Quote | 10 In Stock 1 |
| MORE+  | 4.0 - 36.0mm Optic Dia., Self-Centering Jaw Clamp | Fixed | | #16-077 | ₹15,840 Request Quote | 6 In Stock 1 |
| MORE+  | 5.0 - 100.0mm Optic Dia., Self-Centering Jaw Clamp | Fixed | | #16-078 | ₹41,365 Request Quote | CONTACT US 1 |

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# Resources

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- ☐ Application Note
- ☐ Technical Tool
- ☐ Video
- ☐ Glossary
- ☐ FAQ

APPLICATION NOTE
Anti-Reflection (AR) Coatings

APPLICATION NOTE
An Introduction to Optical Coatings

TECHNICAL TOOL
Beam Displacement Calculator

APPLICATION NOTE
UV vs. IR Grade Fused Silica

APPLICATION NOTE
Understanding Optical Windows

VIDEO
Optical Windows Review

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