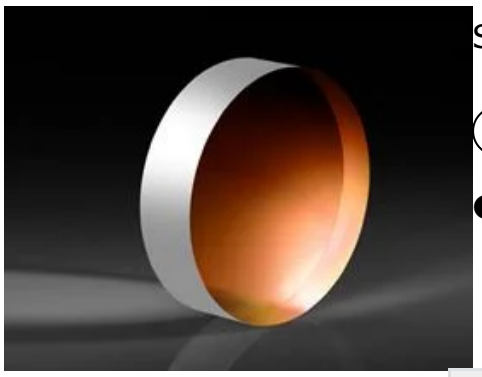
TECHSPEC®

50mm Dia., 1mm Thick, VIS 0° Coated λ/10 Fused Silica Window



Stock **#36-940** **9 In Stock**

- 1 +

MRP ₹31,983

Price inclusive of all taxes

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Volume Pricing	
Qty 1-5	₹31,983 each
Qty 6-25	₹25,424 each
Qty 26-49	₹23,912 each
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Product Downloads

STEP:step | PDF Drawing:pdf | IGES:igs | eDrawing:eprt | EO Spec Sheet | Download All

General

Type:	Protective Window	**Type of Window:**	Glass

Physical & Mechanical Properties

Clear Aperture CA (mm):	40.00	**Diameter (mm):**	50.00 +0.00/-0.20
Thickness (mm):	1.00 ±0.10	**Dimensional Tolerance (mm):**	+0.00/-0.20
Bevel:	Protective as needed	**Clear Aperture (%):**	80
Edges:	Fine Ground	**Parallelism (arcsec):**	<5
Poisson's Ratio:	0.16	**Young's Modulus (GPa):**	73
Knoop Hardness (kg/mm^2):	522.00		

Optical Properties

Coating:	VIS 0° (425-675nm)	**Substrate:** ⓘ	Fused Silica (Corning 7980)
Index of Refraction (n_d):	1.458	**Surface Quality:**	20-10
Transmitted Wavefront, P-V:	λ/10	**Abbe Number (v_d):**	67.8
Coating Specification:	R_{avg} ≤0.4% @ 425 - 675nm	**Wavelength Range (nm):**	425 - 675

Damage Threshold, Reference: ⓘ	5 J/cm^2 @ 532nm, 10ns		

Material Properties

Density (g/cm^3):	2.20	**Coefficient of Thermal Expansion CTE (10^{-6}/°C):**	0.52 (+5 to +35°C) 0.57 (0 to +200°C) 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:	United States	**Imported By:**	Edmund Optics India Private Limited 267, Greystone Building, Second Floor, 6th Cross Rd, Binnamangala, Stage 1, Indiranagar, Bengaluru, Karnataka, India 560038 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

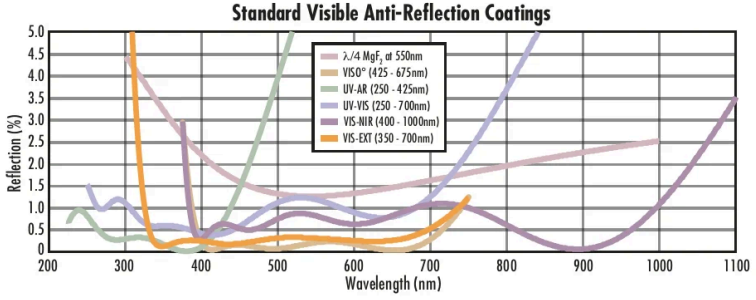
Learn more about our **custom manufacturing capabilities** or submit an inquiry **here.**

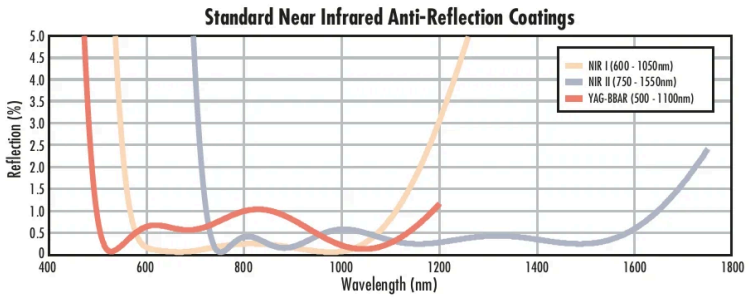
Product Details

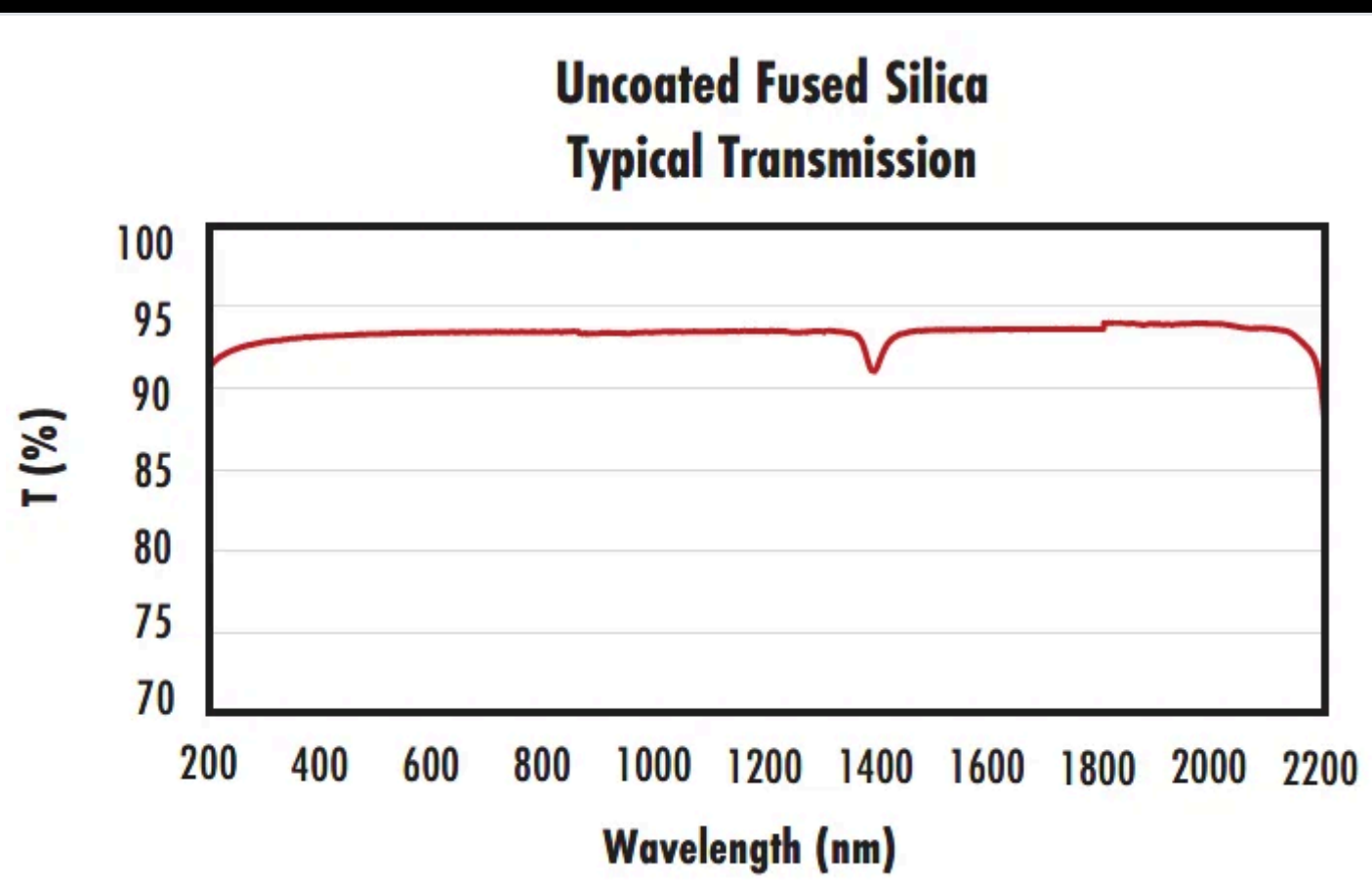
- UV, Visible, and NIR Anti-Reflection Coated Versions Available
- λ/10 Transmitted Wavefront Distortion
- Circular and Square Sizes from 2mm to 150mm
- **1λ** or **λ/4** UV Fused Silica Windows Also Available

TECHSPEC® λ/10 UV Fused Silica Windows feature laser-grade surface quality and parallelism. In addition, these windows will limit the transmitted wavefront distortion to λ/10. The superior transmission characteristics, excellent thermal properties, and high tolerance manufacturing specifications make these windows an excellent choice for more demanding applications. TECHSPEC λ/10 UV Fused Silica Windows are available for purchase in circular and square sizes ranging from 2mm to 150mm.. These windows are offered uncoated or with anti-reflection coatings optimized for the UV or visible spectrum.

Technical Information







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

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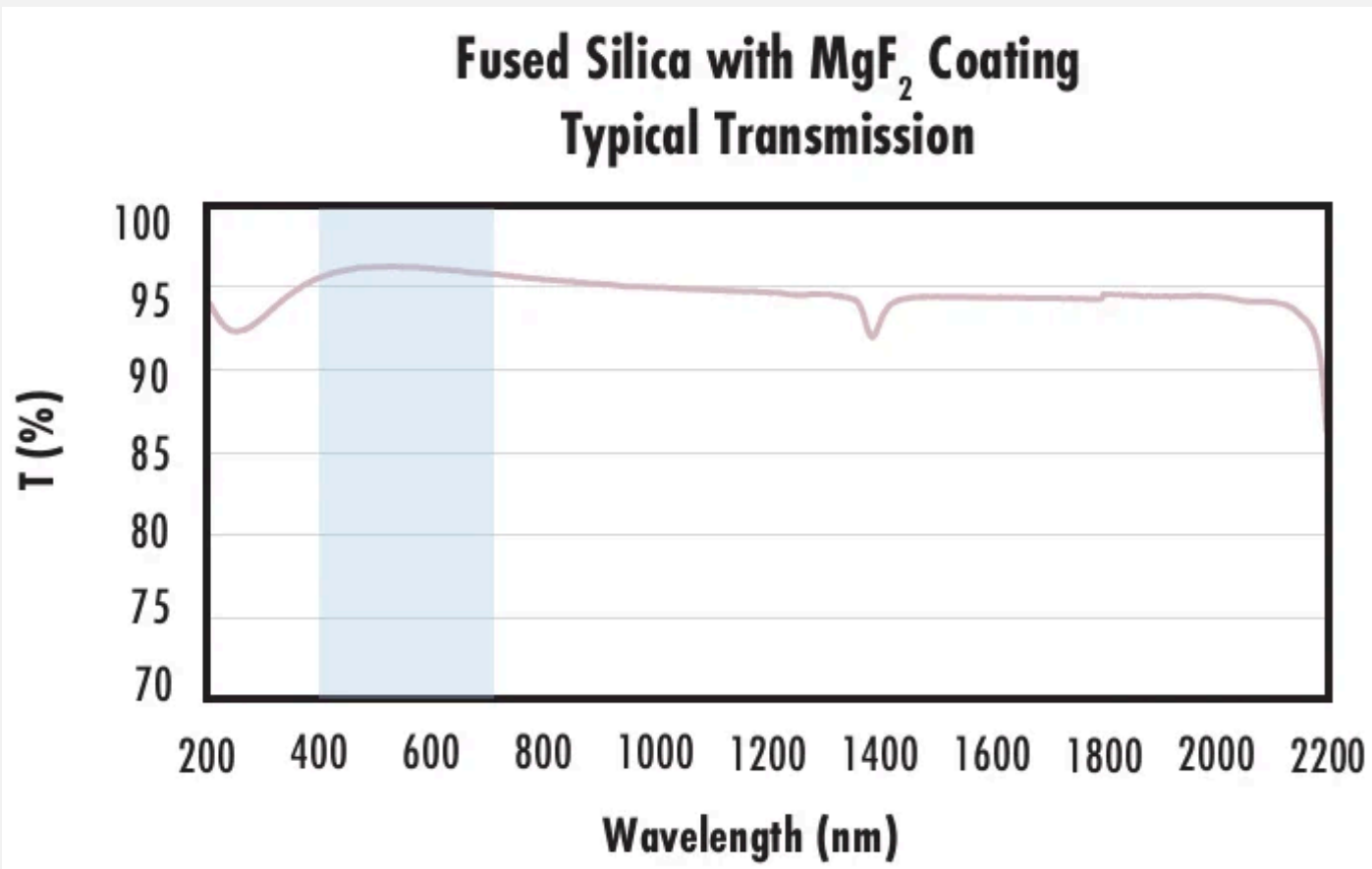

Typical transmission of a 3mm thick fused silica wind with MgF2 (400-700nm) coating at 0° AOI.

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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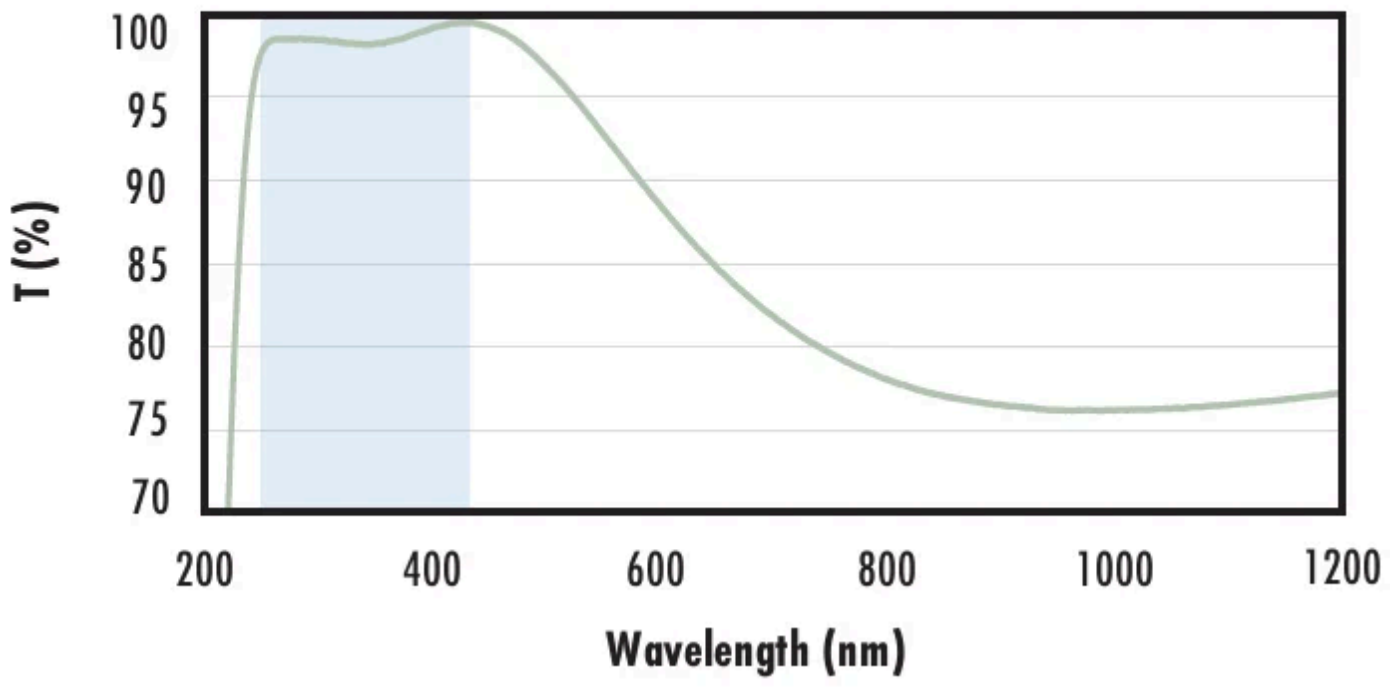
Fused Silica with UV-AR Coating
Typical Transmission



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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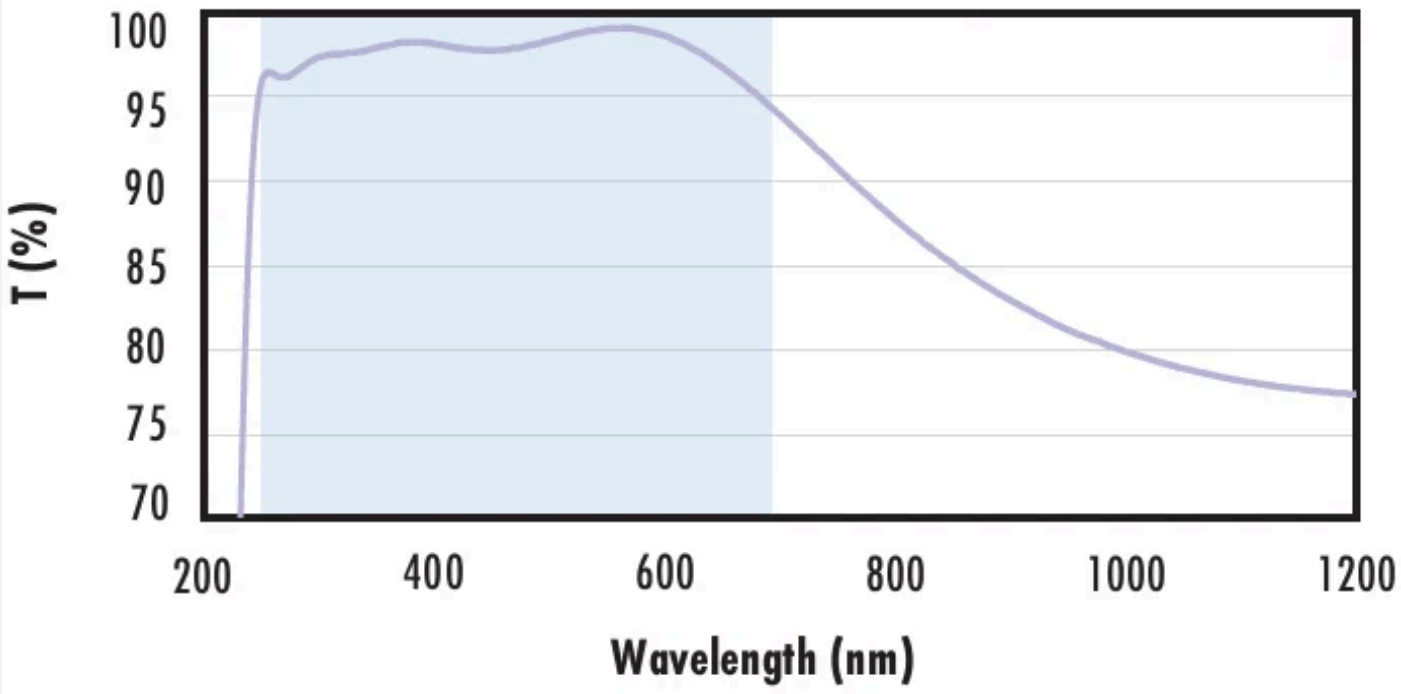
Fused Silica with UV-VIS Coating
Typical Transmission



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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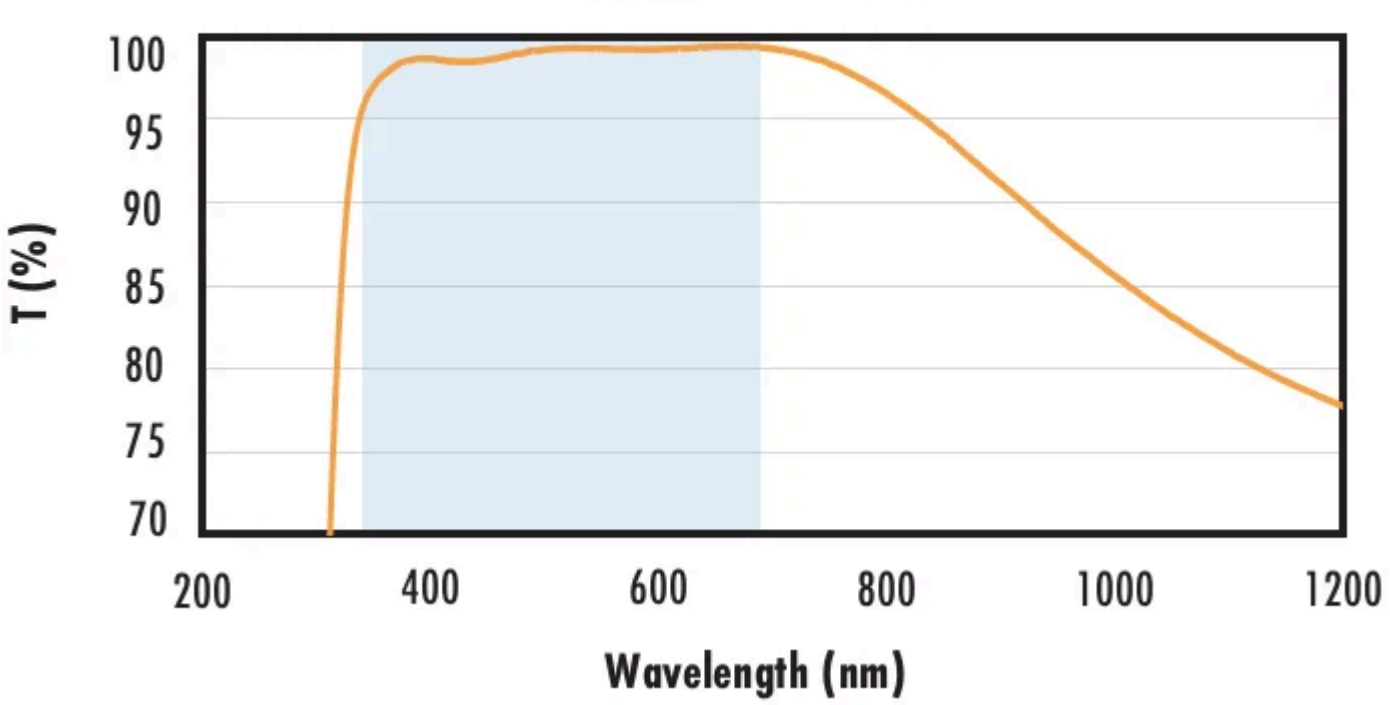
Fused Silica with VIS-EXT Coating
Typical Transmission



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.

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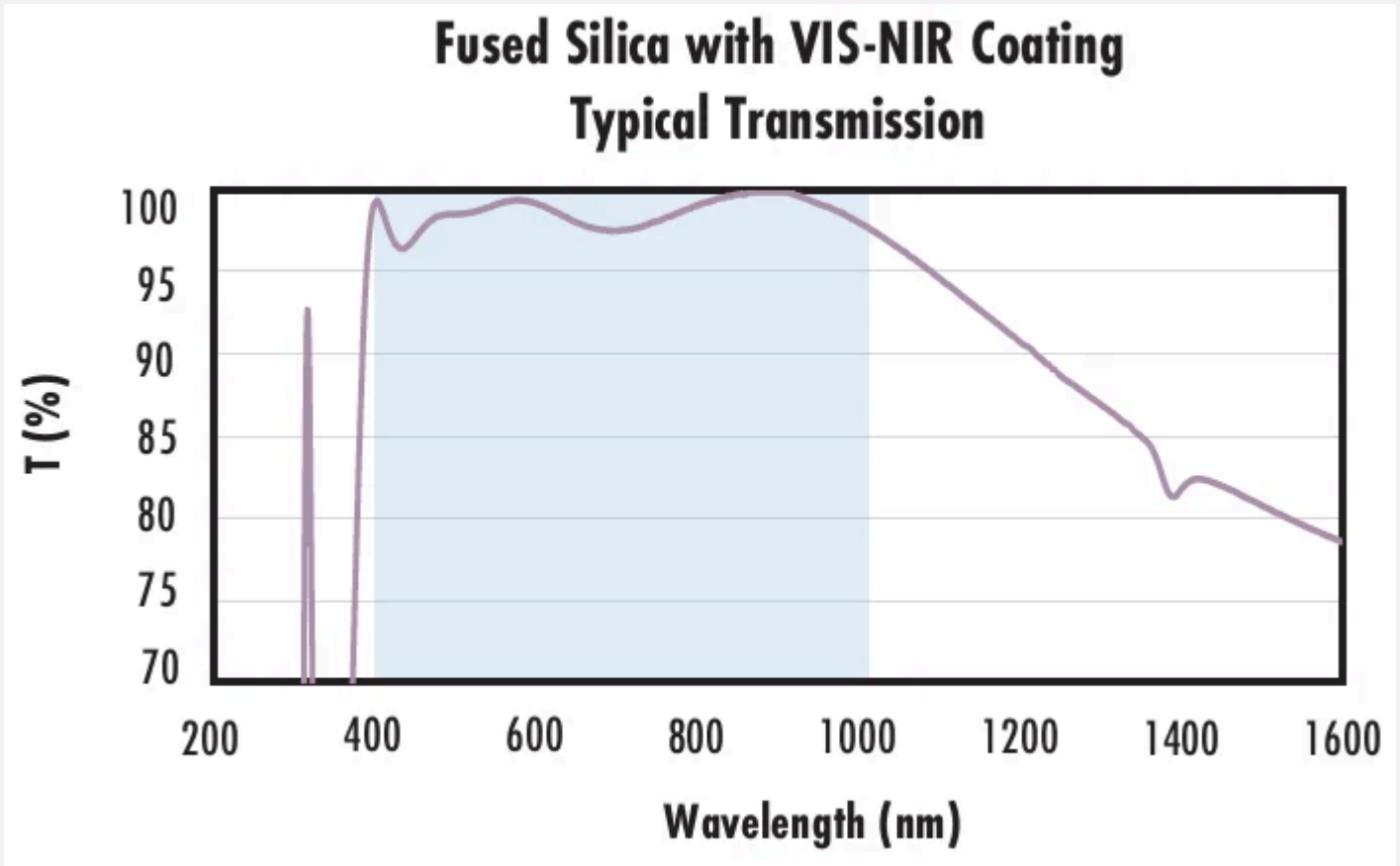

Typical transmission of a 3mm thick fused silica wind
with VIS-NIR (400-1000nm) coating at 0° AOI.

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

R_{abs} ≤ 0.25% @ 880nm
R_{avg} ≤ 1.25% @ 400 - 870nm
R_{avg} ≤ 1.25% @ 890 - 1000nm

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

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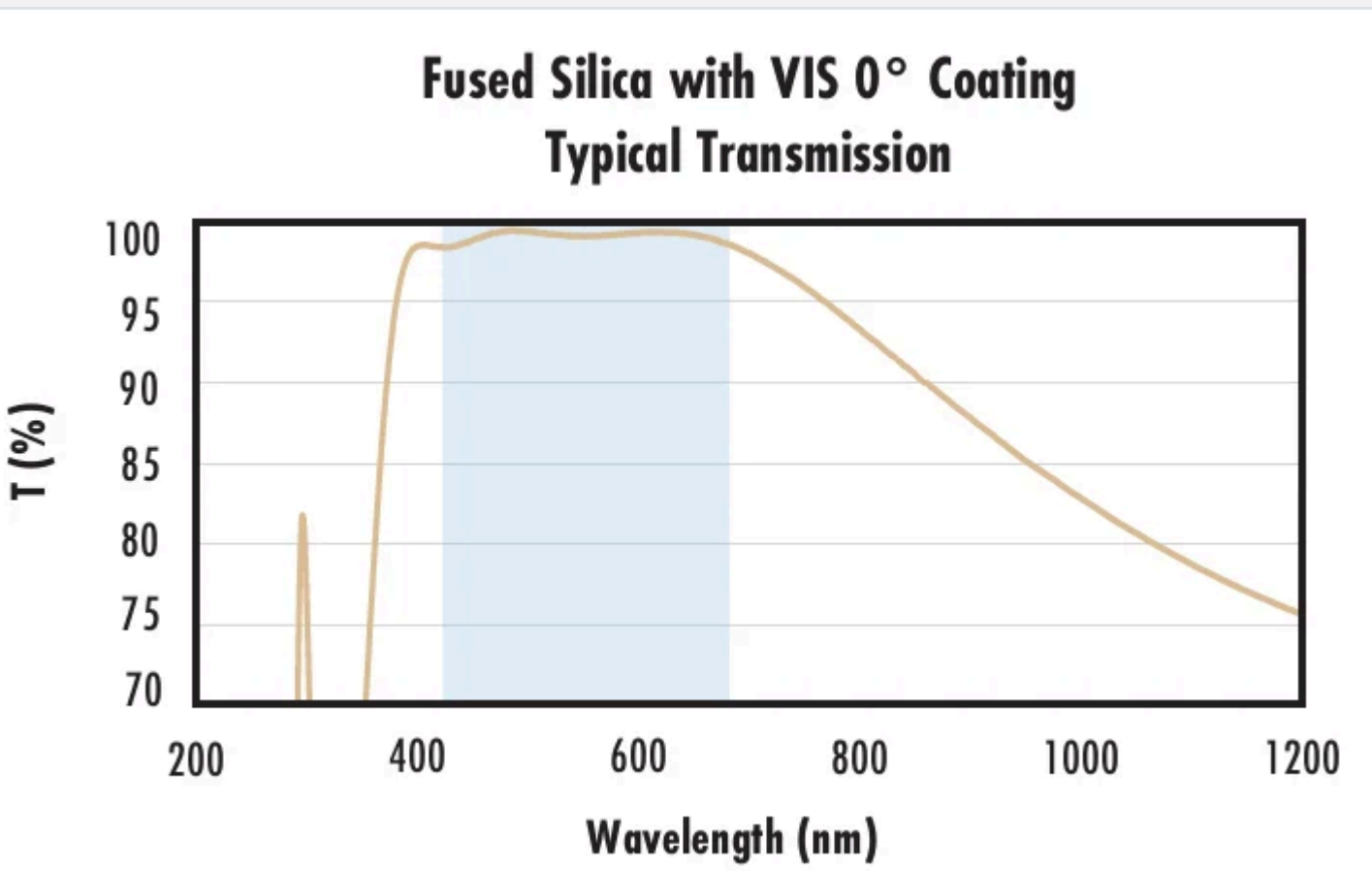

Typical transmission of a 3mm thick fused silica wind
with VIS 0° (425-675nm) coating at 0° AOI.

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

R_{avg} ≤ 0.4% @ 425 - 675nm

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

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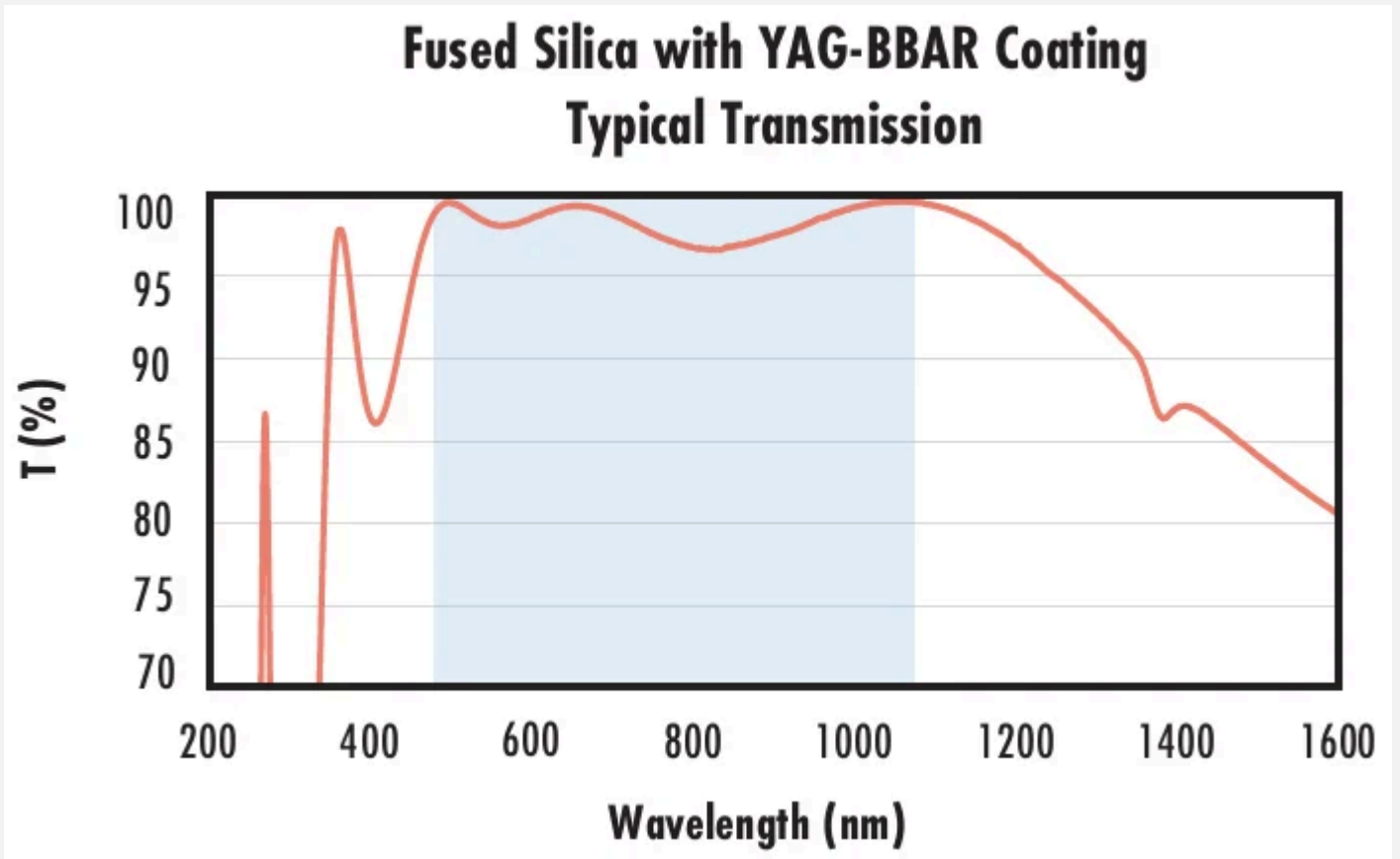

Typical transmission of a 3mm thick fused silica wind
with YAG-BBAR (500-1100nm) coating at 0° AOI.

The 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.

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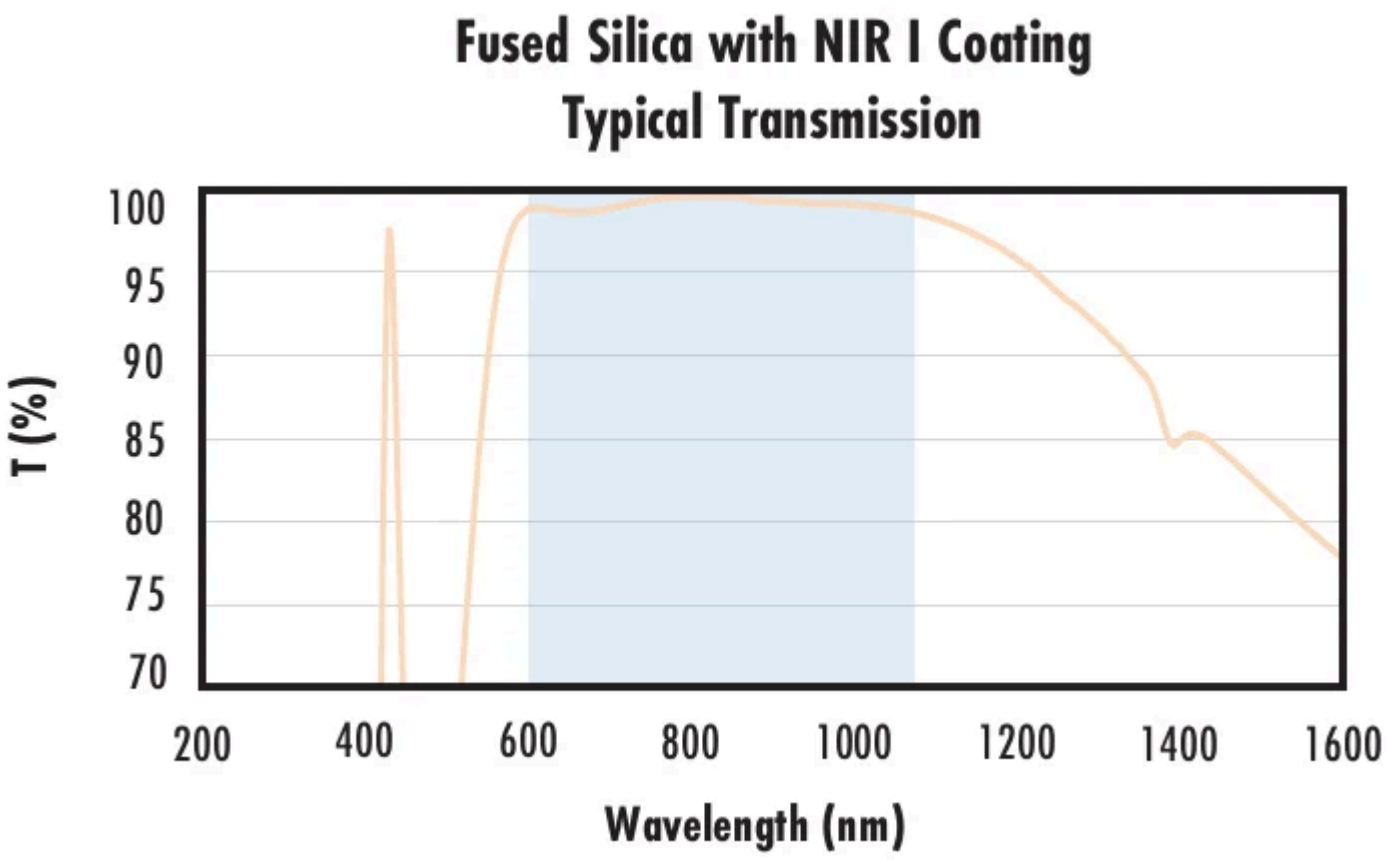

Typical transmission of a 3mm thick fused silica wind with NIR I (600 - 1050nm) coating at 0° AOI.

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.

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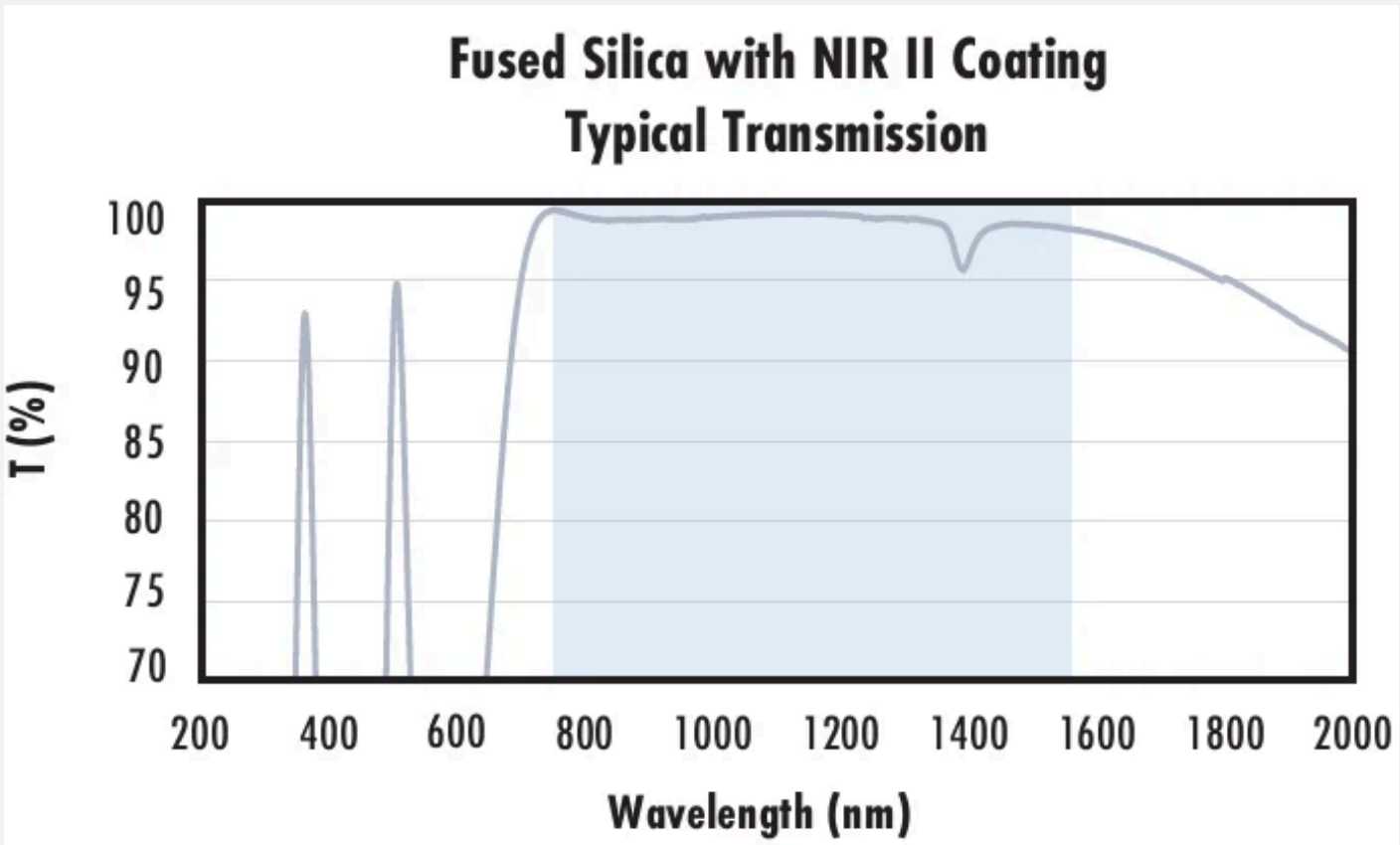

Typical transmission of a 3mm thick fused silica wind with NIR II (750 - 1550nm) coating at 0° AOI.

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.

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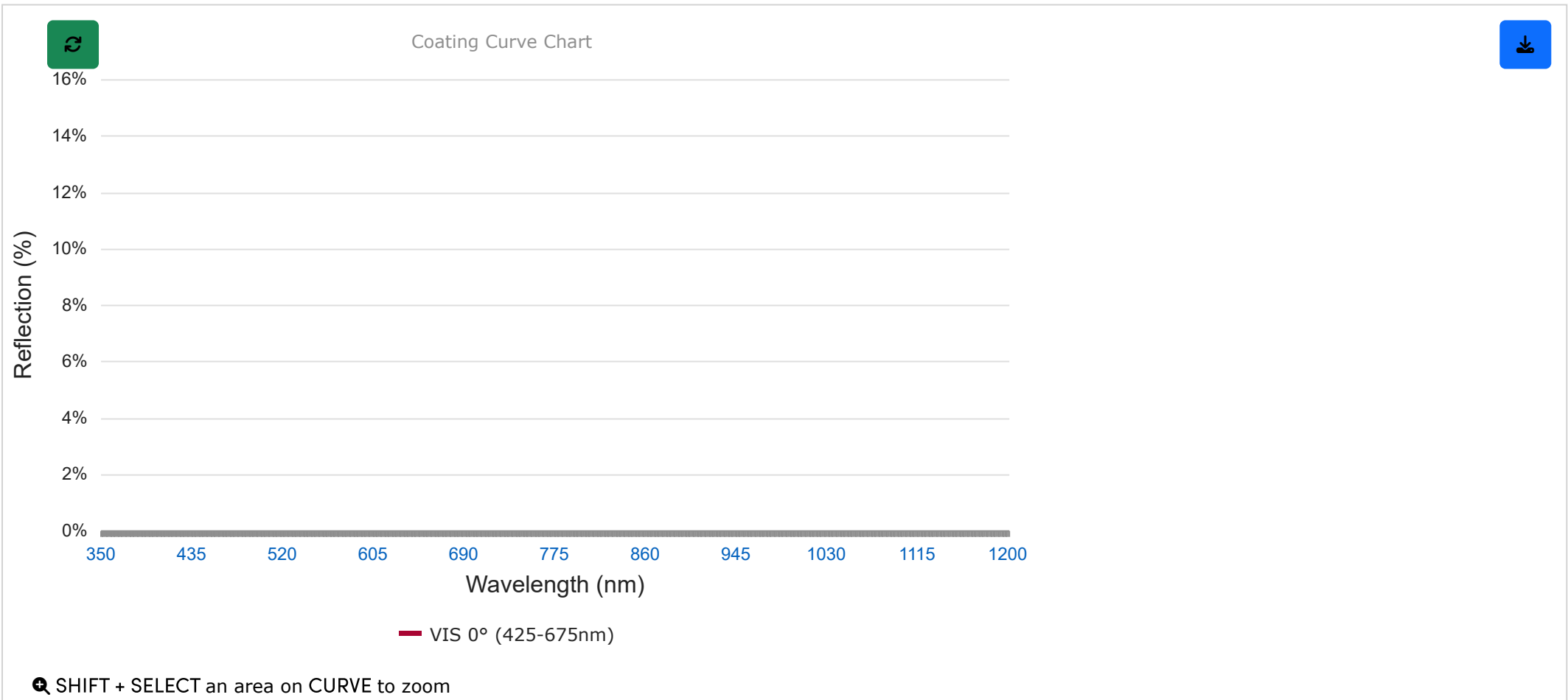
Coating Curves

VIS 0° (425-675nm)



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

Related Products

Cage System Optical Lens Mounts

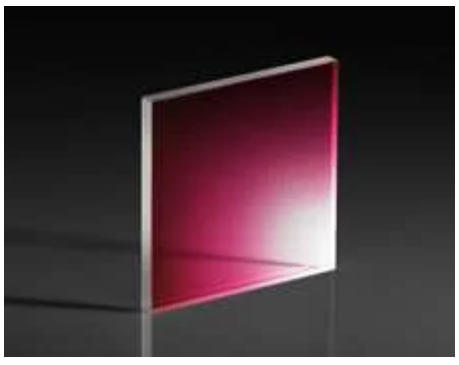
C, S, and T-Mount Circular Optic Mounts

PUROSOL™ Optical Cleaner

λ/20 High Power Laser Line Windows

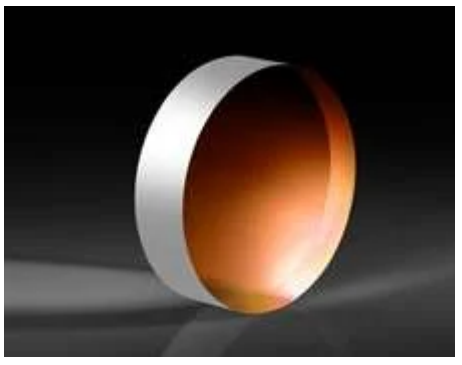
Frequently Purchased Together

#47-797 – 30mm, Al & AR Coated, Fused Silica, Right Angle Prism
₹22,801
Qty



#49-621 – 12.5mm Sq., 3mm Thick, Uncoated λ/4 N-BK7 Window
₹7,062
Qty

#62-574 – 25.4mm Dia. x 88.9mm FL, VIS 0° Coated, Plano-Convex Lens
₹4,792
Qty



#63-205 – 20mm Dia., 2mm Thick, VIS 0° Coated λ/10 Fused Silica Window
₹18,362
Qty

Compatible Mounts

	Title	Type	Compare	Stock Number	Price ☐	Buy
MORE+ 	50.0mm Optic Dia., Optic Mount	Fixed		#64-567	₹4,969 Request Quote	3 In Stock 1
MORE+ 	50.0mm Optic Dia., Optic Mount	Fixed		#64-568	₹4,969 Request Quote	7 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+ 	50.0/50.8mm Optic Dia., Optical Cell Assembly	Fixed		#36-465 CLEARANCE	₹12,739 Request Quote	2 In Stock 1
	50.0/50.8mm Optic Dia., X-Y	Adjustable - Linear (XY)		#62-957	₹31,074 Request	1 In Stock 1

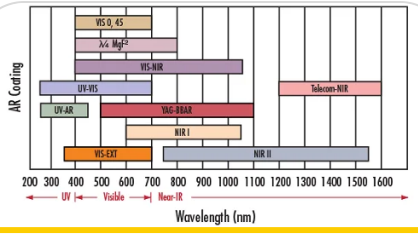
	Title	Type	Compare	Stock Number	Price ☐	Buy
MORE+ 	Translating Optic Mount				Quote	
MORE+ 	5.0 - 100.0mm Optic Dia., Self-Centering Jaw Clamp	Fixed		#16-078	₹41,365 Request Quote	CONTACT US 1
MORE+ 	50.0/50.8mm Optic Dia., Precision Gimbal Mount	Adjustable - Gimbal		#55-000	₹51,454 Request Quote	7 In Stock 1
MORE+ 	50.0/50.8mm Optic Dia., X-Y-Z Translating Optic Mount	Adjustable - Linear (XYZ)		#62-960	₹61,039 Request Quote	20+ In Stock 1
MORE+ 	50.0/50.8mm Optic Dia., 5 Axes Optical Mount	Adjustable - Linear (XYZ) & Tip-Tilt		#13-778	₹84,748 Request Quote	10 In Stock 1

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

Resources

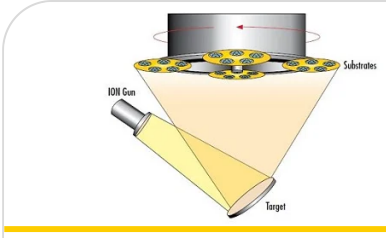
Media Type

- [ ] Application Note
- [ ] Technical Tool
- [ ] Video
- [ ] Glossary
- [ ] FAQ



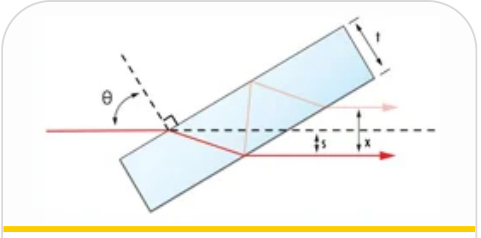
APPLICATION NOTE

Anti-Reflection (AR) Coatings



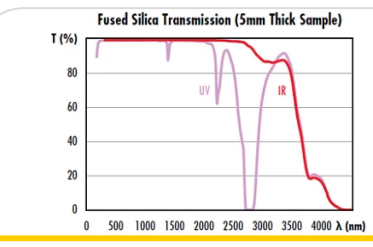
APPLICATION NOTE

An Introduction to Optical Coatings



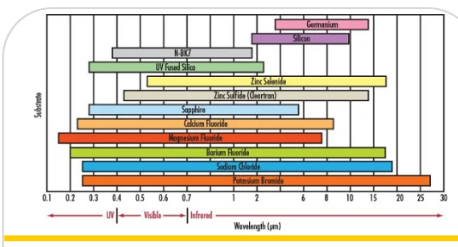
TECHNICAL TOOL

Beam Displacement Calculator



APPLICATION NOTE

UV vs. IR Grade Fused Silica



APPLICATION NOTE

Understanding Optical Windows

VIDEO

Optical Windows Review

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