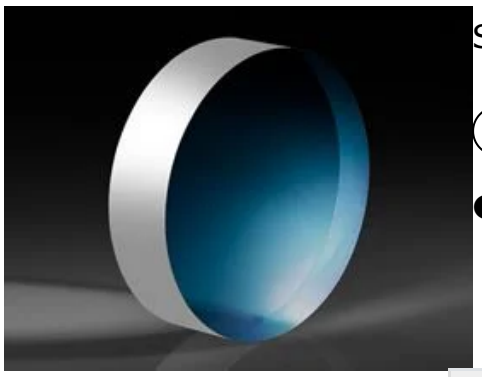
TECHSPEC®

20mm Dia. 2mm Thick NIR II Coated, 1λ Fused Silica Window



Stock #39-298 CONTACT US

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MRP ₹10,998

Price inclusive of all taxes

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Volume Pricing	
Qty 1-5	₹10,998 each
Qty 6-25	₹8,778 each
Qty 26-49	₹8,222 each
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General

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

Physical & Mechanical Properties

Clear Aperture CA (mm):	18.00	**Diameter (mm):**	20.00 +0.00/-0.20
Thickness (mm):	2.00 ±0.38	**Parallelism (arcmin):**	<5
Dimensional Tolerance (mm):	+0.00/-0.20	**Bevel:**	Protective as needed
Clear Aperture (%):	90	**Edges:**	Fine Ground
Poisson's Ratio:	0.16	**Young's Modulus (GPa):**	73
Knoop Hardness (kg/mm^2):	522.00		

Optical Properties

Coating:	NIR II (750-1550nm)	**Substrate:** ⓘ	Fused Silica (Corning 7980)
Index of Refraction (n_d):	1.458	**Surface Quality:**	60-40
Abbe Number (v_d):	67.8	**Coating Specification:**	R_{abs} ≤1.5% @ 750 - 800nm R_{abs} ≤1.0% @ 800 - 1550nm R_{avg} ≤0.7% @ 750 - 1550nm

Wavelength Range (nm):	750 - 1550	**Surface Flatness (P-V):**	1λ
Damage Threshold, By Design: ⓘ	8 J/cm^2 @ 1064nm, 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

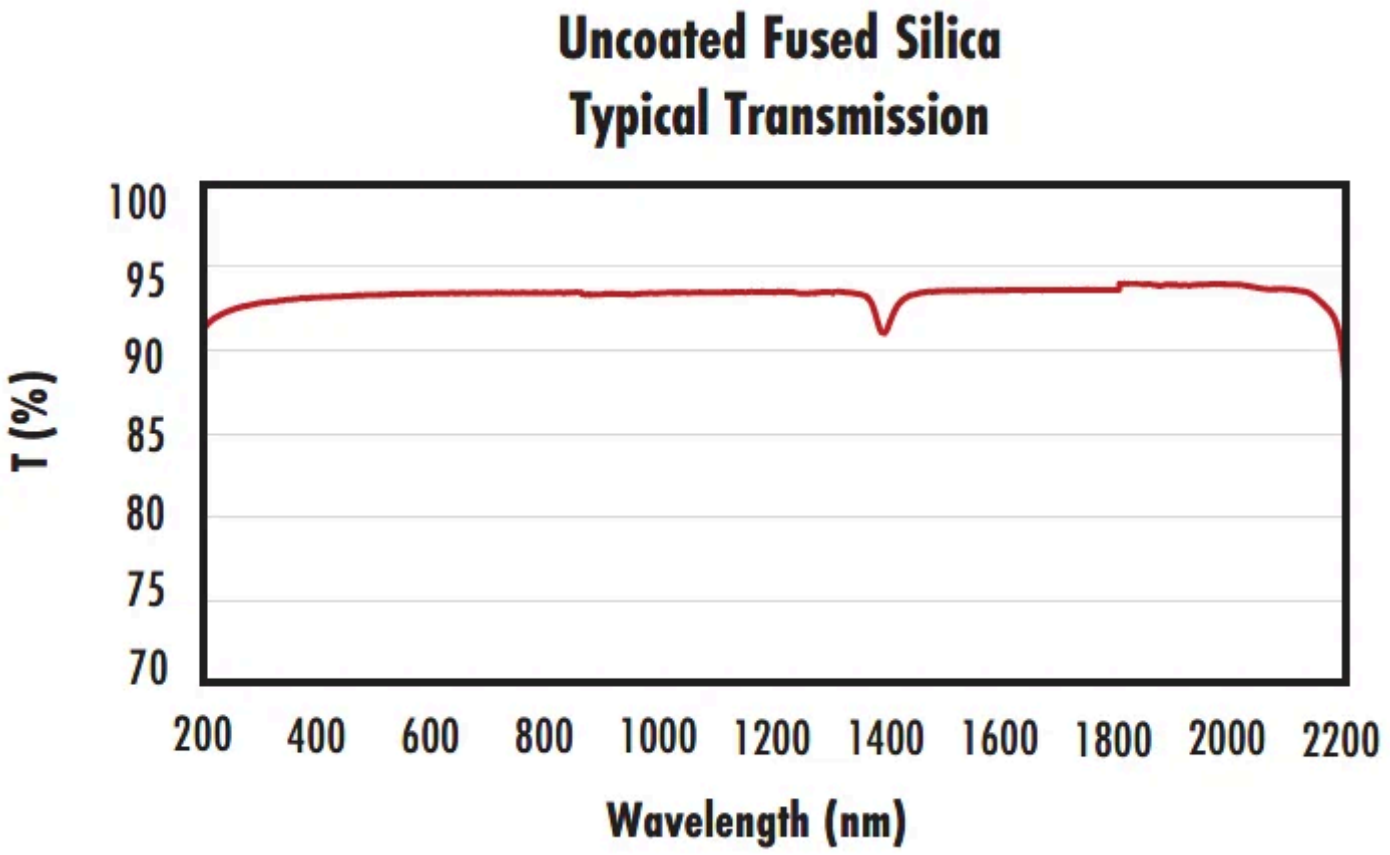
- Available Uncoated or with Broadband Anti-Reflection Coatings
- Ideal for Cost Sensitive Broadband Applications
- Circular and Square Sizes from 5mm to 100mm
- **λ/4** or **λ/10** UV Fused Silica Windows Also Available

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.

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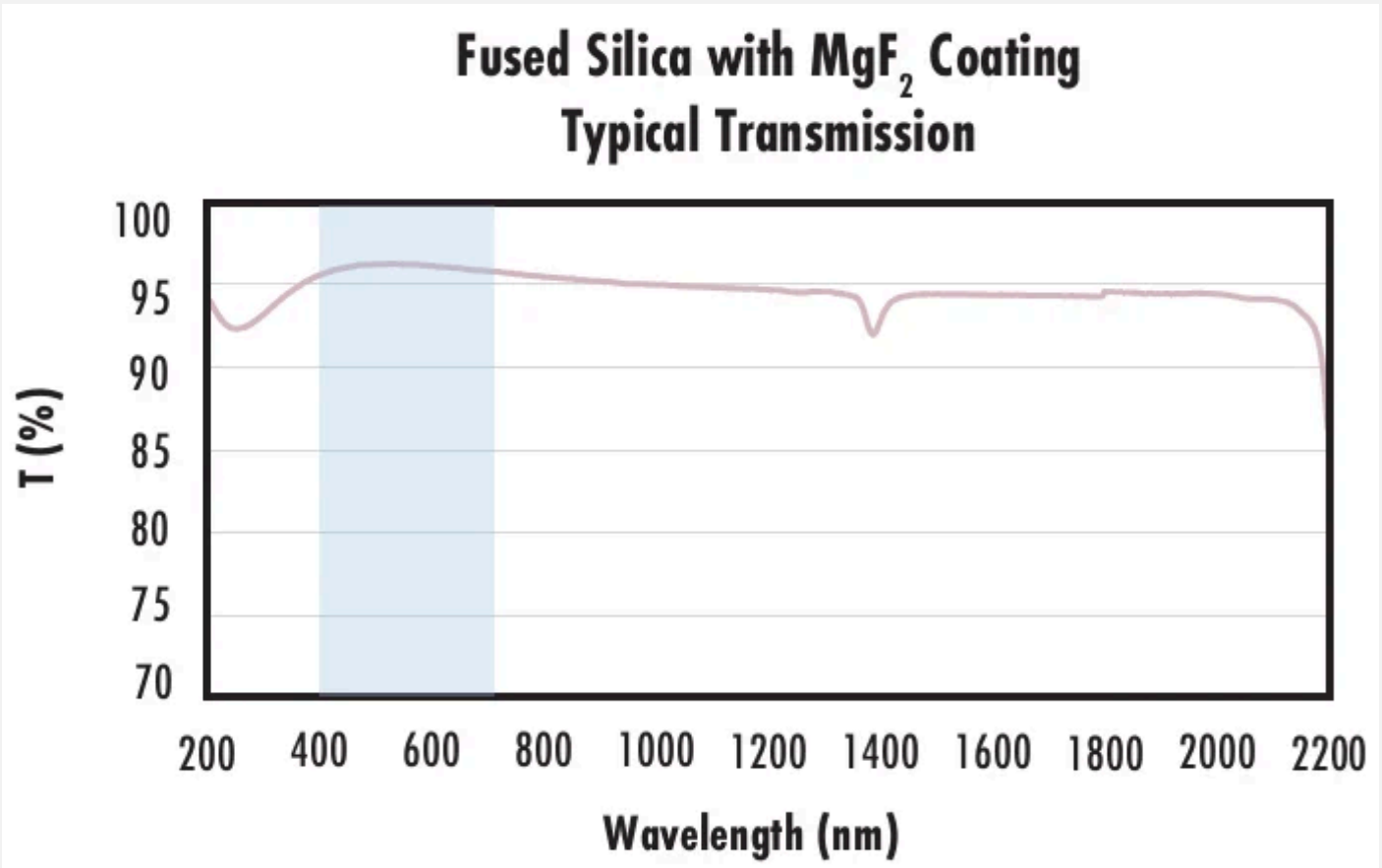

Typical transmission of a 3mm thick fused silica wind with MgF2 (400-700nm) coating at 0° AOI.

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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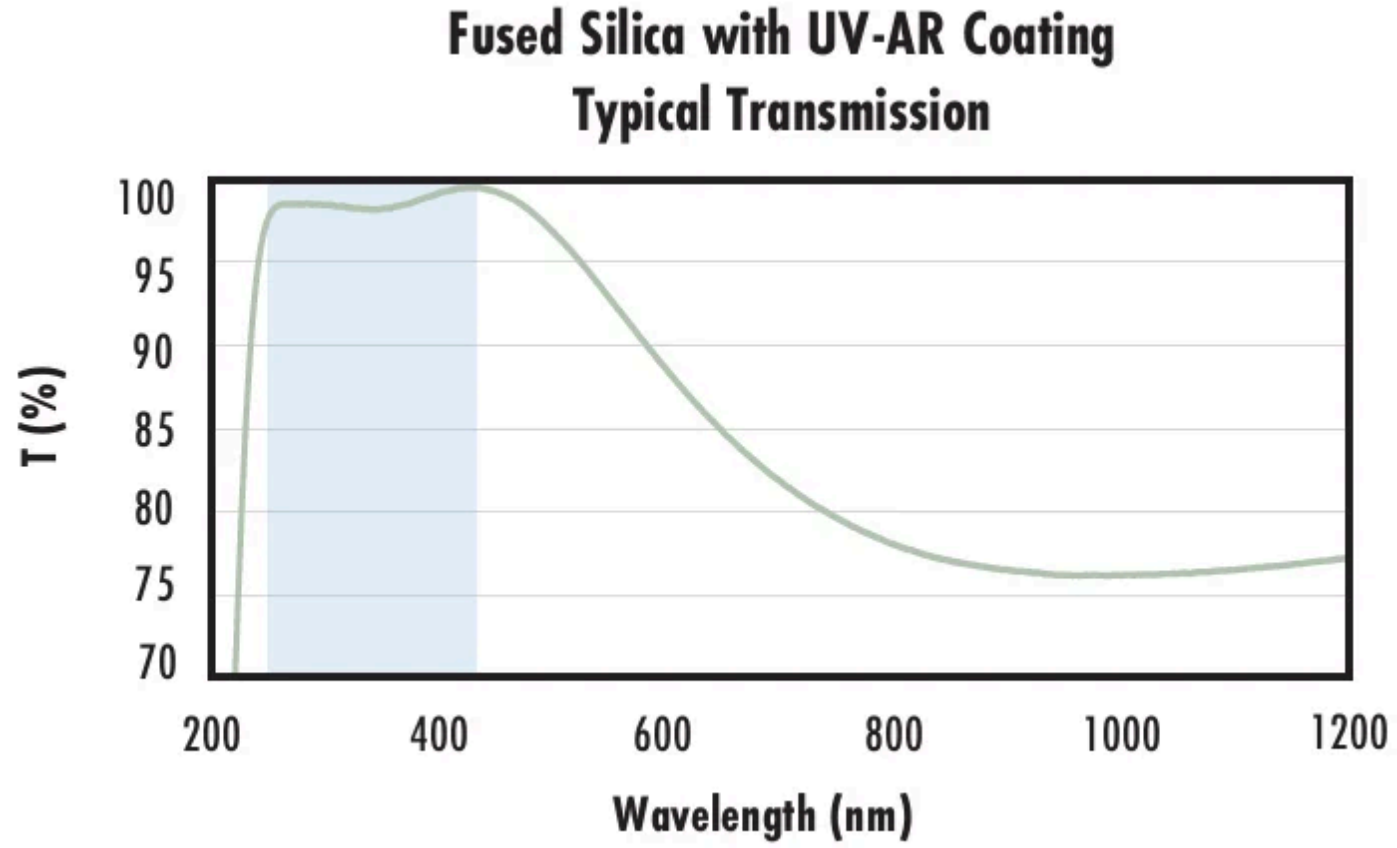

Typical transmission of a 3mm thick fused silica wind with UV-AR (250-425nm) coating at 0° AOI.

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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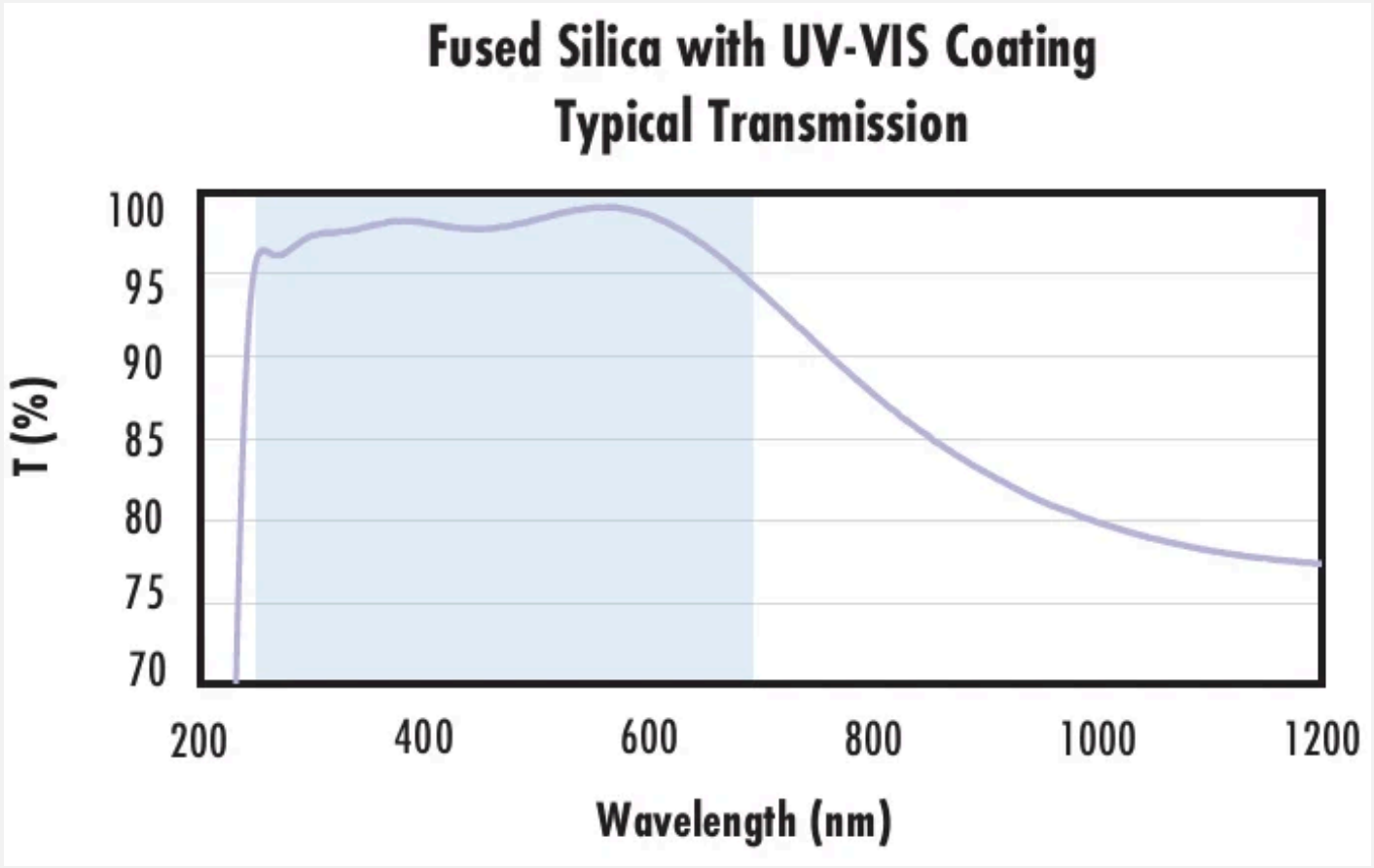

Typical transmission of a 3mm thick fused silica wind with UV-VIS (250-700nm) coating at 0° AOI.

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

R_{abs} ≤ 1.0% @ 350 - 450nm
R_{avg} ≤ 1.5% @ 250 - 700nm

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

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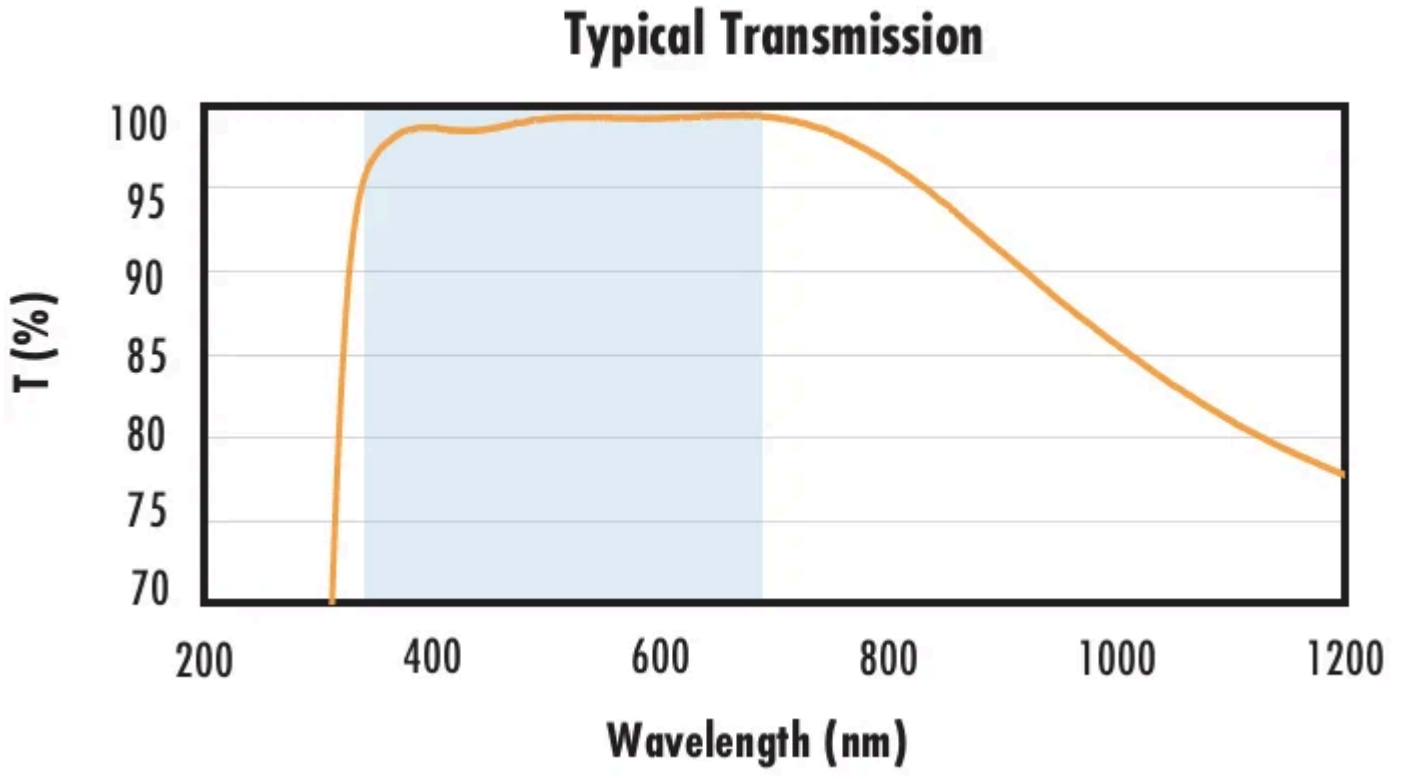

Typical transmission of a 3mm thick fused silica wind with VIS-EXT (350-700nm) coating at 0° AOI.

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

R_{avg} ≤ 0.5% @ 350 - 700nm

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

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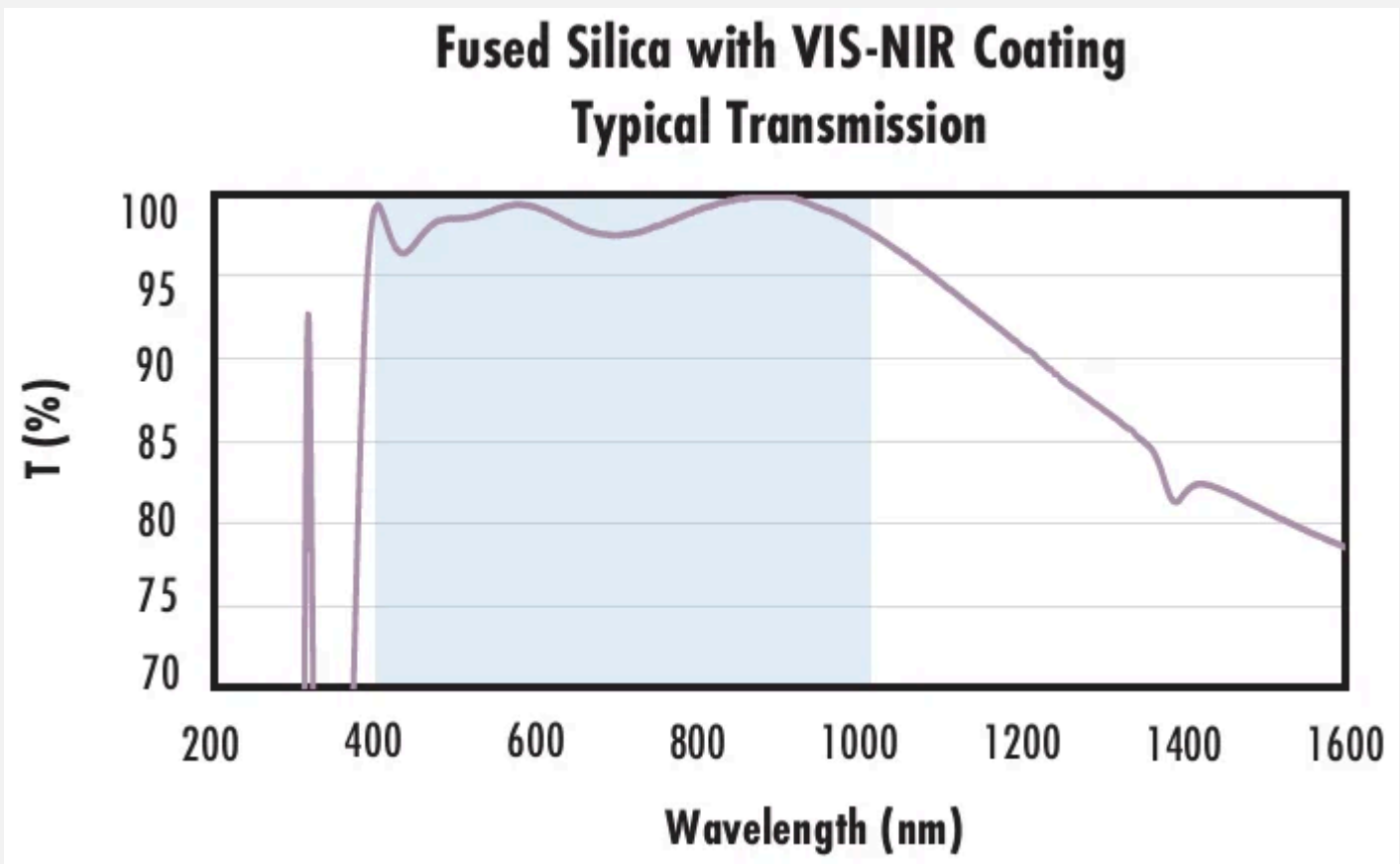

Typical transmission of a 3mm thick fused silica wind with VIS-NIR (400-1000nm) coating at 0° AOI.

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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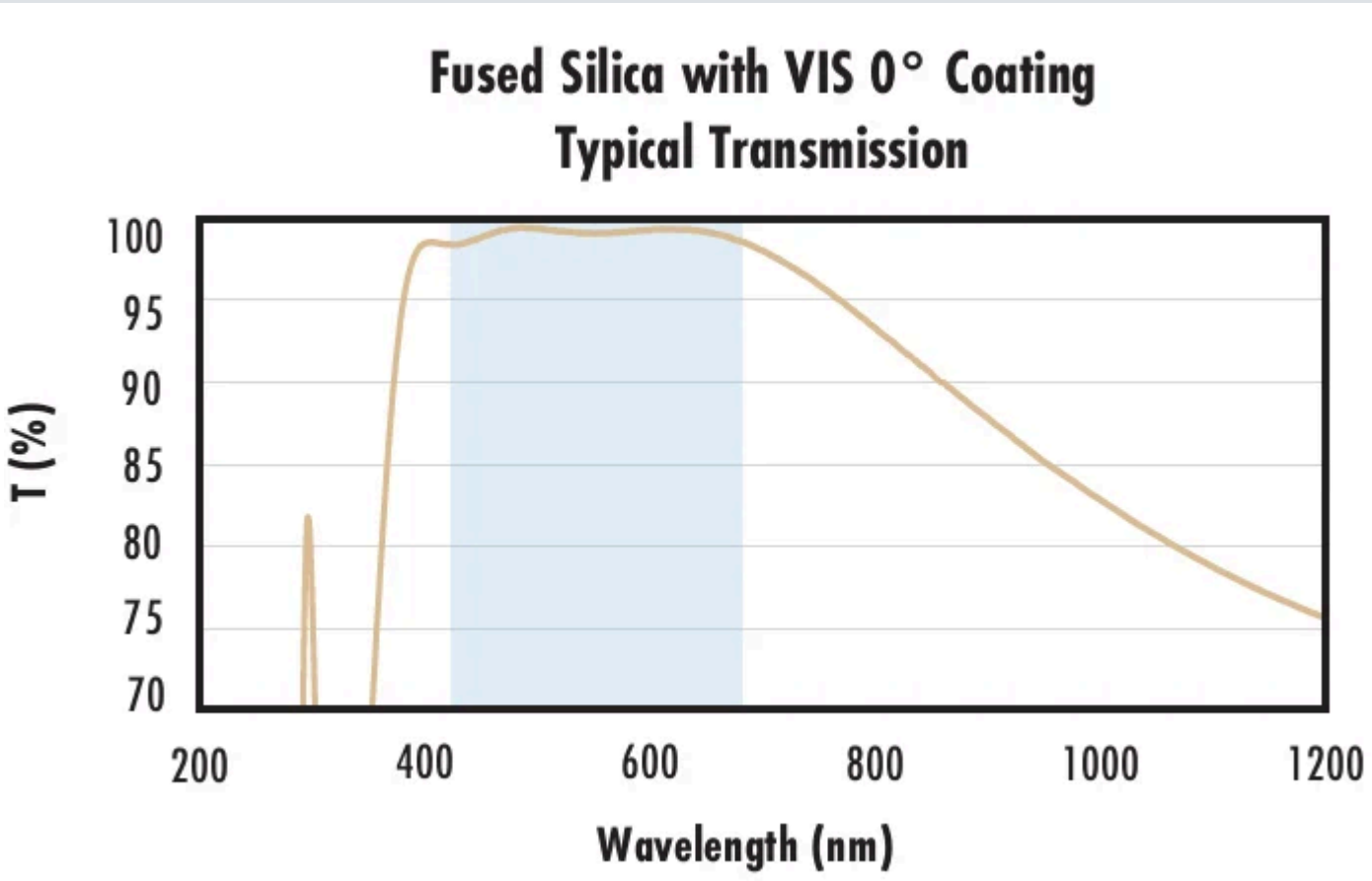

Typical transmission of a 3mm thick fused silica wind with VIS 0° (425-675nm) coating at 0° AOI.

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

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

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

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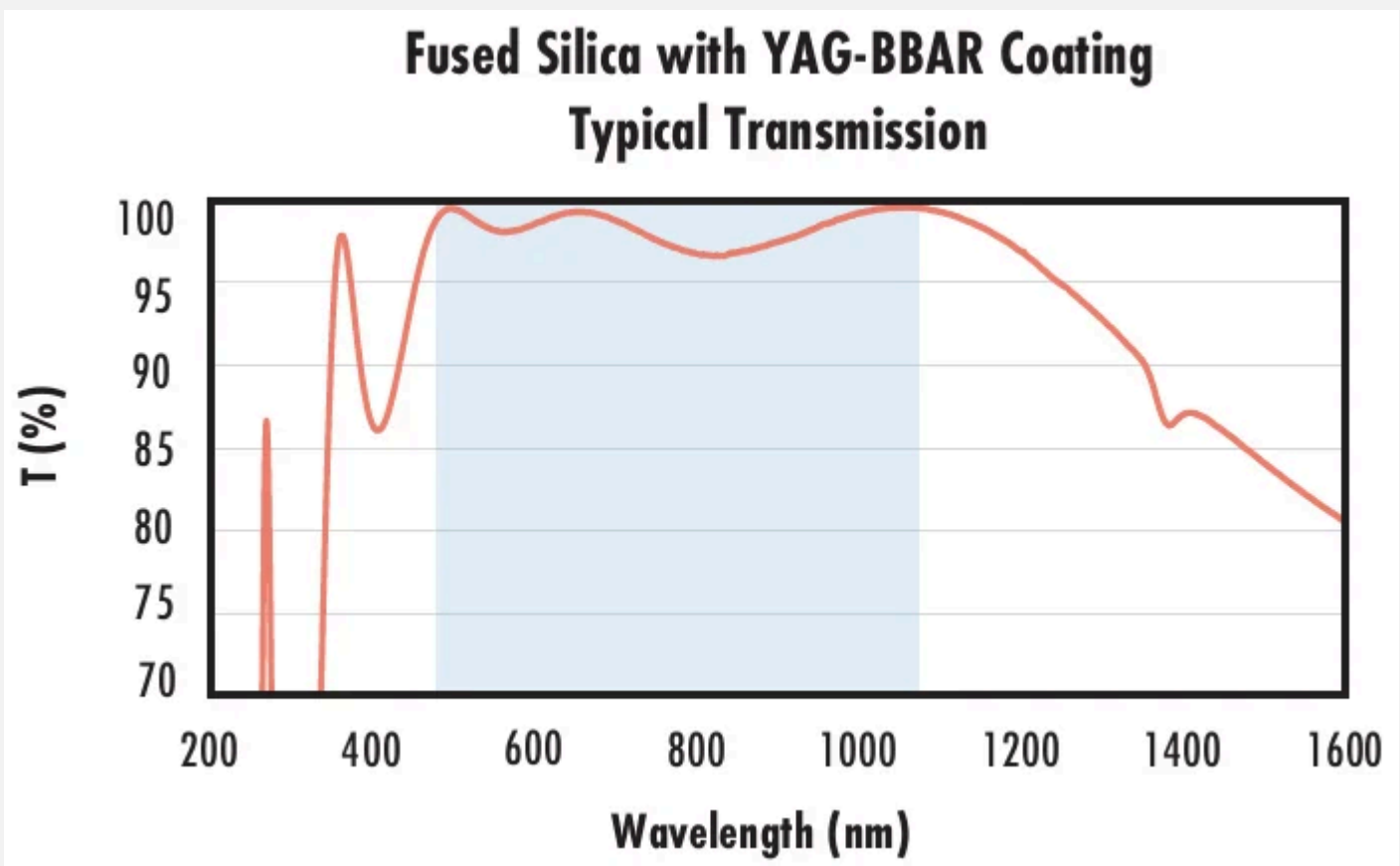

Typical transmission of a 3mm thick fused silica wind with YAG-BBAR (500-1100nm) coating at 0° AOI.

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

$R_{abs} \leq 0.25\%$ @ 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.

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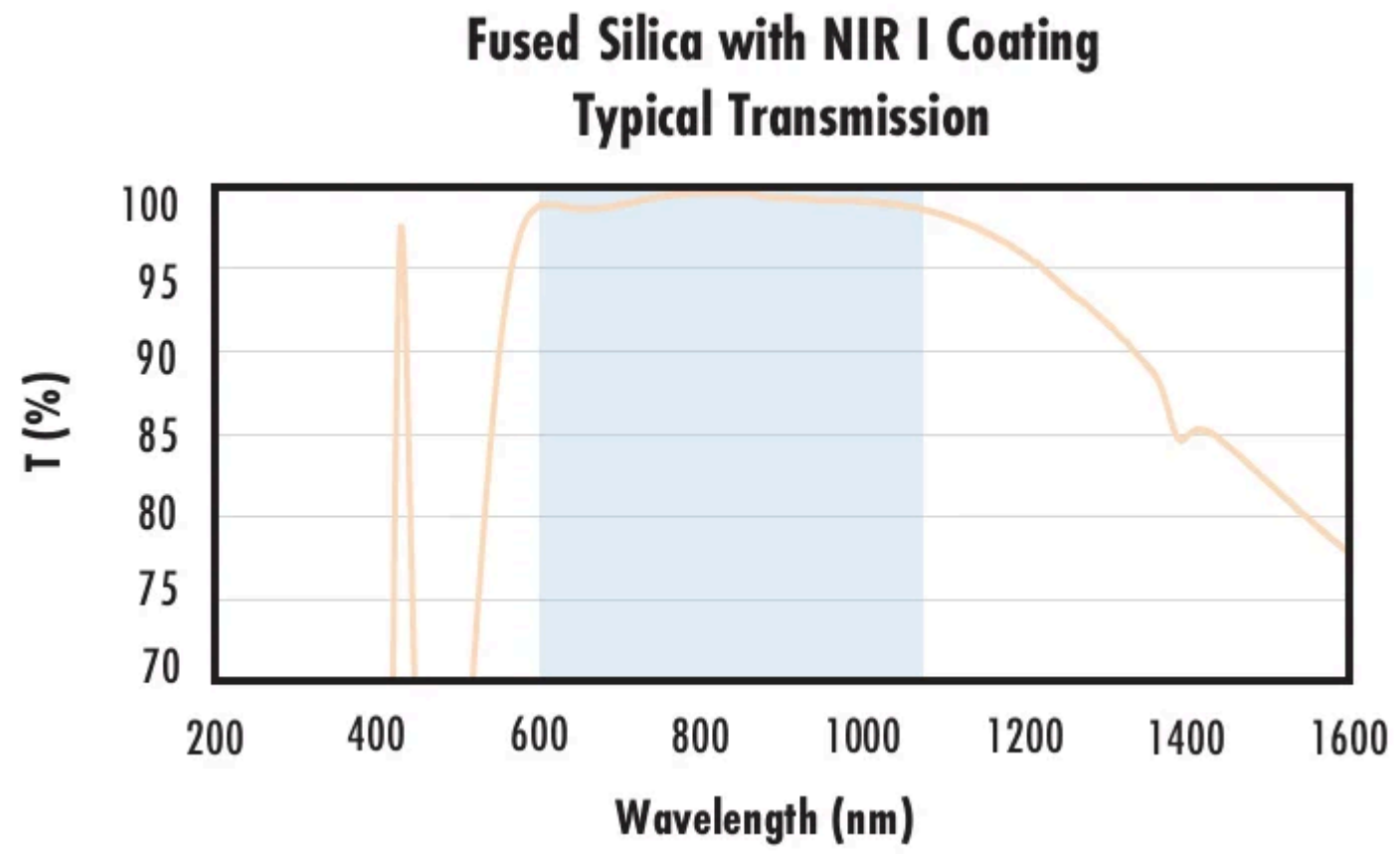

Typical transmission of a 3mm thick fused silica wind with NIR I (600 - 1050nm) coating at 0° AOI.

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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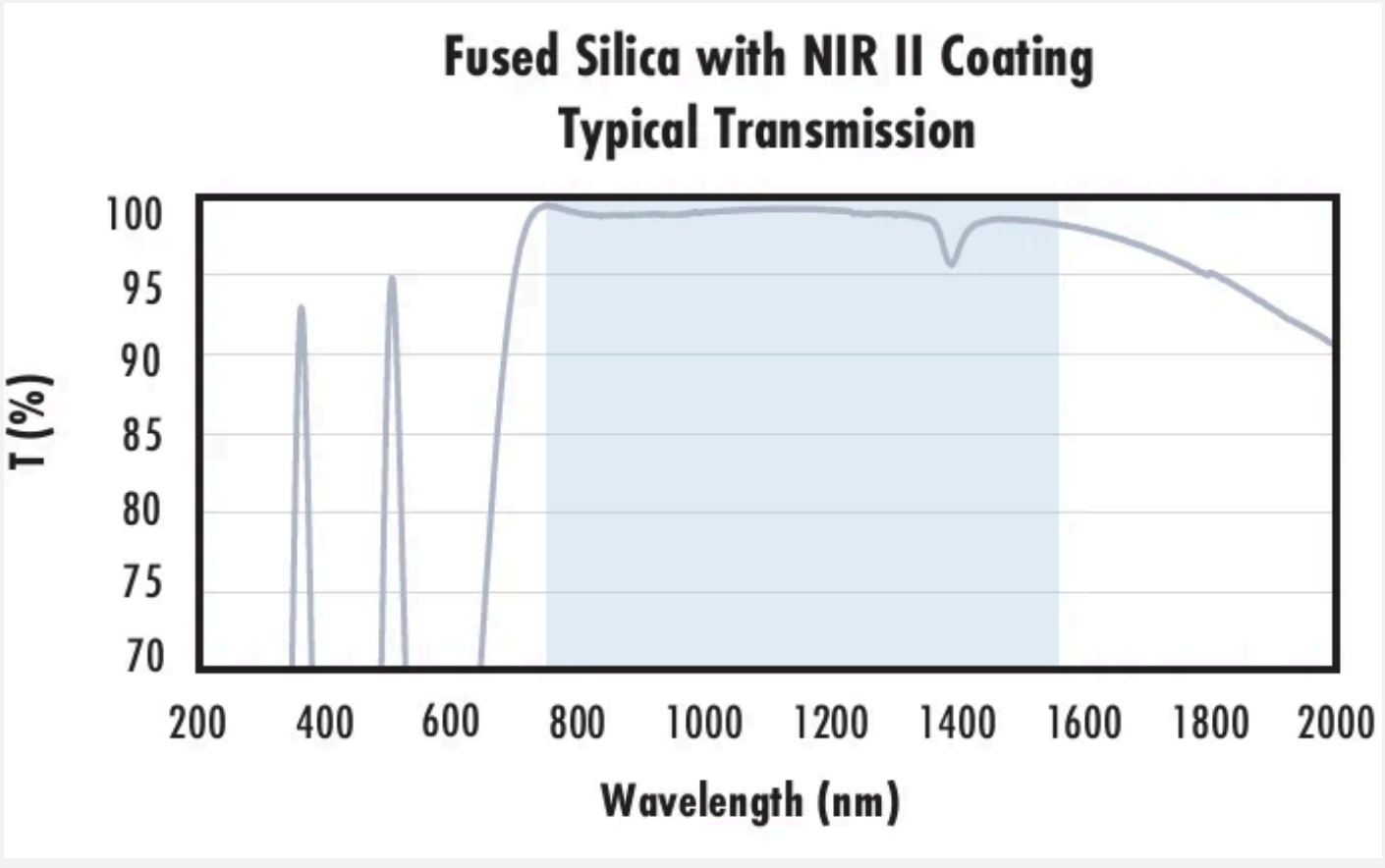

Typical transmission of a 3mm thick fused silica wind with NIR II (750 - 1550nm) coating at 0° AOI.

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

R_{abs} ≤ 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.

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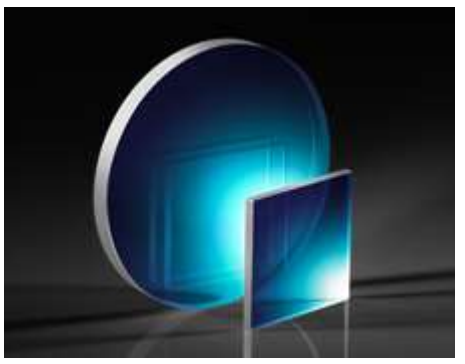

λ/10 UV Fused Silica Windows

Frequently Purchased Together

#49-555 – 4.0mm Diameter, Sapphire Half-Ball Lens
₹3,405
Qty

#67-534 – 20.0mm Dia. x 35.0mm FL, NIR II Coated, Plano-Convex Lens
₹4,969
Qty

#67-535 – 20.0mm Dia. x 40.0mm FL, NIR II Coated, Plano-Convex Lens
₹4,792
Qty

#83-530 – 20mm Diameter, 1550nm V-Coat, λ/4 N-BK7 Window
₹10,796
Qty

Compatible Mounts

	Title	Type	Compare	Stock Number	Price	Buy
MORE+ 	20.0mm Optic Dia., Optic Mount	Fixed		#64-559	₹3,305 Request Quote	14 In Stock 1

	Title	Type	Compare	Stock Number	Price ☐	Buy
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
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