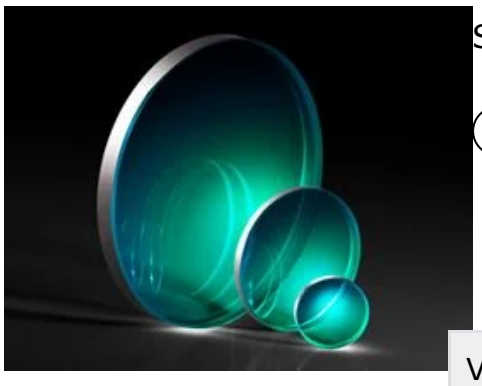
TECHSPEC®

50mm Dia., 3mm Thick, Uncoated, λ/4 Fused Silica Window



TECHSPEC® λ/4 UV Fused Silica Window

Stock #70-532 13 In Stock

- 1 +

A$323.20

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Volume Pricing	
Qty 1-5	A$323.20 each
Qty 6-25	A$257.60 each
Qty 26-49	A$241.60 each
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EO Spec Sheet

General

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

Physical & Mechanical Properties

Clear Aperture CA (mm):	45.00	**Diameter (mm):**	50.00 +0.00/-0.10
Thickness (mm):	3.00 ±0.10	**Parallelism (arcmin):**	<1
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:	Uncoated	**Substrate:** ⓘ	Fused Silica
Index of Refraction (n_d):	1.458	**Surface Quality:**	40-20
Transmitted Wavefront, P-V:	λ/4	**Abbe Number (v_d):**	67.8
Wavelength Range (nm):	200 - 2200		

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)

Regulatory Compliance

RoHS 2015:	**Compliant**	**Certificate of Conformance:**	**View**
REACH 241:	**Compliant**		

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

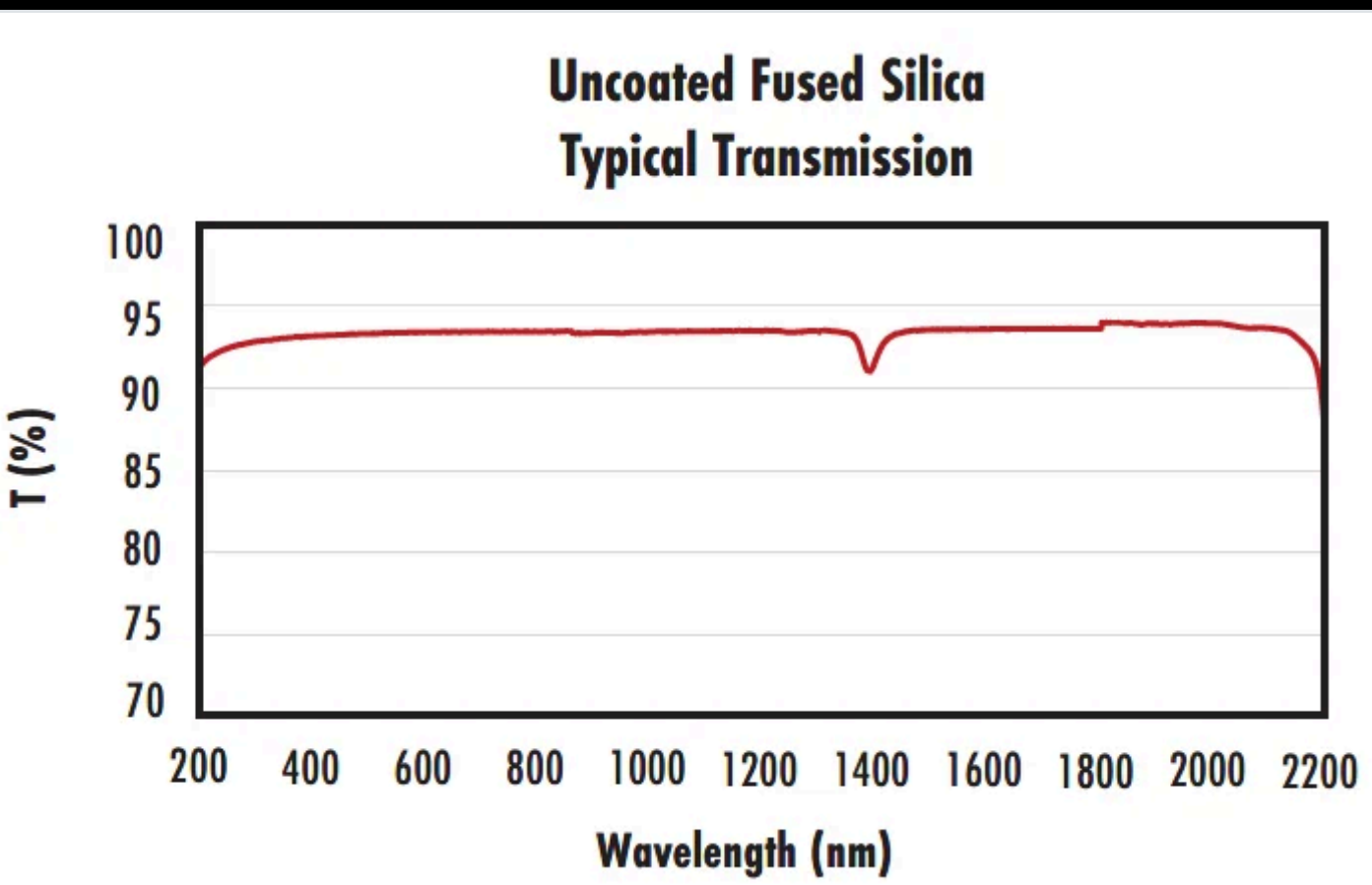
Learn more about our **custom manufacturing capabilities** or submit an inquiry **here.**

Product Details

- Available Uncoated or BBAR Coated for UV, Visible, and NIR
- Ideal for Imaging Applications
- Circular and Rectangular Sizes from 5 to 200mm
- **1λ** or **λ/10** UV Fused Silica Windows Also Available

TECHSPEC® λ/4 UV Fused Silica Windows are manufactured with 40-20 surface quality and λ/4 transmitted wavefront error specifications, making them ideal for imaging applications. Featuring UV fused silica substrates, these windows provide high transmission from the ultraviolet (UV) through the visible and near-infrared (NIR). Broadband anti-reflection (BBAR) coating options are available to minimize reflection losses and increase transmission. TECHSPEC λ/4 UV Fused Silica Windows are used in optical imaging applications, in low to medium powered laser applications, and as protective windows, especially in applications requiring transmission of UV light.

Technical Information



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

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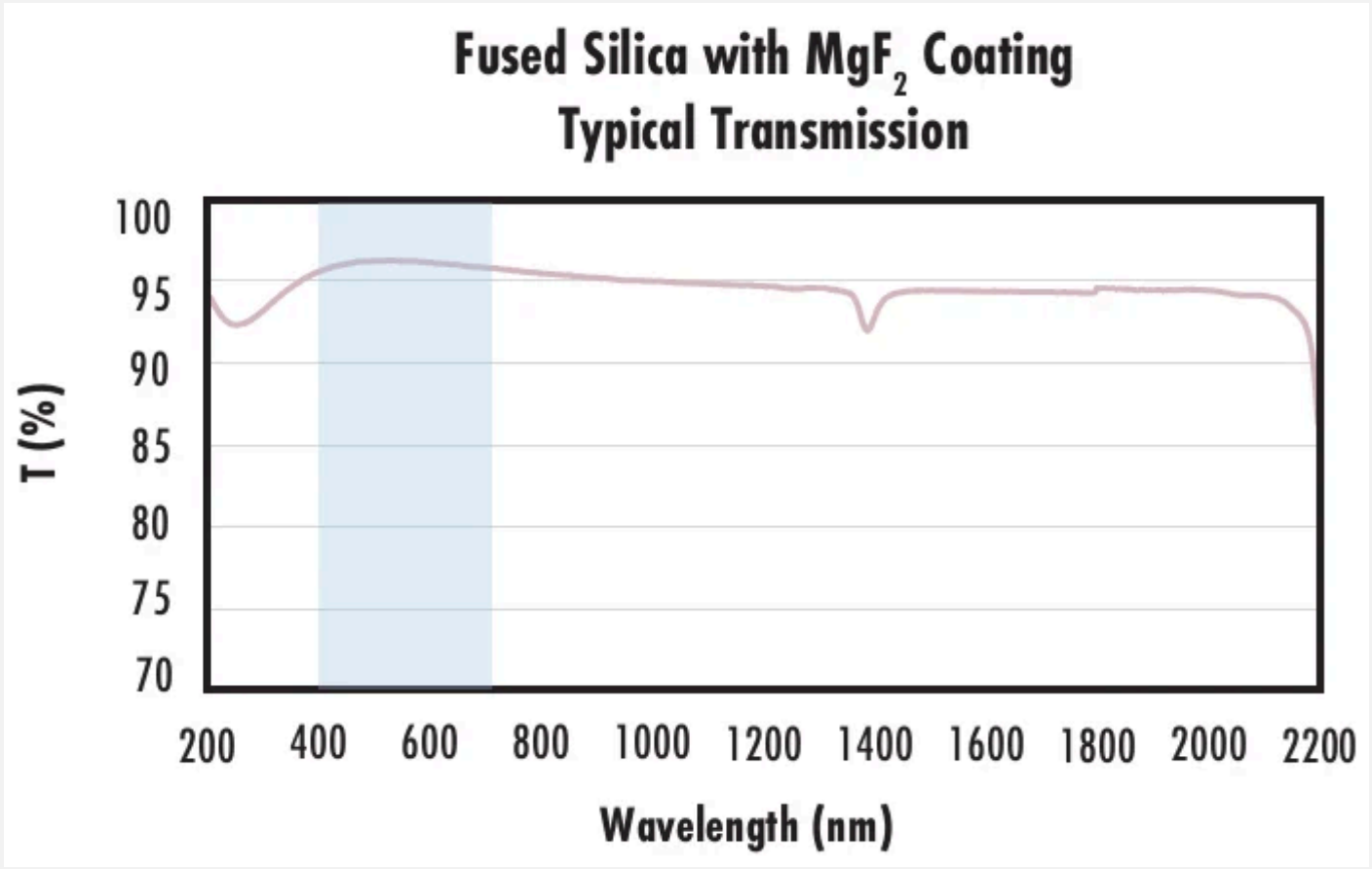

Typical transmission of a 3mm thick fused silica wind with MgF2 (400-700nm) coating at 0° AOI.

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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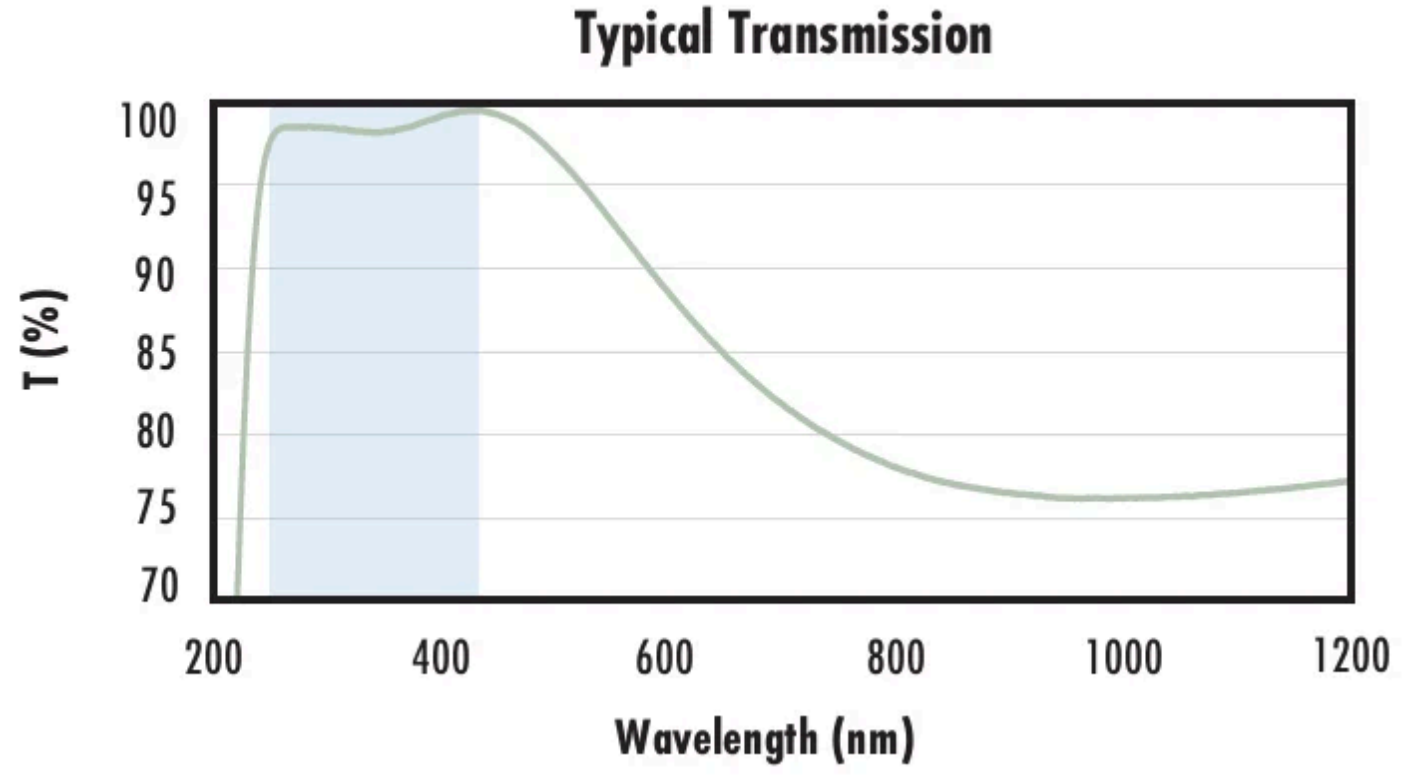

Typical transmission of a 3mm thick fused silica wind with UV-AR (250-425nm) coating at 0° AOI.

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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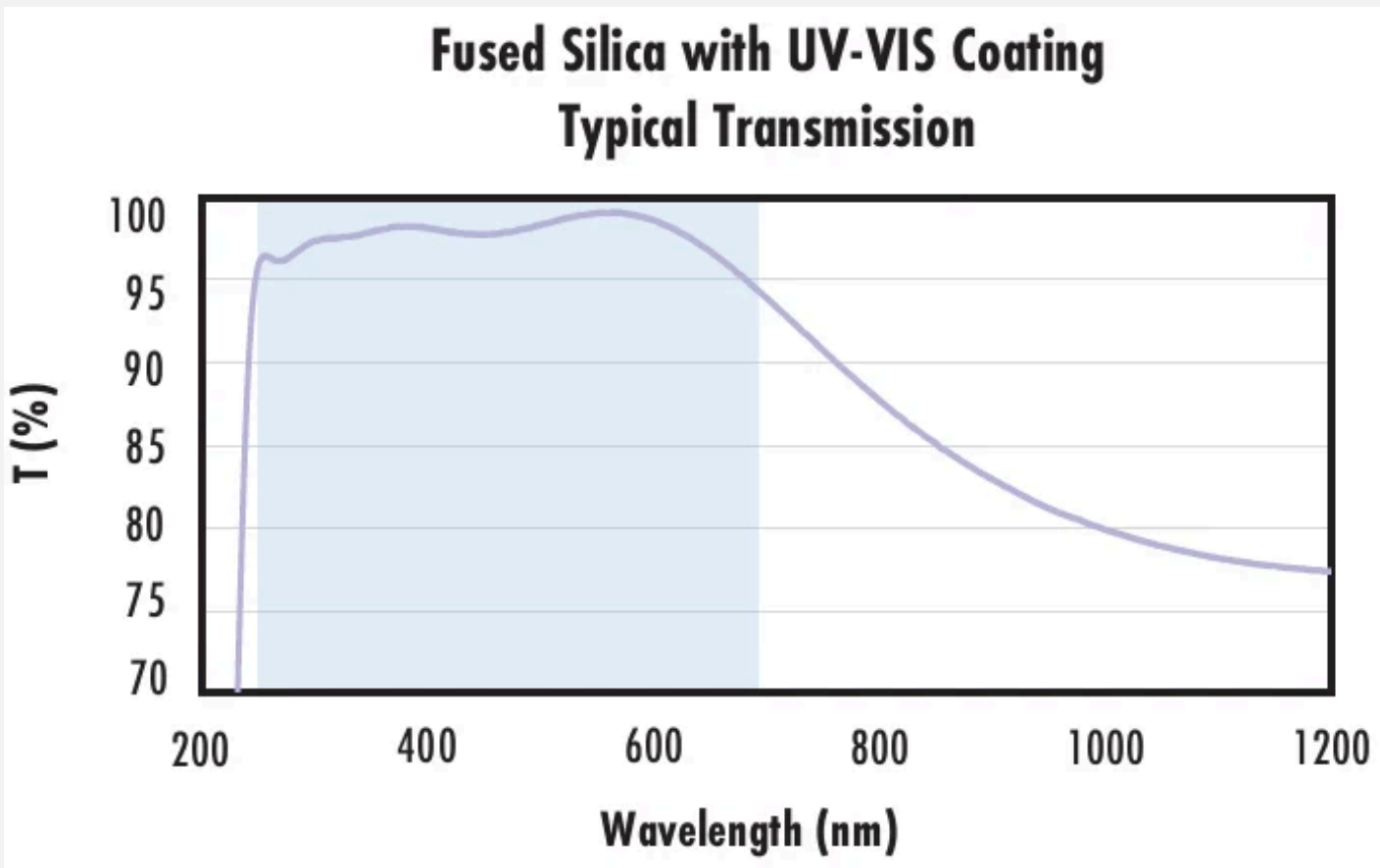

Typical transmission of a 3mm thick fused silica wind with UV-VIS (250-700nm) coating at 0° AOI.

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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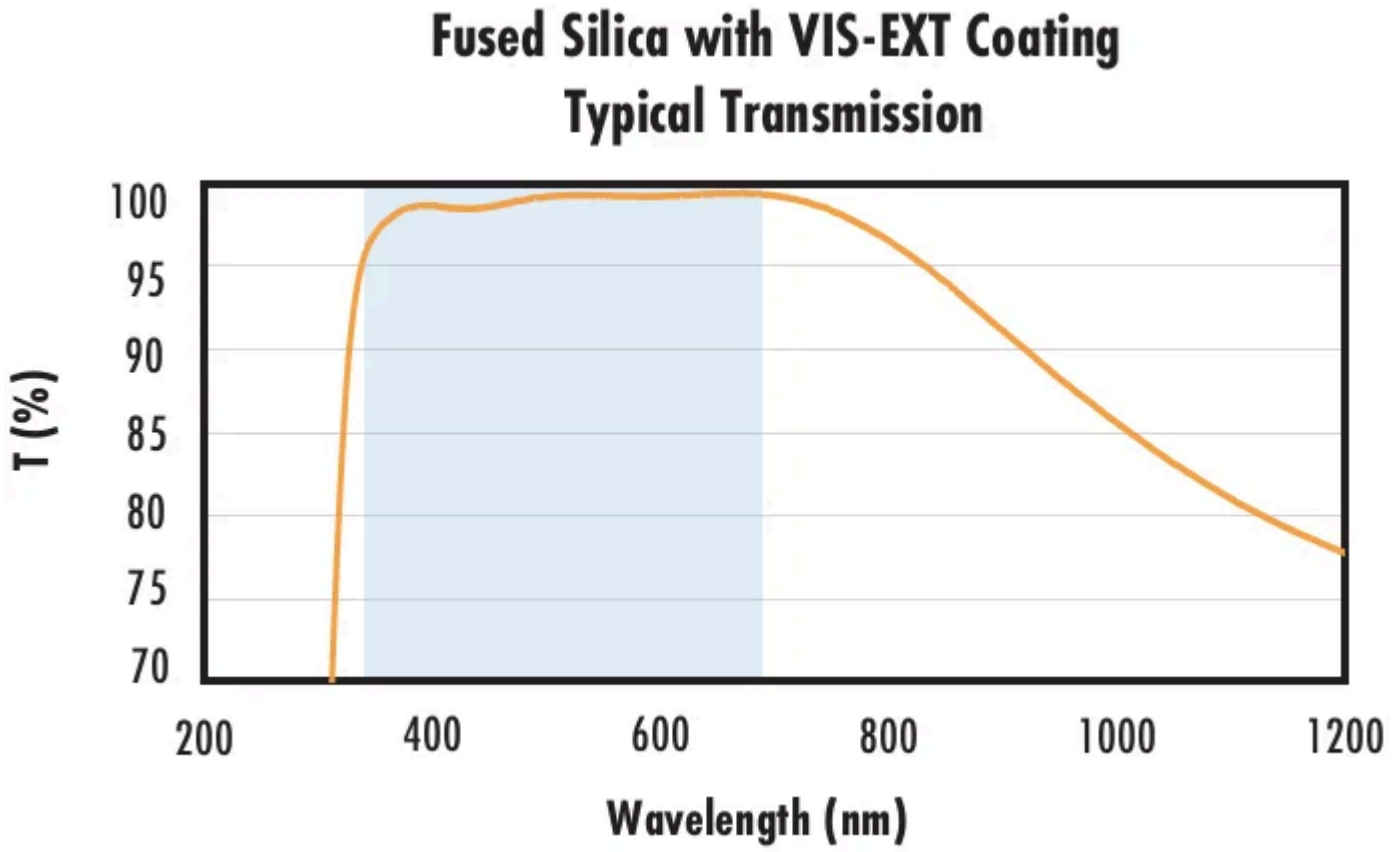

Typical transmission of a 3mm thick fused silica wind with VIS-EXT (350-700nm) coating at 0° AOI.

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.

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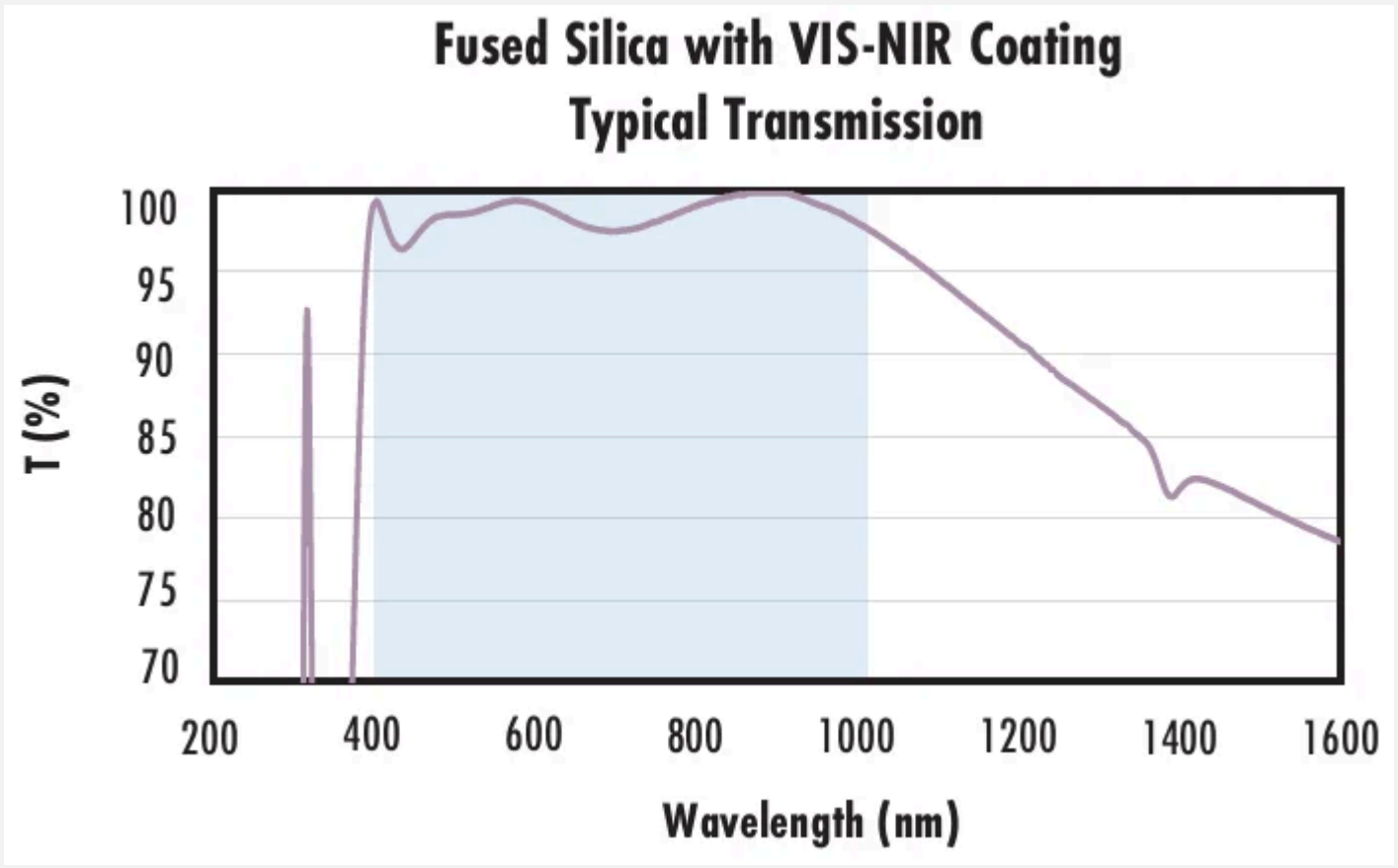

Typical transmission of a 3mm thick fused silica wind with VIS-NIR (400-1000nm) coating at 0° AOI.

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

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

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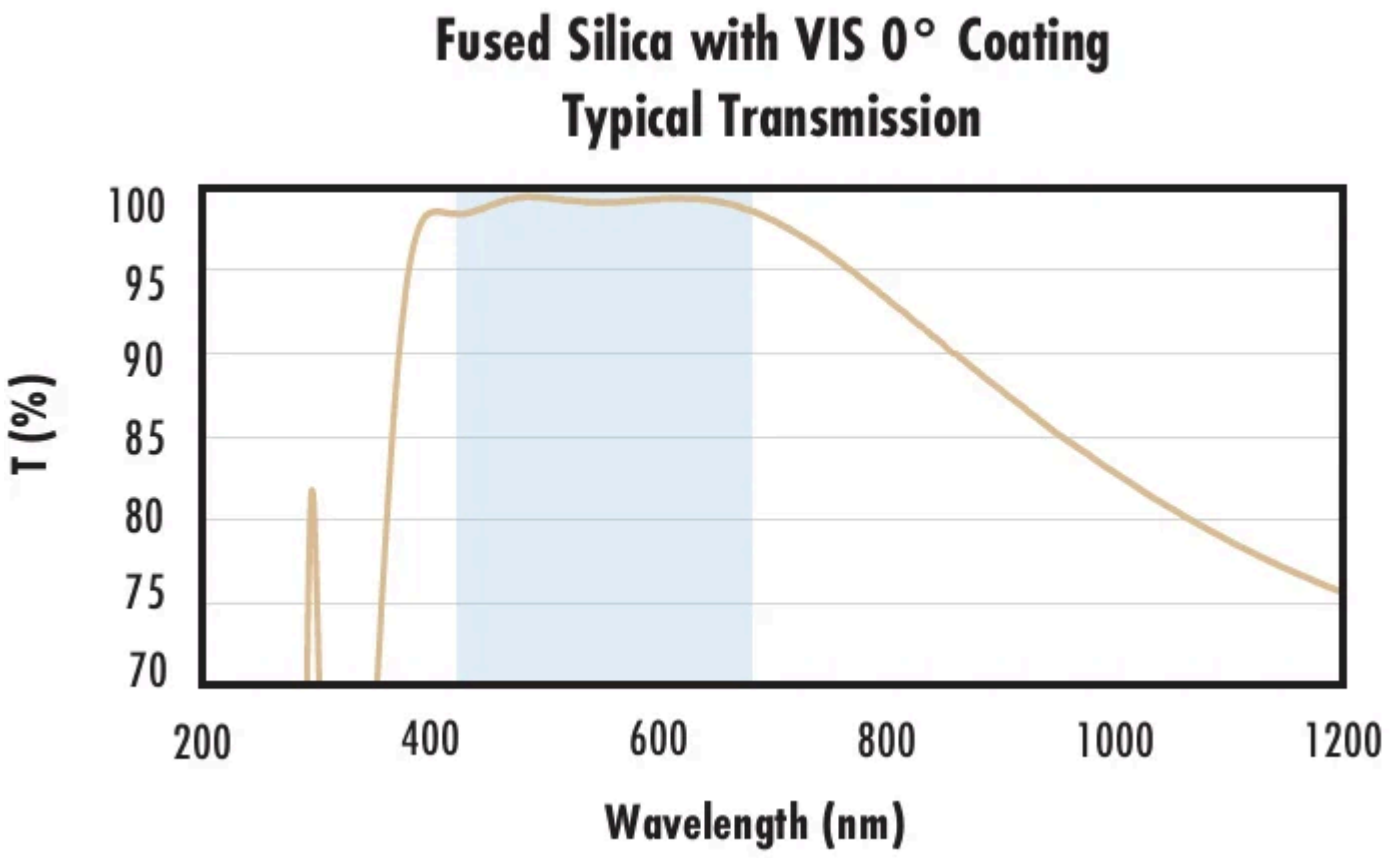

Typical transmission of a 3mm thick fused silica wind with VIS 0° (425-675nm) coating at 0° AOI.

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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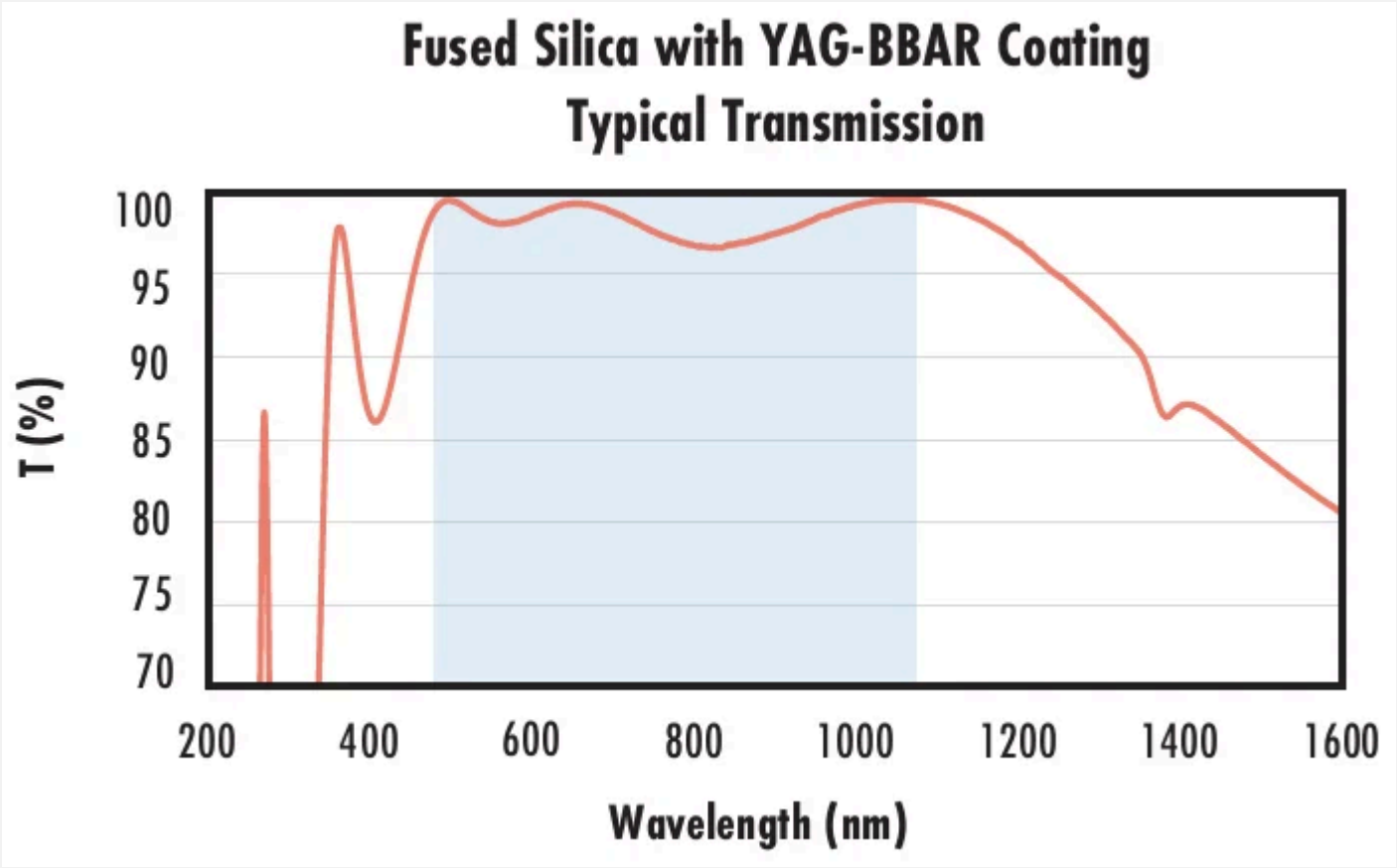

Typical transmission of a 3mm thick fused silica wind with YAG-BBAR (500-1100nm) coating at 0° AOI.

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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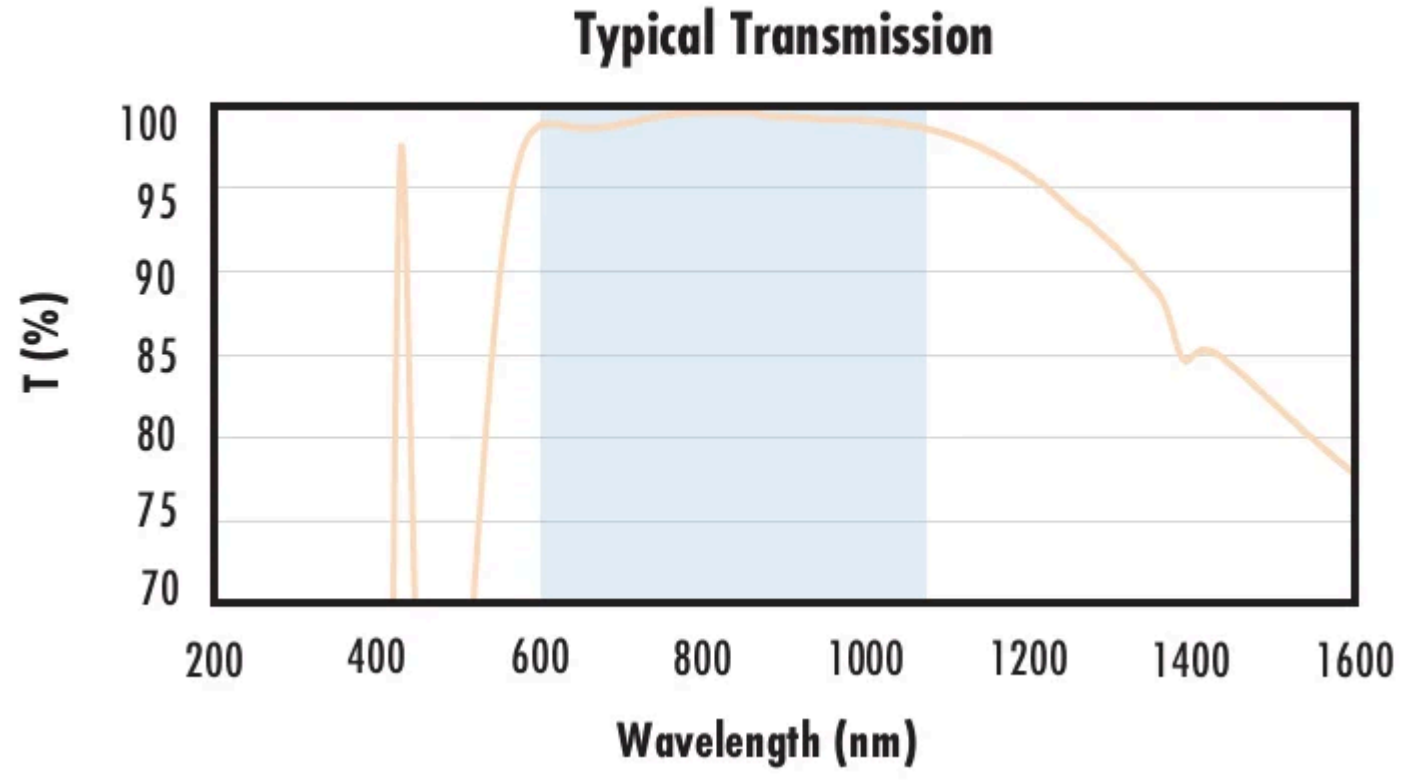

Typical transmission of a 3mm thick fused silica wind with NIR I (600 - 1050nm) coating at 0° AOI.

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

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

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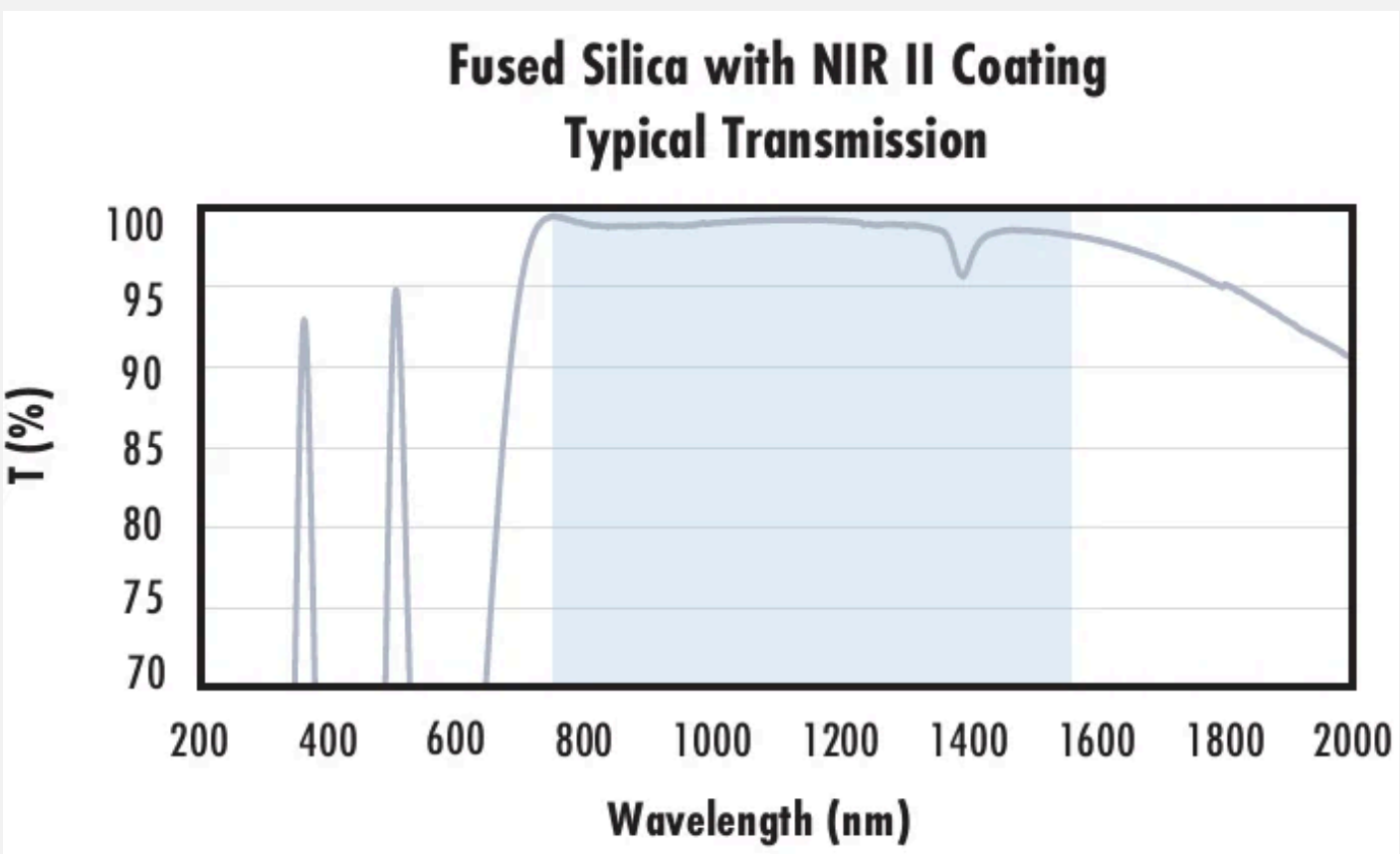

Typical transmission of a 3mm thick fused silica wind with NIR II (750 - 1550nm) coating at 0° AOI.

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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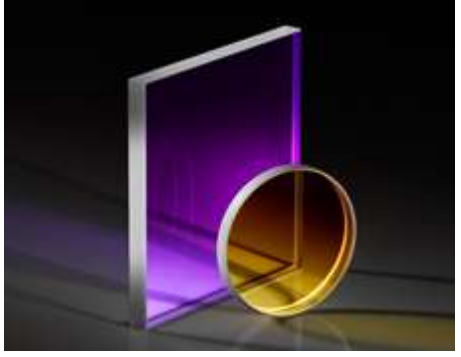
Related Products

λ/10 UV Fused Silica Windows



1λ UV Fused Silica Windows

C, S, and T-Mount Circular Optic Mounts

PUROSOL™ Optical Cleaner

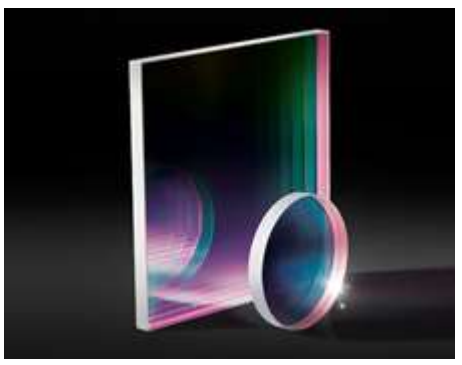
Frequently Purchased Together

#47-009 – 25mm VIS, 50R/50T, Non-Polarizing Cube Beamsplitter
A$499.20

Qty

#48-802 – 50.0mm Dia. x 250.0mm FL, NIR I Coated, Plano-Convex Lens
A$112.00

Qty



#86-451 – 50mm Diameter, 850nm Cut-On SWIR Longpass Filter
A$262.40

Qty

#38-900 – 50.8mm Dia. 1064nm 45°, Nd:YAG Laser Line Mirror
A$500.80

Qty

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