

TECHSPEC® 12.5mm Dia., 3mm Thick, NIR II Coated, M4 Fused Silica Window



TECHSPEC® M4 UV Fused Silica Windows

Stock **#25-654** **6 In Stock**

⊖ 1 ⊕ £108⁰⁰

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Volume Pricing	
Qty 1-5	£108.80 each
Qty 6-25	£86.40 each
Qty 26-49	£80.80 each
Need More?	Request Quote

ⓘ Prices shown are exclusive of VAT/local taxes

Product Downloads

General

Protective Window **Type:**

Glass **Type of Window:**

Physical & Mechanical Properties

Clear Aperture CA (mm):

11.25	Diameter (mm):
12.50 +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/mm²):
522.00	

Optical Properties

	Coating:
NIR II (750-1550nm)	
	Substrate: <input type="checkbox"/>
Fused Silica (Corning 7980)	
	Index of Refraction (n_d):
1.458	
	Surface Quality:
40-20	
	Transmitted Wavefront, P-V:
λ/4	
	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	
	Damage Threshold, Reference: <input type="checkbox"/>
8 J/cm ² @ 1064nm, 10ns	

Material Properties

	Density (g/cm³):
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

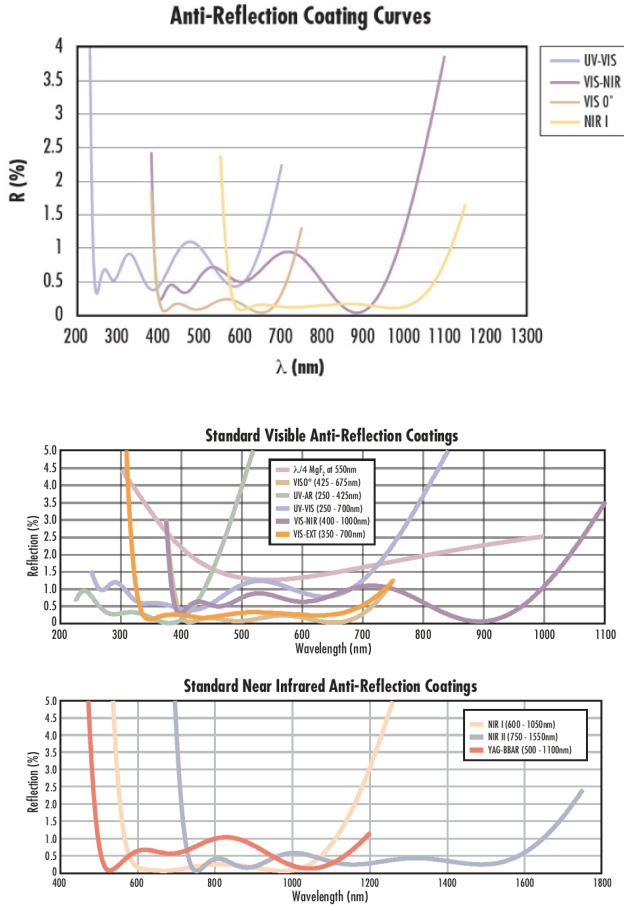
Learn more about our [custom manufacturing capabilities](#) or submit an inquiry [here](#).

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® $\lambda/4$ UV Fused Silica Windows are manufactured with 40-20 surface quality and $\lambda/4$ 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 $\lambda/4$ 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



FUSED SILICA

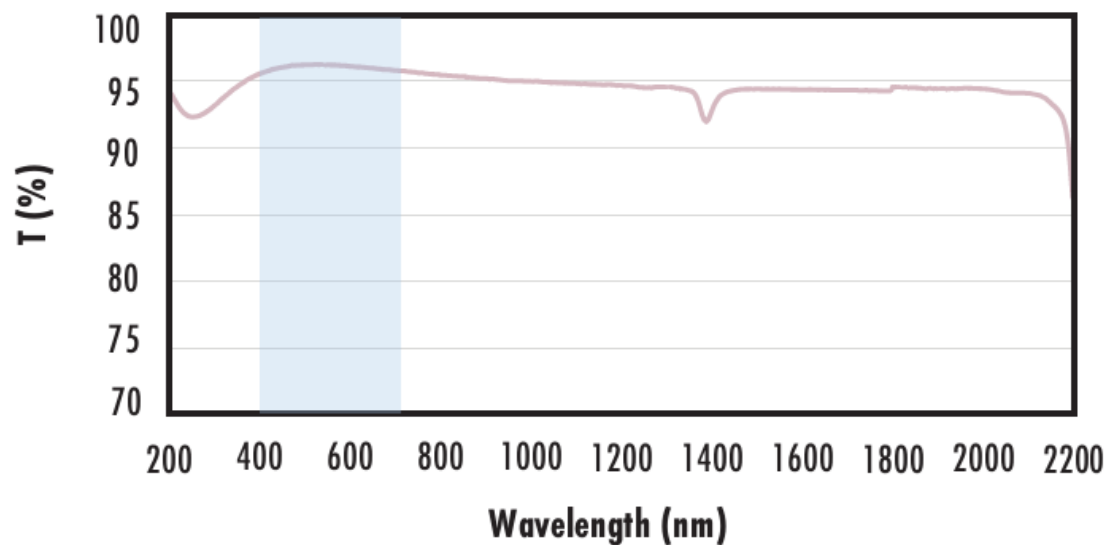
Uncoated Fused Silica Typical Transmission



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

[Click Here to Download Data](#)

Fused Silica with MgF_2 Coating Typical Transmission



Typical transmission of a 3mm thick fused silica window with MgF_2 (400-700nm) coating at 0° AOI. The blue shaded region indicates the coating design wavelength range, with the following specification:

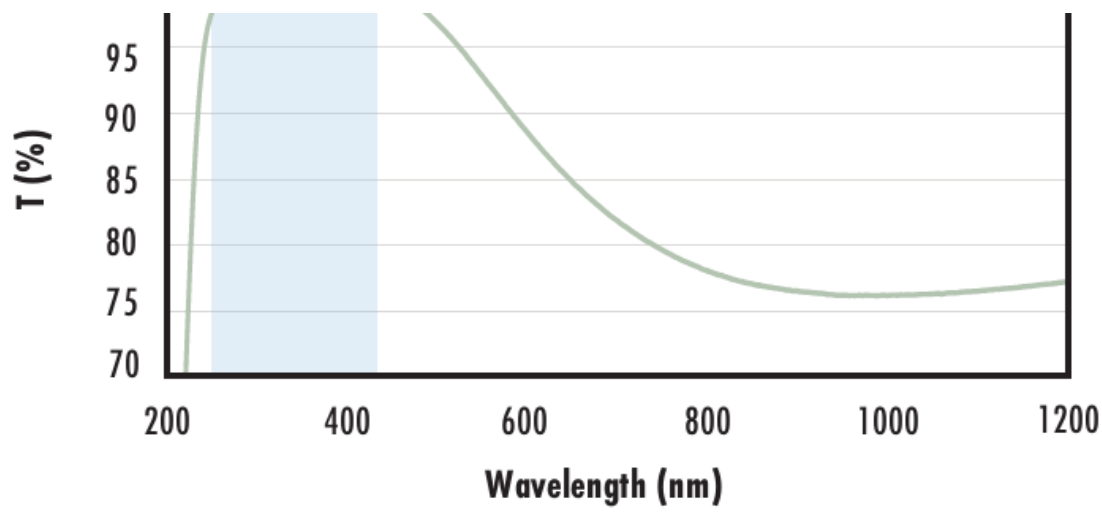
$R_{avg} \leq 1.75\%$ @ 400 - 700nm (N-BK7)

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

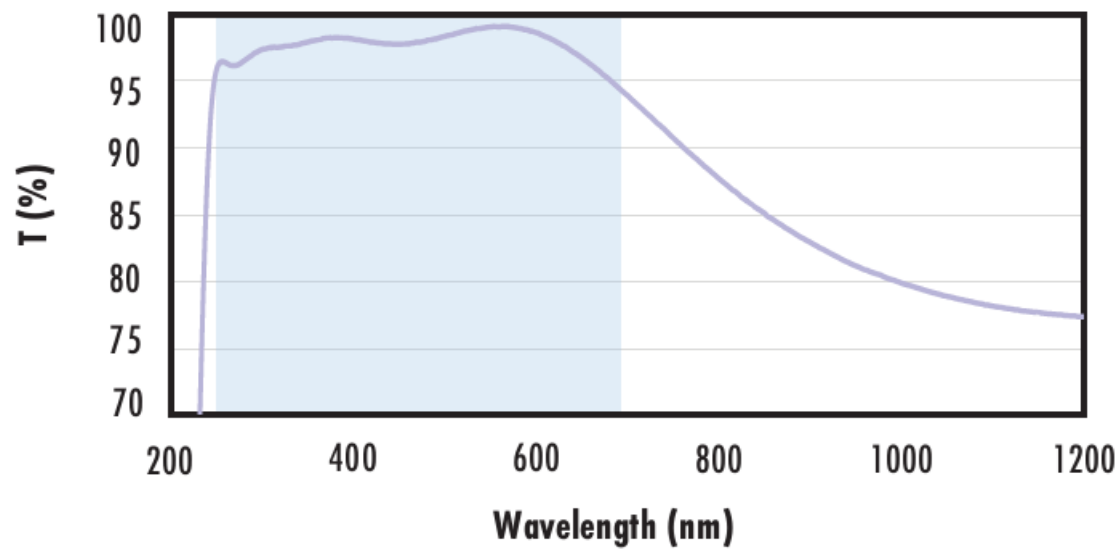
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Fused Silica with UV-AR Coating Typical Transmission





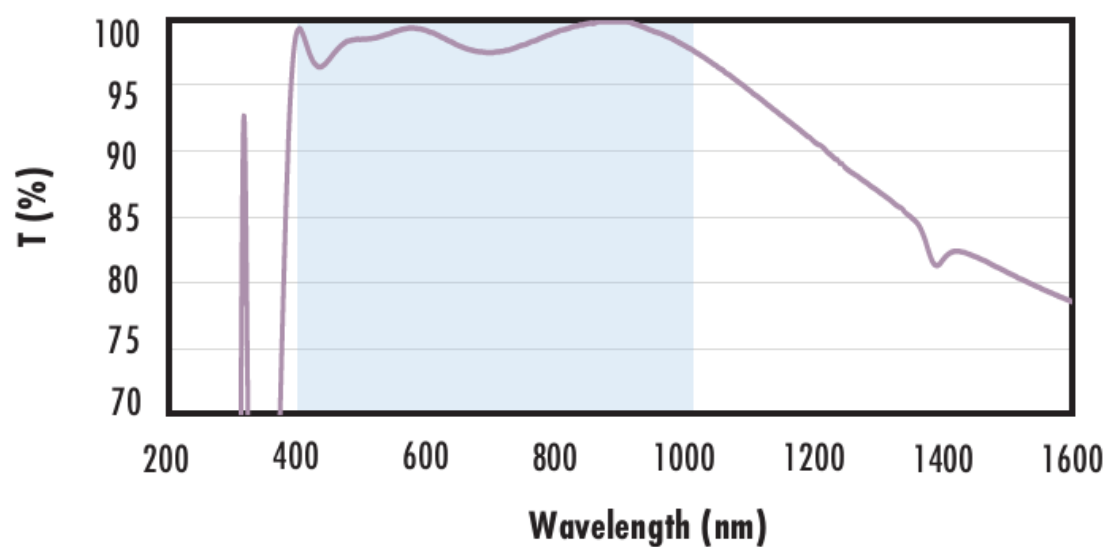
Fused Silica with UV-VIS Coating Typical Transmission



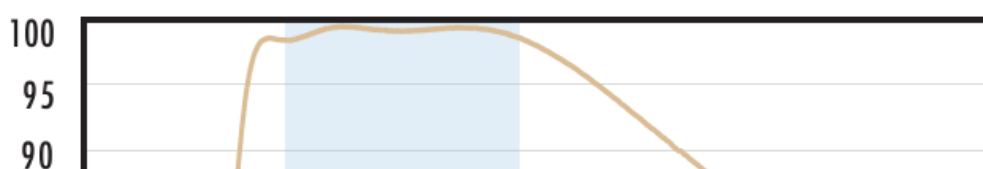
Fused Silica with VIS-EXT Coating Typical Transmission



Fused Silica with VIS-NIR Coating Typical Transmission



Fused Silica with VIS 0° Coating Typical Transmission





range, with the following specification:
 $R_{avg} \leq 0.4\% @ 425 - 675\text{nm}$
 Data outside this range is not guaranteed and is for reference only.
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**Fused Silica with YAG-BBAR Coating
 Typical Transmission**



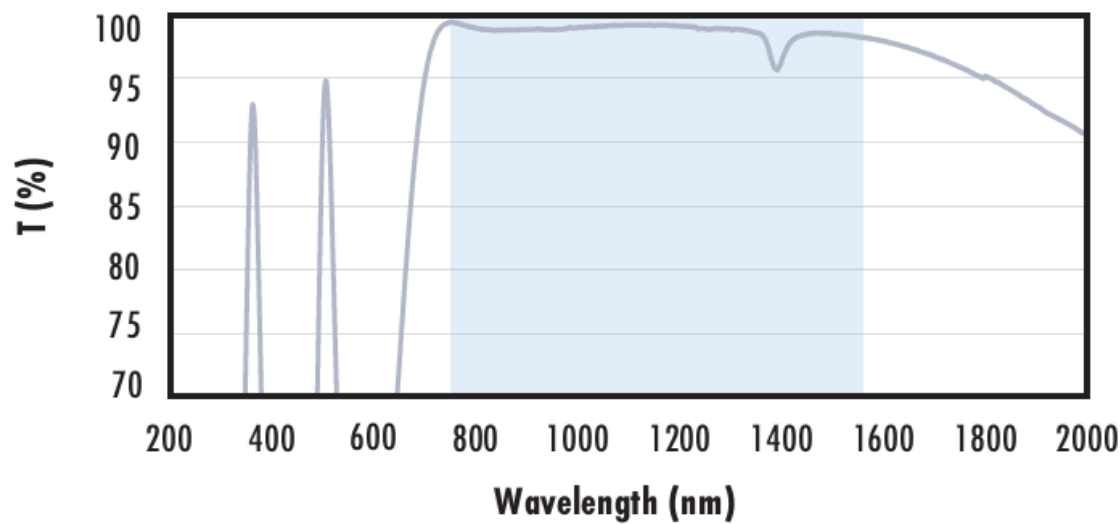
Typical transmission of a 3mm thick fused silica window with YAG-BBAR (500-1100nm) coating at 0° AOI.
 The blue shaded region indicates the coating design wavelength range, with the following specification:
 $R_{abs} \leq 0.25\% @ 532\text{nm}$
 $R_{abs} \leq 0.25\% @ 1064\text{nm}$
 $R_{avg} \leq 1.0\% @ 500 - 1100\text{nm}$
 Data outside this range is not guaranteed and is for reference only.
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**Fused Silica with NIR I Coating
 Typical Transmission**



Typical transmission of a 3mm thick fused silica window with NIR I (600 - 1050nm) coating at 0° AOI.
 The blue shaded region indicates the coating design wavelength range, with the following specification:
 $R_{avg} \leq 0.5\% @ 600 - 1050\text{nm}$
 Data outside this range is not guaranteed and is for reference only.
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**Fused Silica with NIR II Coating
 Typical Transmission**



Typical transmission of a 3mm thick fused silica window with NIR II (750 - 1550nm) coating at 0° AOI.
 The blue shaded region indicates the coating design wavelength range, with the following specification:
 $R_{abs} \leq 1.5\% @ 750 - 800\text{nm}$
 $R_{abs} \leq 1.0\% @ 800 - 1550\text{nm}$
 $R_{avg} \leq 0.7\% @ 750 - 1550\text{nm}$
 Data outside this range is not guaranteed and is for reference only.
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