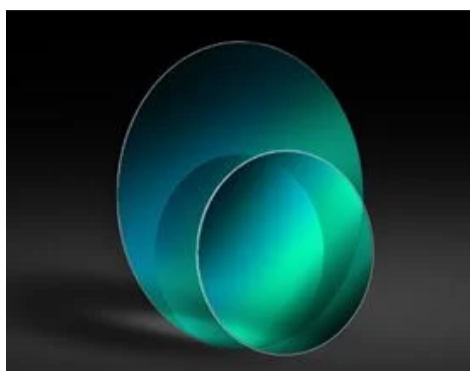


TECHSPEC® 12.5mm Diameter NIR I, Ultra-Thin N-BK7 Window

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Ultra-Thin N-BK7 Windows

Stock #22-046 **9 In Stock**

1 MRP ₹13,116

Price inclusive of all taxes

ADD TO CART

Volume Pricing	
Qty 1-5	₹13,116 each
Qty 6-25	₹10,291 each
Qty 26-49	₹9,938 each
Need More?	Request Quote

Product Downloads

- STEP:step
- Curve:pdf
- PDF Drawing:pdf
- IGES:igs
- Curve (xlsx):xlsx
- eDrawing:eprt
- EO Spec Sheet
- [Download All](#)

General

Type: Protective Window	Type of Window: Glass
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Physical & Mechanical Properties

Clear Aperture CA (mm): 11.25	Diameter (mm): 12.50 +0.00/-0.10
Thickness (mm): 0.20 ±0.025	Bevel: Protective as needed
Edges: Fine Ground	Parallelism (arcsec): <30
Poisson's Ratio: 0.21	Young's Modulus (GPa): 82
Knoop Hardness (kg/mm²): 610.00	

Optical Properties

Coating: NIR I (600-1050nm)	Substrate: N-BK7
Index of Refraction (n_d): 1.516	Surface Quality: 20-10
Transmitted Wavefront, P-V: λ/2	Abbe Number (v_d): 64.17
Coating Specification: R _{avg} ≤0.5% @ 600 - 1050nm	Wavelength Range (nm): 600 - 1050
Damage Threshold, By Design: 7 J/cm ² @ 1064nm, 10ns	

Material Properties

Density 2.51
(g/cm³):

Coefficient of Thermal Expansion CTE (10⁻⁶/°C): 7.1 (-30 to +70°C)
8.3 (+20 to +300°C)

Regulatory Compliance

RoHS 2015: [Compliant](#)

Certificate of Conformance: [View](#)

Reach 235: [Compliant](#)

Country of Origin: Japan

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

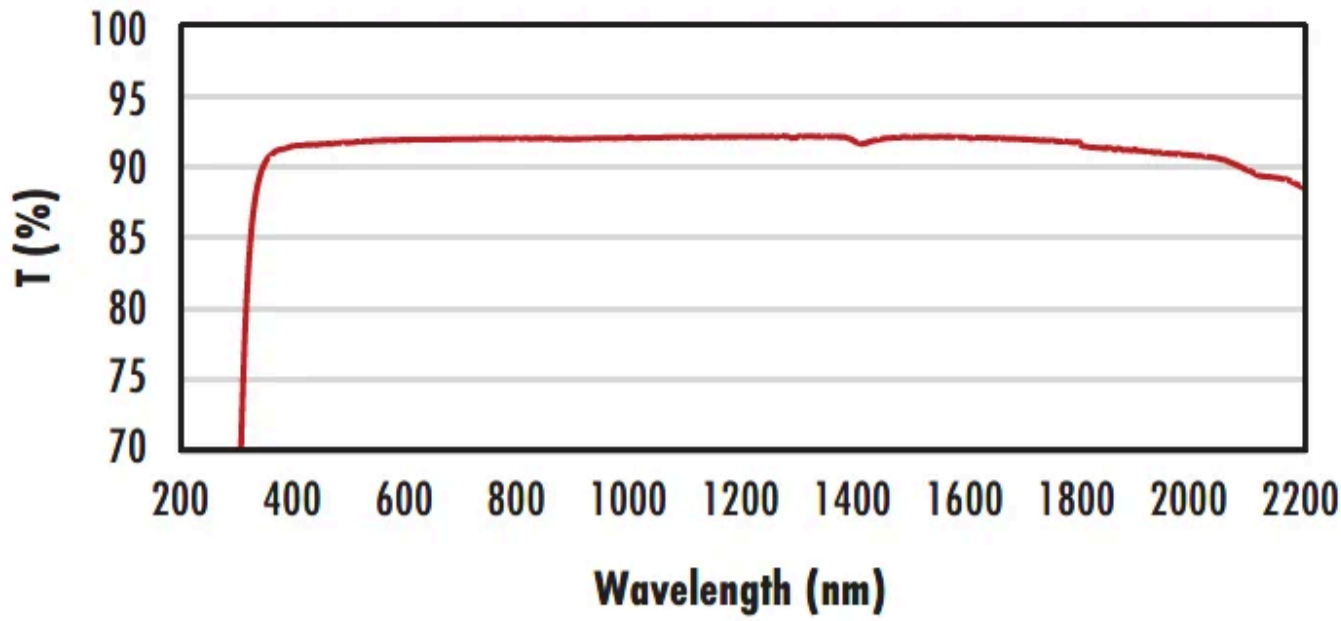
- Ultra-Thin 0.20mm Thickness
- Precision N-BK7 Substrate
- Extremely Lightweight

TECHSPEC® Ultra-Thin N-BK7 Windows are our thinnest windows available and are at least 1/10 the thickness of our traditional N-BK7 windows. Their extremely thin designs make them ideal for both weight and size-sensitive applications. Additionally, their high tolerance design yields minimal beam distortion and scatter. TECHSPEC® Ultra-Thin N-BK7 Windows are available uncoated or with a MgF2 anti-reflection coating. For custom sizes or coating options, please contact our [Sales Department](#).

Note: The Ultra-Thin N-BK7 Windows are very fragile. Handle these windows with care.

Technical Information

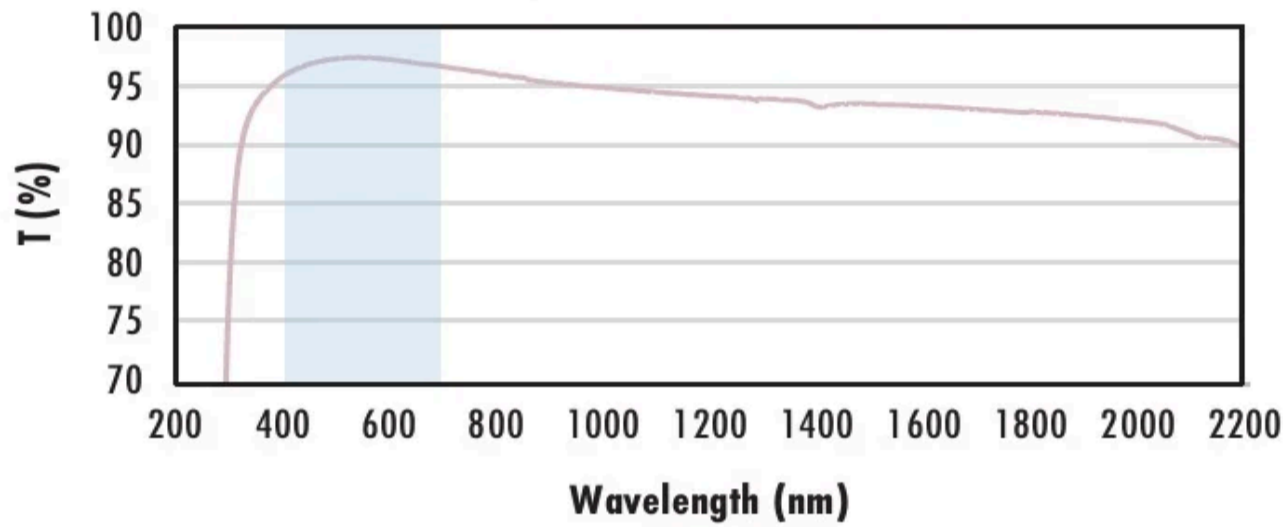
Uncoated N-BK7 Typical Transmission



Typical transmission of a 3mm thick, uncoated N-BK7 window across the UV - NIR spectra.

[Click Here to Download Data](#)

N-BK7 with MgF₂ Coating Typical Transmission



Typical transmission of a 3mm thick N-BK7 window with MgF₂ (400-700nm) coating at 0° AOI.

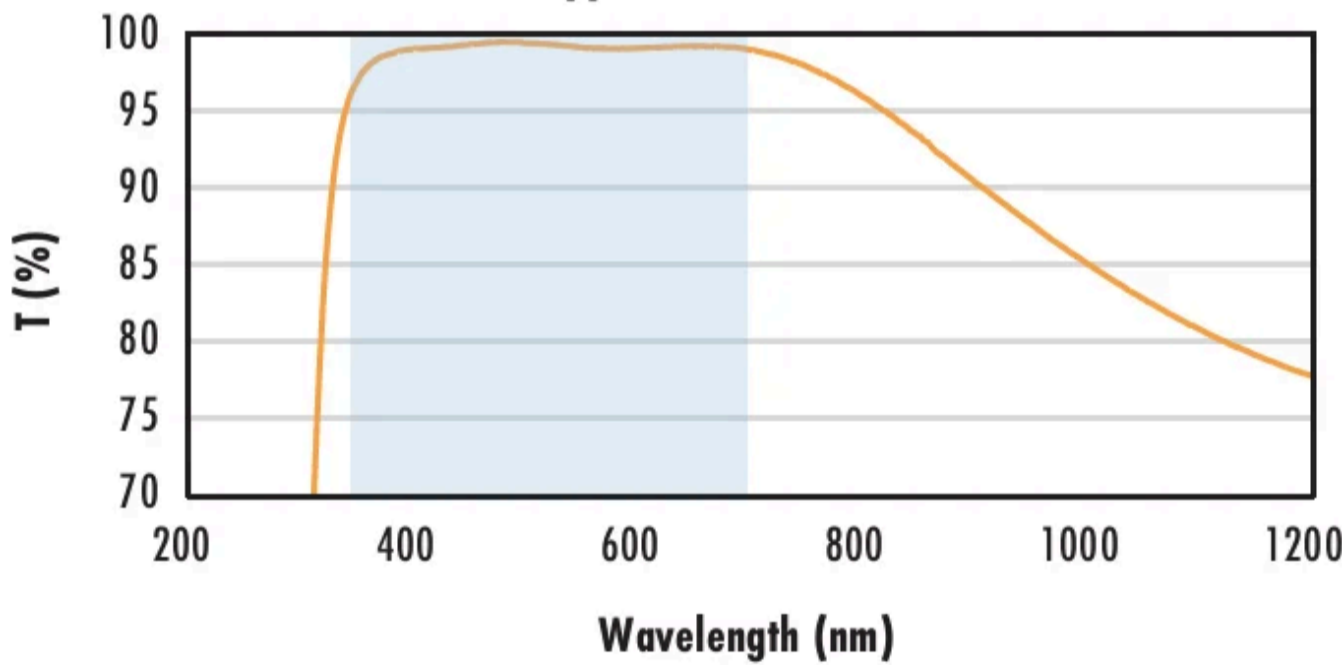
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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

[Click Here to Download Data](#)

N-BK7 with VIS-EXT Coating Typical Transmission



Typical transmission of a 3mm thick N-BK7 window with VIS-EXT (350-700nm) coating at 0° AOI.

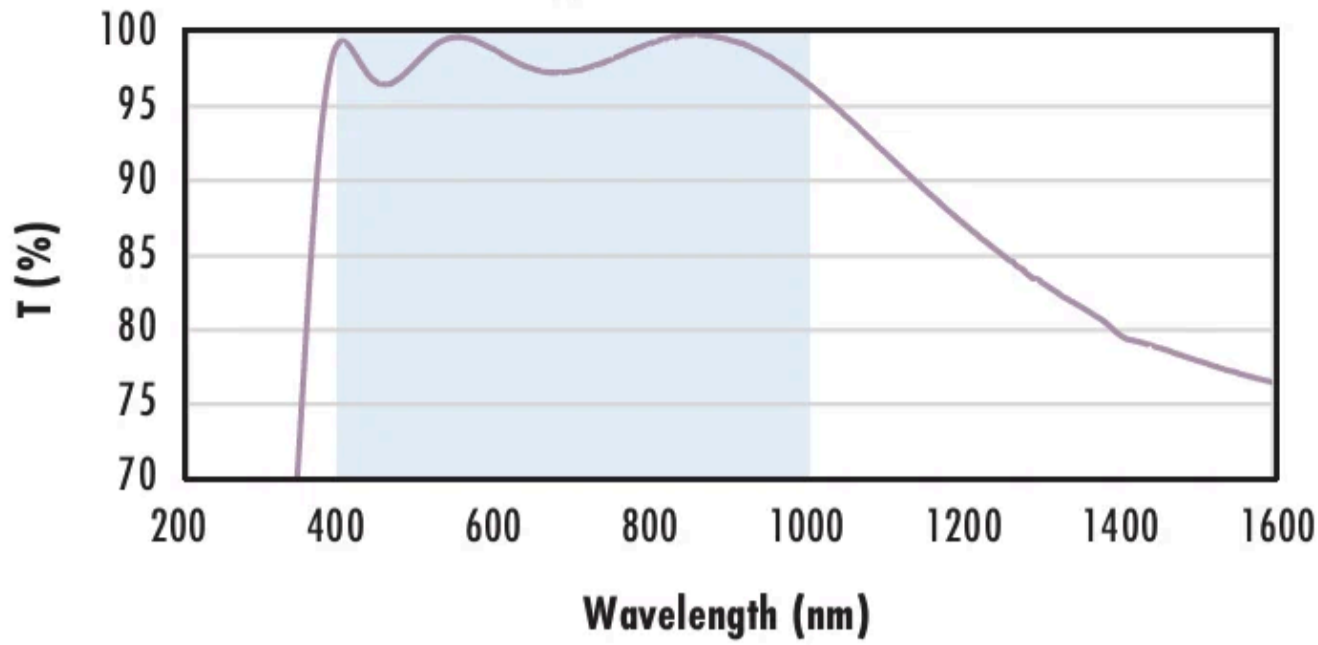
The blue shaded region indicates the coating design wavelength range, with the following specification:

$$R_{avg} \leq 0.5\% @ 350 - 700\text{nm}$$

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

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N-BK7 with VIS-NIR Coating Typical Transmission



Typical transmission of a 3mm thick N-BK7 window with VIS-NIR (400-1000nm) coating at 0° AOI.

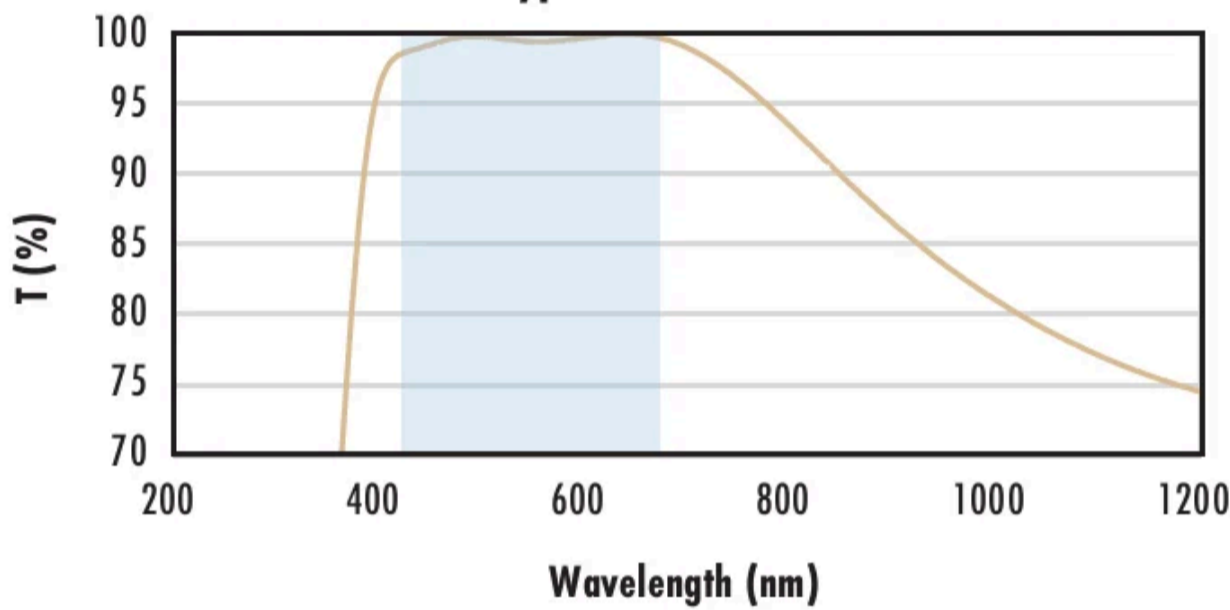
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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

[Click Here to Download Data](#)

N-BK7 with VIS 0° Coating Typical Transmission



Typical transmission of a 3mm thick N-BK7 window with 0° (425-675nm) coating at 0° AOI.

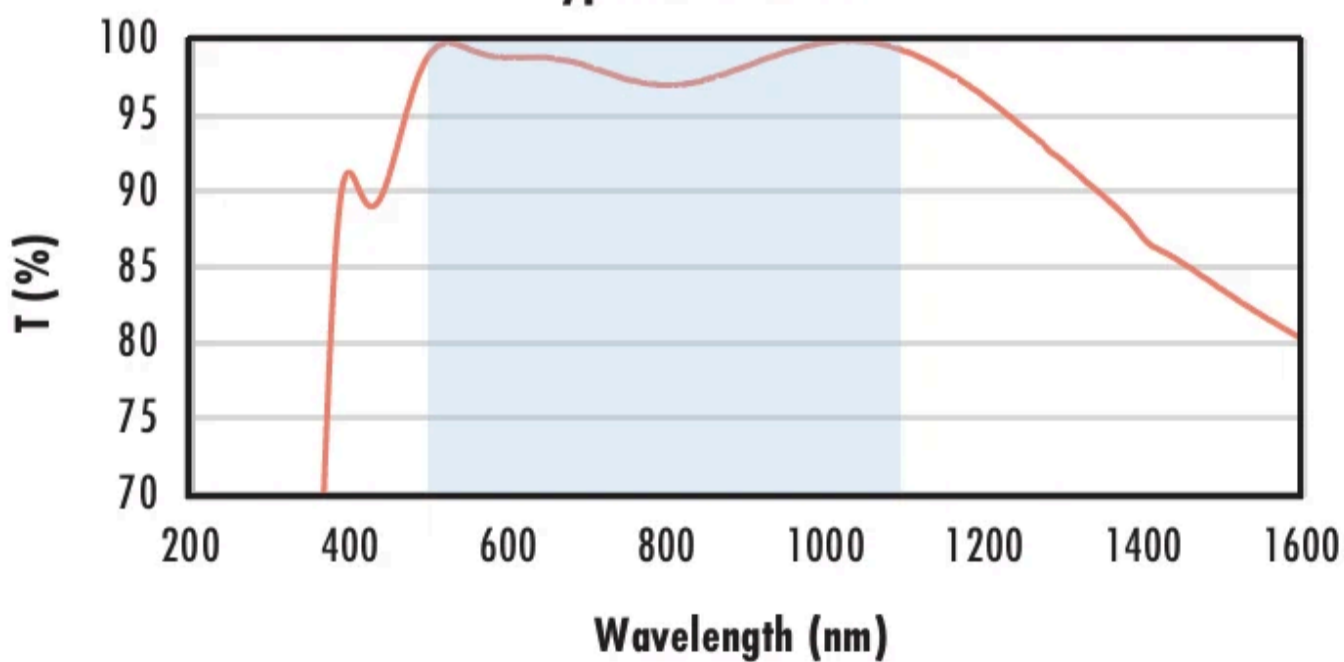
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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

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N-BK7 with YAG-BBAR Coating Typical Transmission



Typical transmission of a 3mm thick N-BK7 window with YAG-BBAR (500-1100nm) coating at 0° AOI.

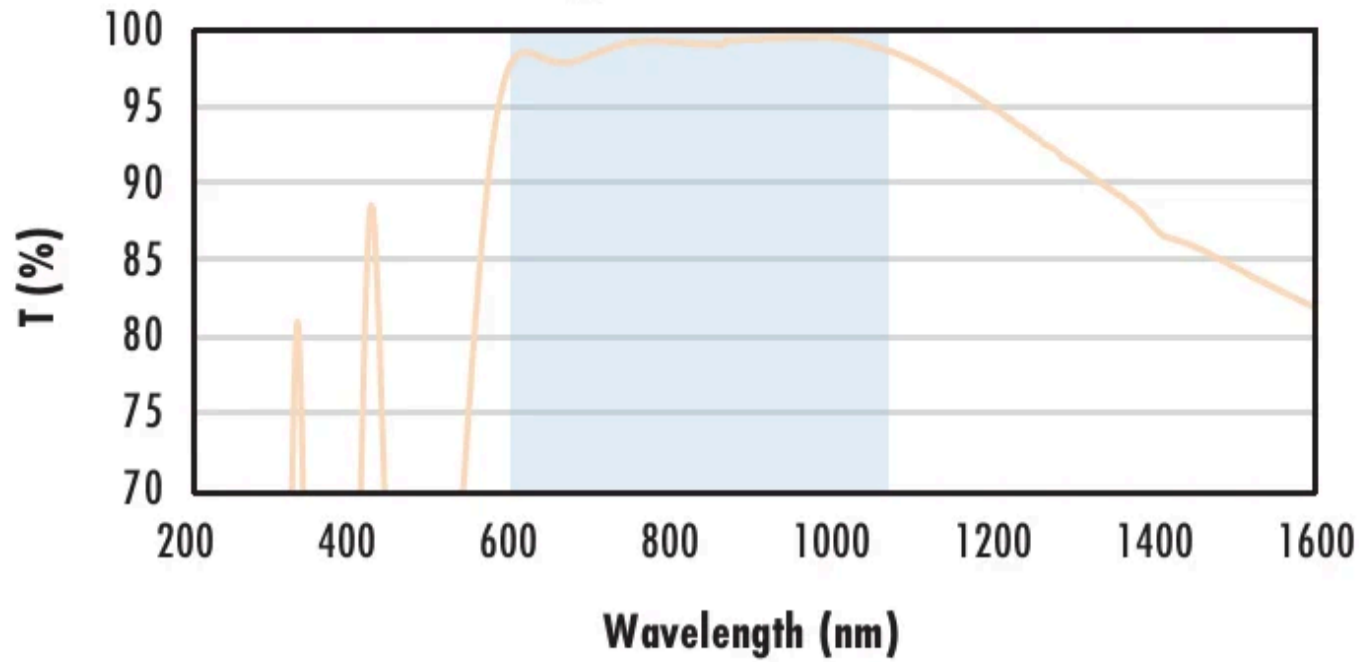
The blue shaded region indicates the coating design wavelength range, with the following specification:

- $R_{abs} \leq 0.25\% @ 532nm$
- $R_{abs} \leq 0.25\% @ 1064nm$
- $R_{avg} \leq 1.0\% @ 500 - 1100nm$

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

[Click Here to Download Data](#)

N-BK7 with NIR I Coating Typical Transmission



Typical transmission of a 3mm thick N-BK7 window with I (600 - 1050nm) coating at 0° AOI.

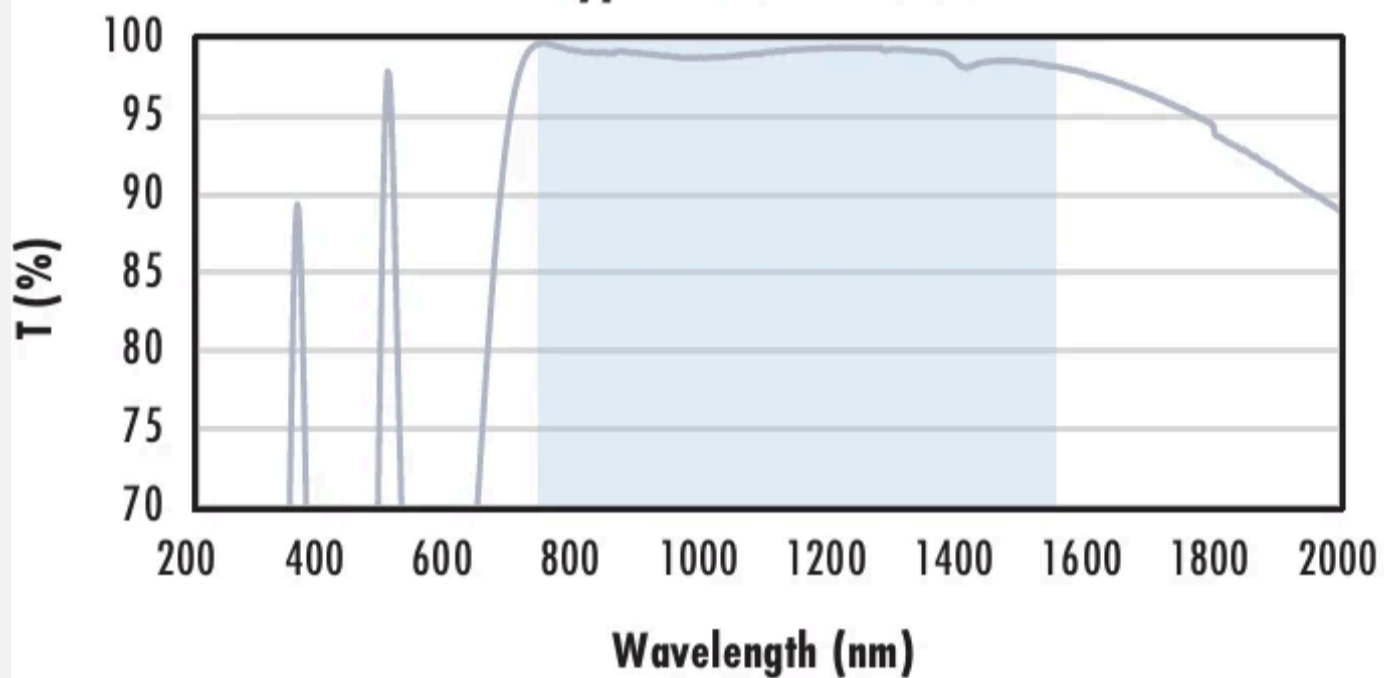
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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

[Click Here to Download Data](#)

N-BK7 with NIR II Coating Typical Transmission



Typical transmission of a 3mm thick N-BK7 window with II (750 - 1550nm) coating at 0° AOI.

The blue shaded region indicates the coating design wavelength range, with the following specification:

$$R_{abs} \leq 1.5\% @ 750 - 800nm$$

$$R_{abs} \leq 1.0\% @ 800 - 1550nm$$

$$R_{avg} \leq 0.7\% @ 750 - 1550nm$$

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

[Click Here to Download Data](#)

Frequently Purchased Together



#49-356 - 25mm Dia. x 50mm FL,
VIS-NIR Coated, Achromatic Lens
₹13,721

Qty



#54-604 - 4.4" x 8.4" Box (280
Sheets), Kimberly-Clark Wipes
₹1,142

Qty

Resources

Media Type

APPLICATION NOTE

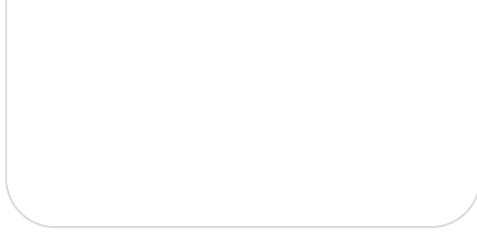
Anti-Reflection
(AR) Coatings

APPLICATION NOTE

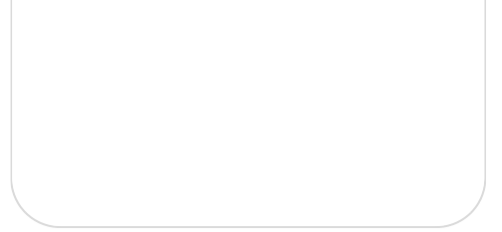
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Displacement
Calculator

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- Video
- Glossary
- FAQ



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