

TECHSPEC®

75mm Dia., 4mm Thick, VIS-EXT Coated, λ/4 N-BK7 Window



Stock #15-795 **6 In Stock**

1 **MRP ₹24,719**

Price inclusive of all taxes

ADD TO CART

| Volume Pricing | |
|----------------|-------------------------------|
| Qty 1-5 | ₹24,719 each |
| Qty 6-25 | ₹19,774 each |
| Qty 26-49 | ₹18,564 each |
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| 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 |
|--------------------------------|------------------------------|

Physical & Mechanical Properties

| | |
|--------------------------------------|---|
| Clear Aperture CA (mm): 67.50 | Diameter (mm): 75.00 +0.0/-0.25 |
| Thickness (mm): 4.00 ±0.20 | Parallelism (arcmin): <1 |
| Bevel: Protective as needed | Clear Aperture (%): 90 |
| Edges: Fine Ground | Poisson's Ratio: 0.21 |
| Young's Modulus (GPa): 82 | Knoop Hardness (kg/mm²): 610.00 |

Optical Properties

| | |
|---|--|
| Coating: VIS-EXT (350-700nm) | Substrate: N-BK7 |
| Index of Refraction (n_d): 1.516 | Surface Quality: 60-40 |
| Abbe Number (v_d): 64.17 | Coating Specification: R _{avg} <0.5% @ 350 - 700nm |
| Wavelength Range (nm): 350 - 700 | Surface Flatness (P-V): λ/4 |
| Damage Threshold, By Design: 5 J/cm ² @ 532nm, 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 253: [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

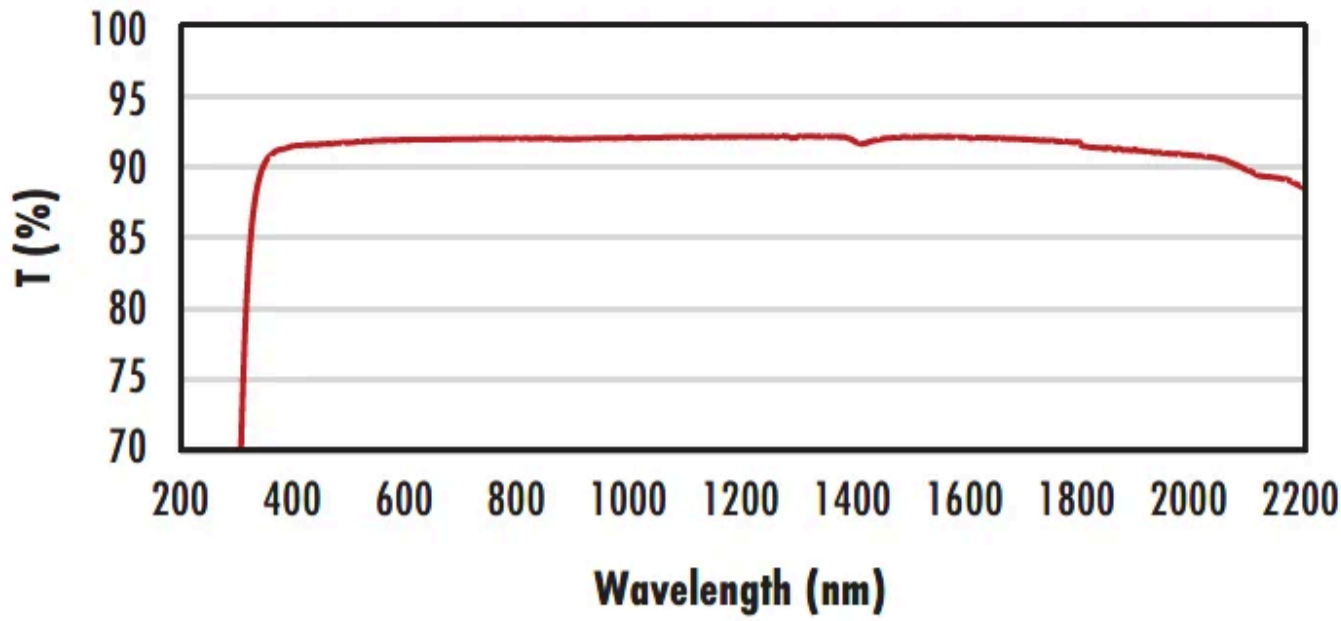
- Circular and Rectangular Sizes from 2mm to 200mm
- 8 Broadband Anti-Reflection Coating Options Available
- World's Largest Selection of Standard N-BK7 Windows
- Also Available with [Ultra-Thin N-BK7 Windows](#)

TECHSPEC® λ/4 N-BK7 Precision Windows are ideally suited for industrial and low-power laser applications. The high tolerance design yields minimal beam distortion and scatter. Broadband coating options extend the range of these precision windows through the visible and near-infrared spectra. TECHSPEC® λ/4 N-BK7 Precision Windows are offered in circular and rectangular sizes ranging from 2mm to 200mm.

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

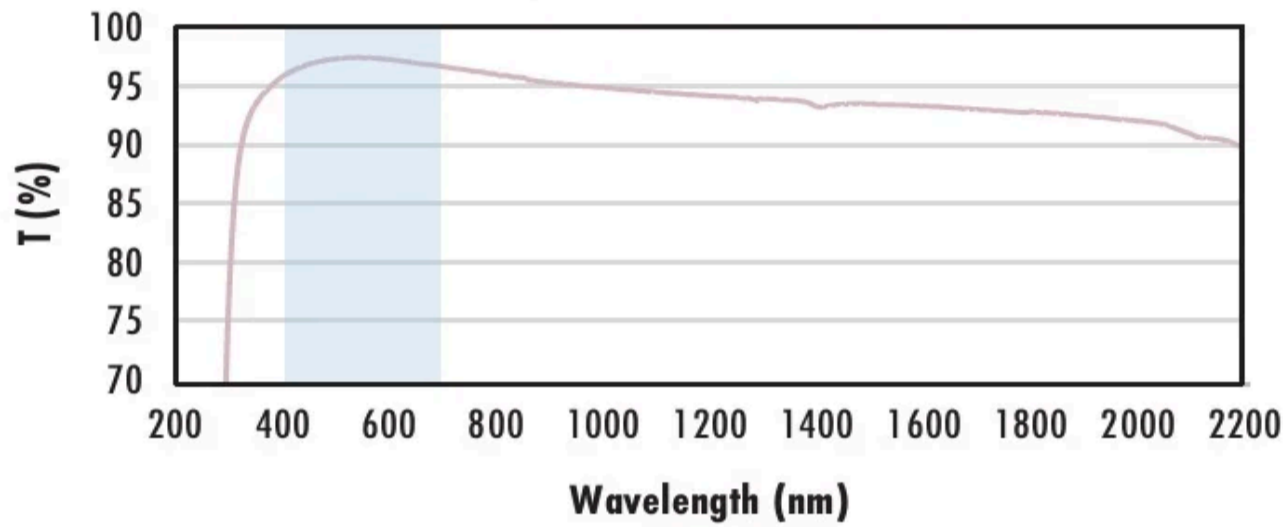
Uncoated N-BK7 Typical Transmission



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.

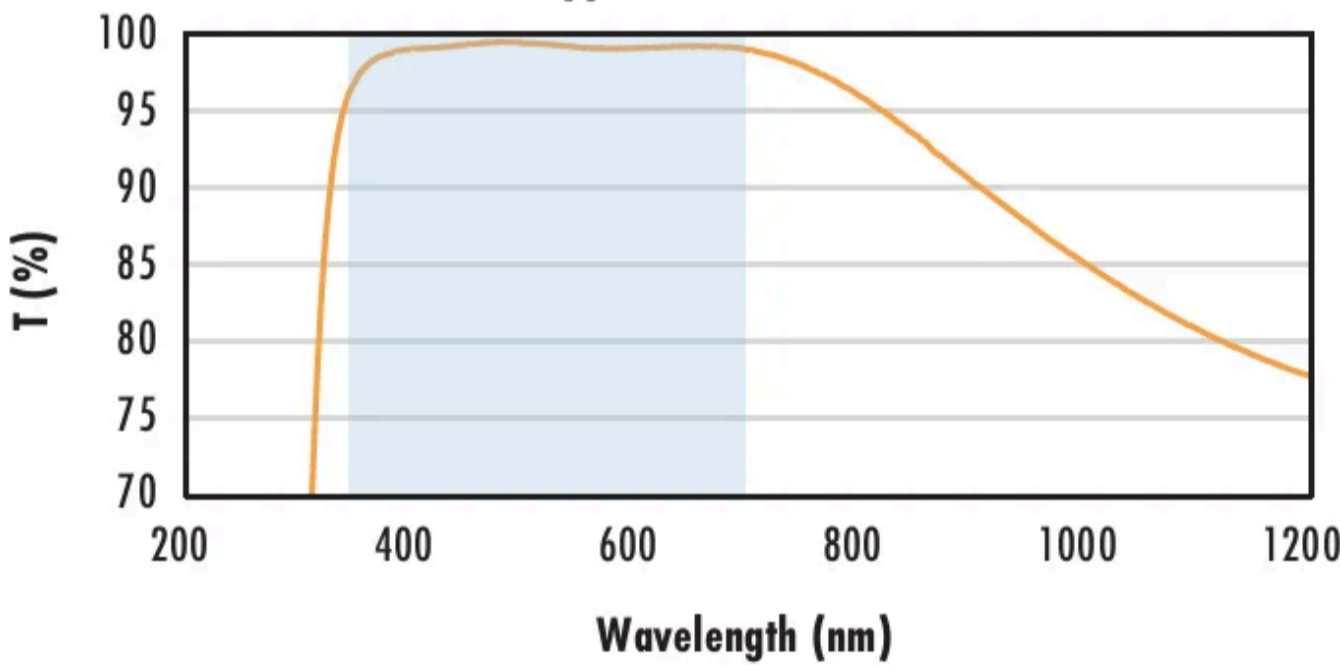
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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.

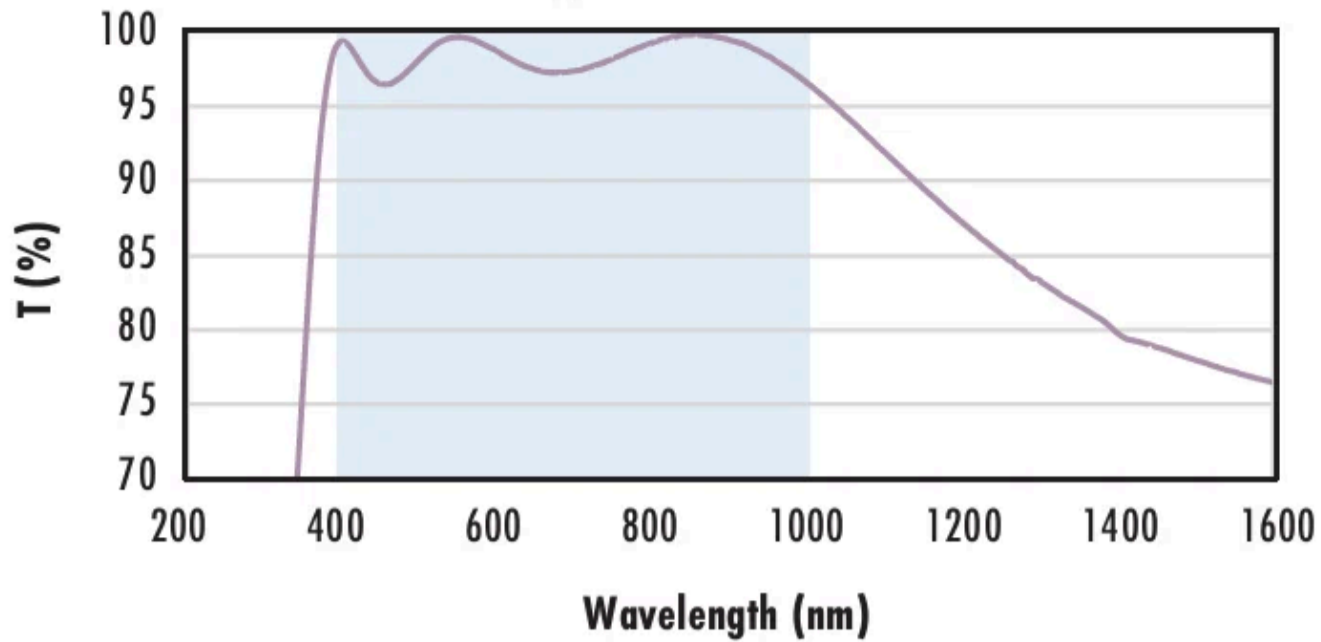
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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

[Click Here to Download Data](#)

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:

$$R_{abs} \leq 0.25\% \text{ @ } 880\text{nm}$$

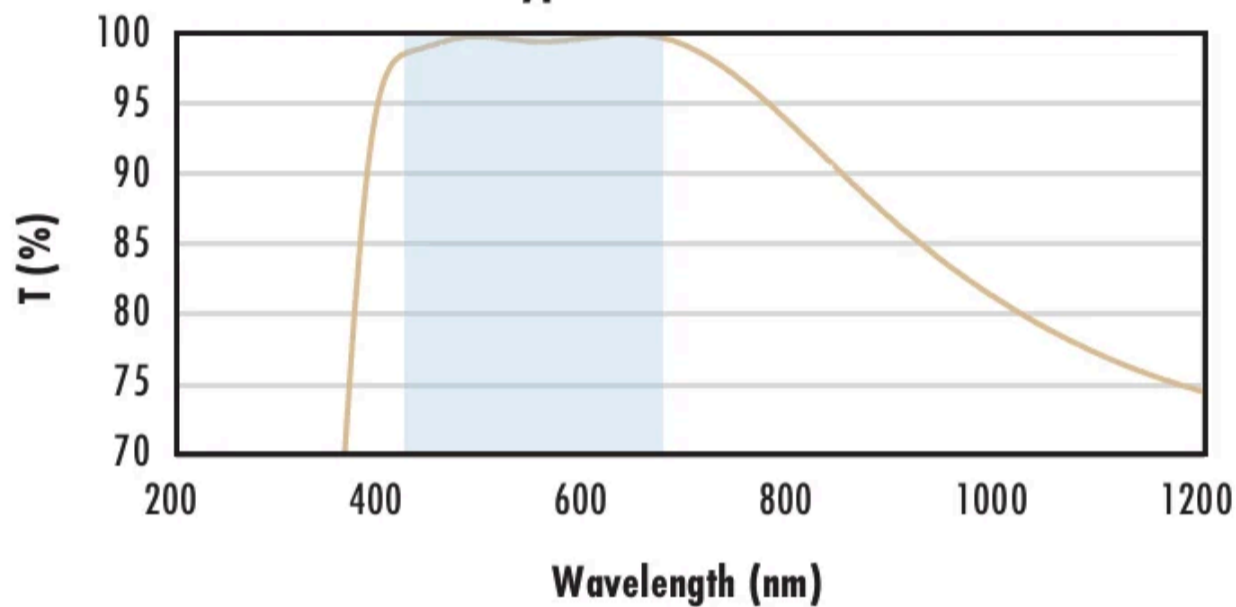
$$R_{avg} \leq 1.25\% \text{ @ } 400 - 870\text{nm}$$

$$R_{avg} \leq 1.25\% \text{ @ } 890 - 1000\text{nm}$$

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.

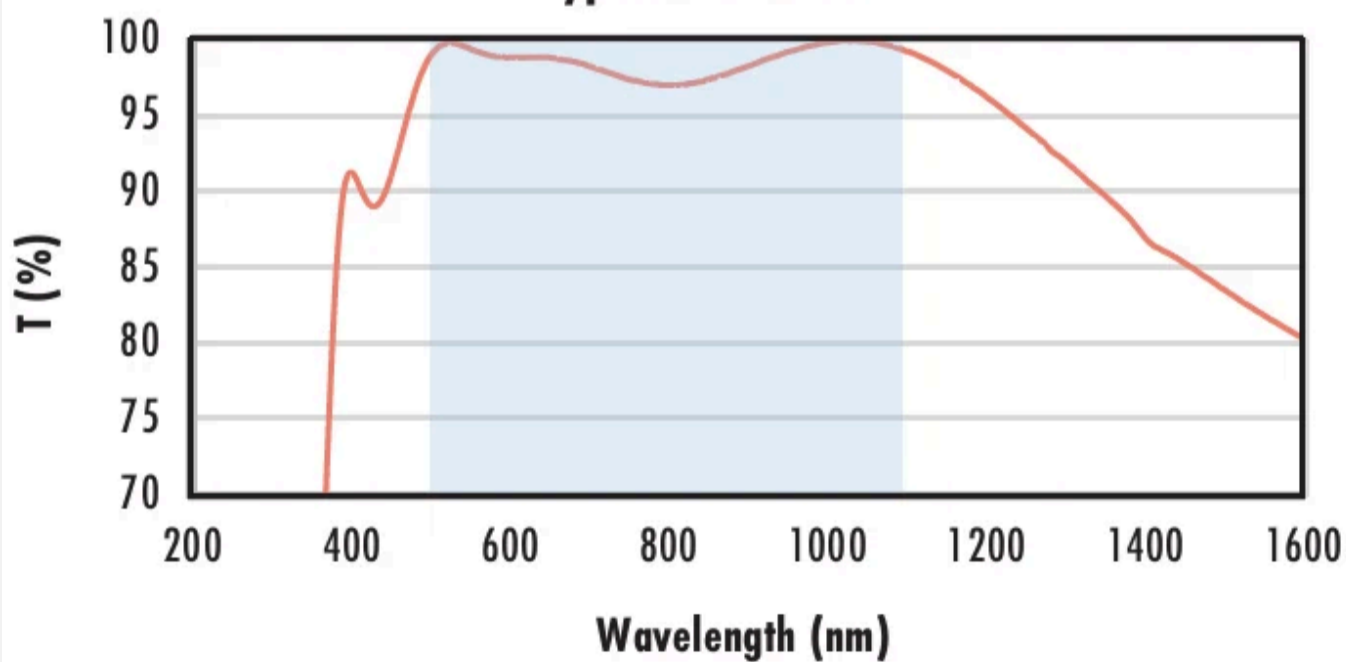
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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

[Click Here to Download Data](#)

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:

$$R_{abs} \leq 0.25\% \text{ @ } 532\text{nm}$$

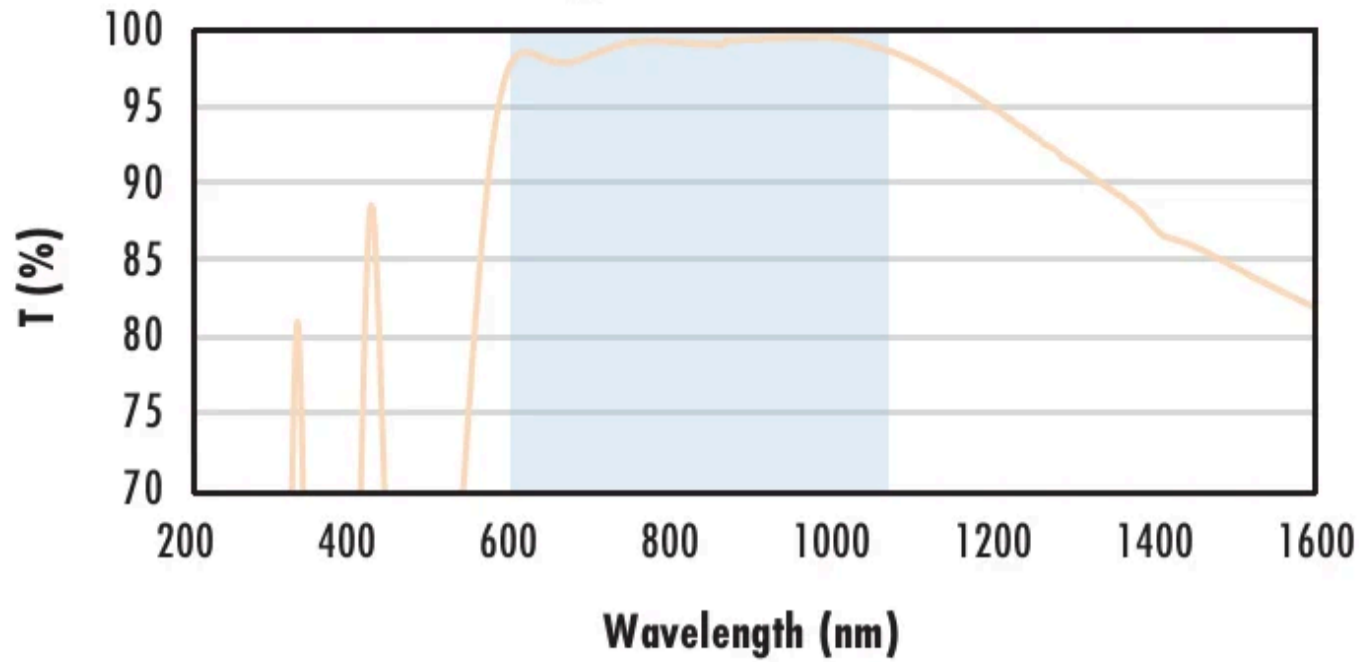
$$R_{abs} \leq 0.25\% \text{ @ } 1064\text{nm}$$

$$R_{avg} \leq 1.0\% \text{ @ } 500 - 1100\text{nm}$$

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.

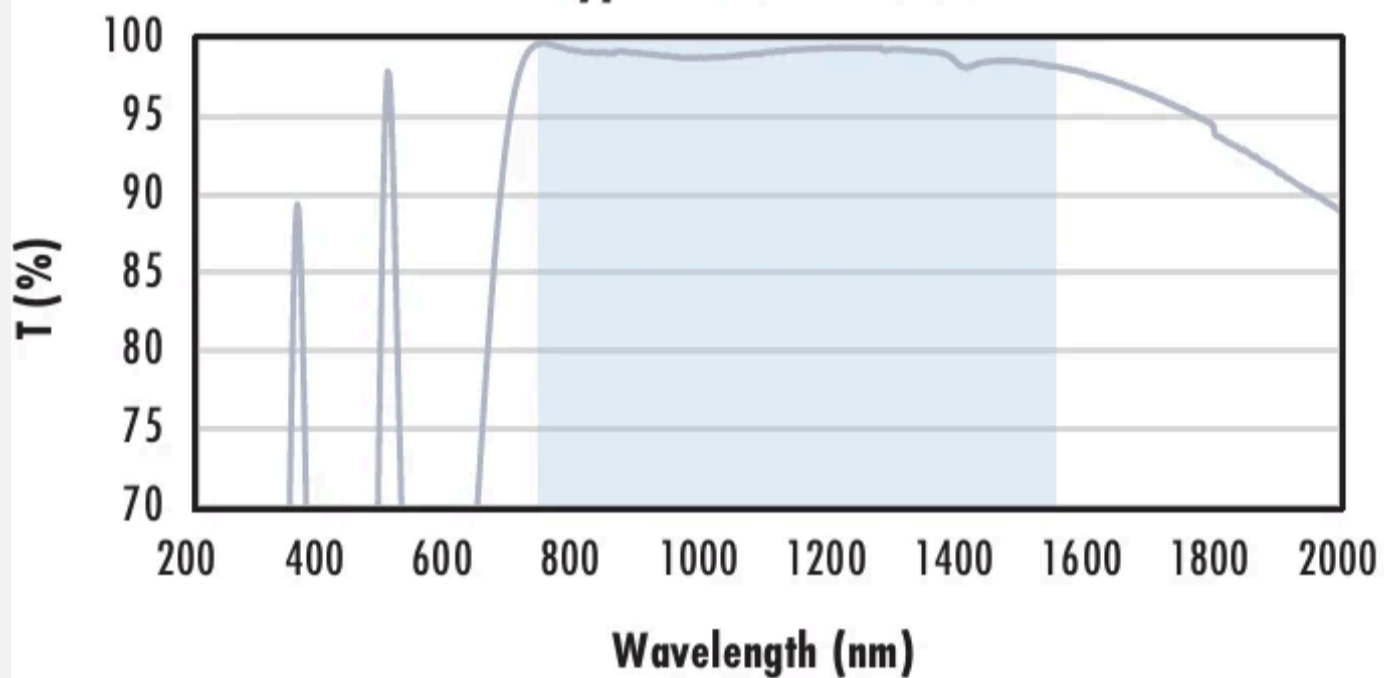
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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](#)

Related Products



Cage System Optical Lens Mounts



C, S, and T-Mount Circular Optic Mounts



PUROSOL™ Optical Cleaner



λ/10 UV Fused Silica Windows

Frequently Purchased Together



#47-005 - 25mm, Enhanced Aluminum, N-BK7 Right Angle Prism Mirror (Leg Coated)
₹18,665



#47-953 - 250 x 250mm 220 Grit Ground Glass Diffuser
₹11,098



#58-001 - 12mm C Series Fixed Focal Length Lens
₹20,709



#59-873 - 50mm C Series Fixed Focal Length Lens
₹26,019

Compatible Mounts

| | Title | Type | Compare | Stock Number | Price | Buy |
|-----------------------|--|-----------------------|---------|--------------|--|--|
| MORE+ | 19.5 - 108.0mm Optic Dia., Three-Screw Adjustable Ring Mount | Fixed | | #03-670 | ₹11,501 Request Quote | 1 In Stock <input type="text" value="1"/> <input type="button" value="🛒"/> |
| MORE+ | 8.0 - 118.0 Optic Height, English Bar-Type Optic Holder | Fixed | | #03-666 | ₹12,107 Request Quote | 10 In Stock <input type="text" value="1"/> <input type="button" value="🛒"/> |
| MORE+ | 75.0/76.2mm Optic Dia., Optical Cell Assembly | Fixed | | #36-466 | ₹23,912 Request Quote | 6 In Stock <input type="text" value="1"/> <input type="button" value="🛒"/> |
| MORE+ | 75.0/76.2mm Optic Dia., E-Series Kinematic Mount | Adjustable - Tip-Tilt | | #15-868 | ₹24,113 Request Quote | CONTACT US <input type="text" value="1"/> <input type="button" value="🛒"/> |
| MORE+ | 5.0 - 100.0mm Optic Dia., Self-Centering Jaw Clamp | Fixed | | #16-078 | ₹41,365 Request Quote | CONTACT US <input type="text" value="1"/> <input type="button" value="🛒"/> |
| MORE+ | 75.0/76.2mm Optic Dia., Optical Cell Kinematic Mount | Adjustable - Tip-Tilt | | #53-965 | ₹59,525 Request Quote | 5 In Stock <input type="text" value="1"/> <input type="button" value="🛒"/> |
| MORE+ | 108.0mm Max Optic Dia., Jaw Clamp | Fixed | | #53-038 | ₹82,730 Request Quote | 2 In Stock <input type="text" value="1"/> <input type="button" value="🛒"/> |
| MORE+ | 108.0mm Max Optic Dia., Jaw Clamp and 6" Kinematic Mount | Adjustable - Tip-Tilt | | #53-040 | ₹1,23,086 Request Quote | 3 In Stock <input type="text" value="1"/> <input type="button" value="🛒"/> |

Check out our full selection of mounts [here](#).

Resources

Media Type

- Application Note
- Technical Tool
- Video

APPLICATION NOTE

Anti-Reflection (AR) Coatings

APPLICATION NOTE

An Introduction to Optical Coatings

TECHNICAL TOOL

Beam Displacement Calculator

Glossary

FAQ

 APPLICATION NOTE

Understanding
Optical
Windows

 VIDEO

Optical
Windows
Review

 APPLICATION NOTE

Optical Glass

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