

TECHSPEC® 150mm Dia., 10mm Thick, MgF₂ Coated λ/4 N-BK7 WindowStock #11-861 **3 In Stock** £588⁰⁰**ADD TO CART**

Volume Pricing	
Qty 1-5	£588.00 each
Qty 6-25	£468.00 each
Qty 26-49	£440.00 each
Need More?	Request Quote

! Prices shown are exclusive of VAT/local taxes**Product Downloads****SPECIFICATIONS****General****Type:**

Protective Window

Note:

Surface Flatness is specified per inch

Physical & Mechanical Properties**Bevel:**
Protective as needed**Clear Aperture (%):**
90**Clear Aperture CA (mm):**
135.00**Diameter (mm):**
150.00 +0.0/-0.25**Thickness (mm):**
10.00 ±0.20**Edges:**
Fine Ground**Knoop Hardness (kg/mm²):**
610.00**Parallelism (arcmin):**
<1**Poisson's Ratio:**
0.21**Young's Modulus (GPa):**
82**Optical Properties****Abbe Number (v_d):**
64.17**Coating:**
MgF₂ (400-700nm)**Coating Specification:**
R_{avg} ≤ 1.75% @ 400 - 700nm**Index of Refraction (n_d):**
1.516**Substrate:**
N-BK7**Surface Flatness (P-V):**
N4**Surface Quality:**
60-40**Wavelength Range (nm):**
400 - 700**Damage Threshold, Reference:**
10 J/cm² @ 532nm, 10ns**Material Properties****Coefficient of Thermal Expansion CTE (10⁻⁶/°C):**
7.1 (-30 to +70°C)
8.3 (+20 to +300°C)**Density (g/cm³):**
2.51**Regulatory Compliance****RoHS 2015:**
Compliant**Certificate of Conformance:**
View**Reach 235:**
Compliant**PRODUCT DETAILS**

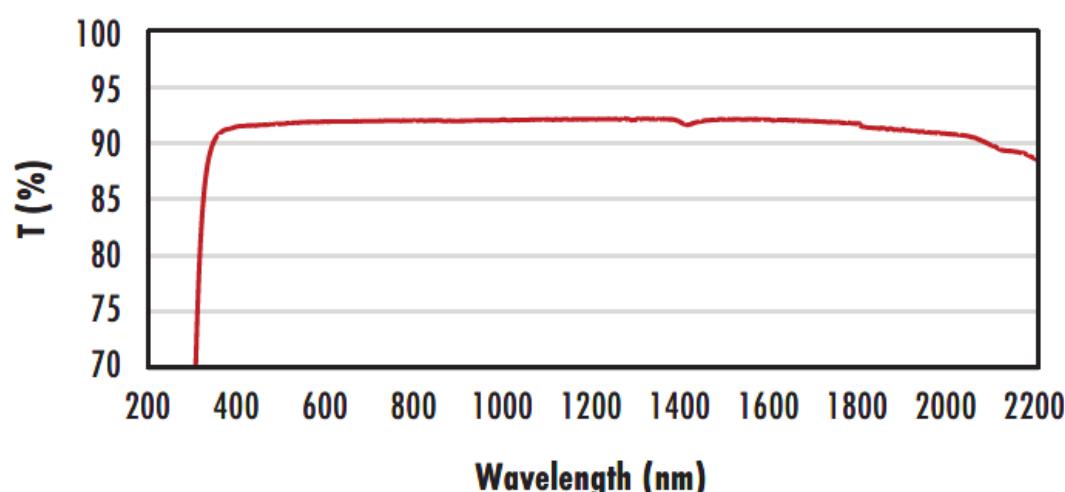
- Circular and Rectangular Sizes from 2mm to 200mm
- 8 Broadband Anti-Reflection Coating Options Available
- World's Largest Selection of Standard N-BK7 Windows
- Also Available with [Ultra-Thin N-BK7 Windows](#)

TECHSPEC® N4 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® N4 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

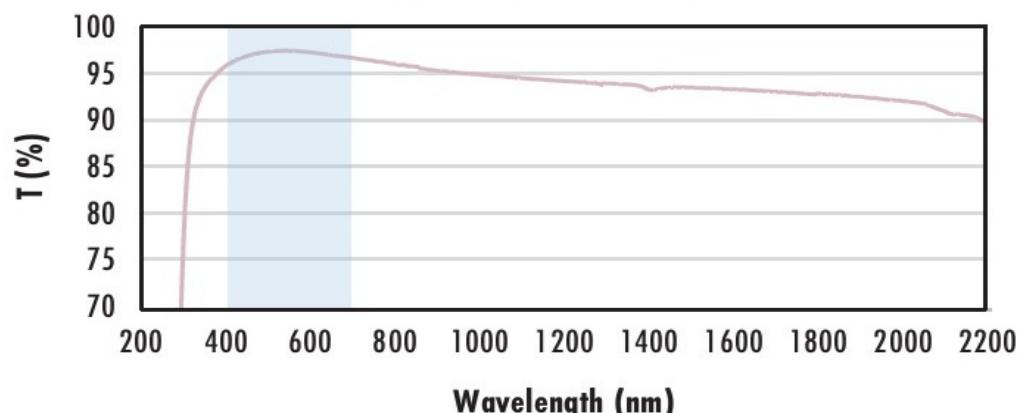
Uncoated N-BK7 Typical Transmission



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

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N-BK7 with MgF_2 Coating Typical Transmission



Typical transmission of a 3mm thick N-BK7 window with MgF_2 (400-700nm) coating at 0° AOI.

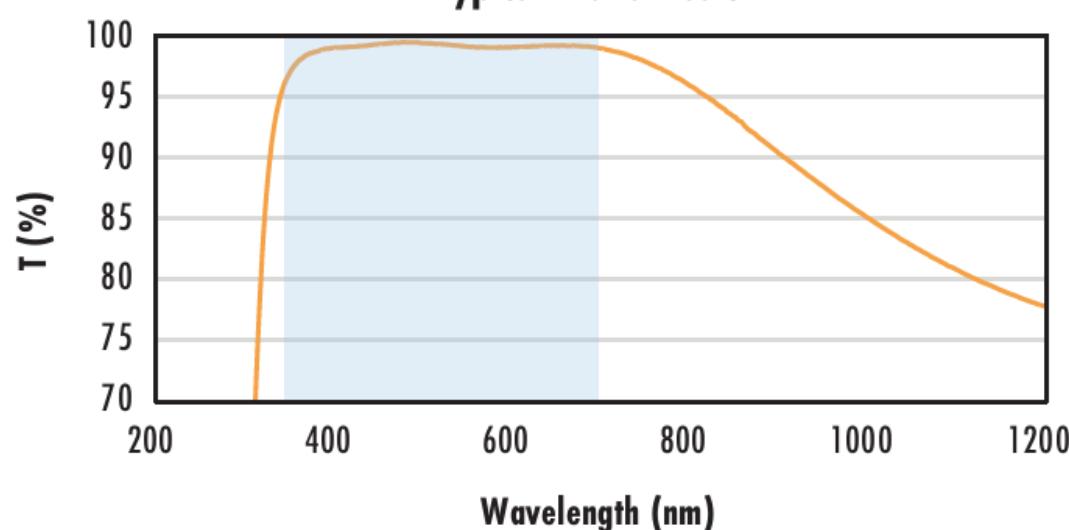
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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

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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.

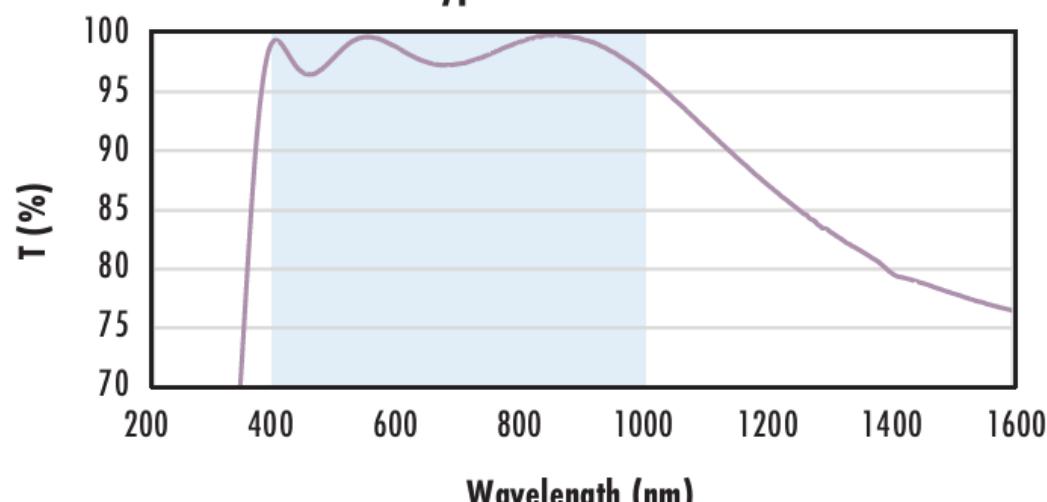
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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:

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

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

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

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

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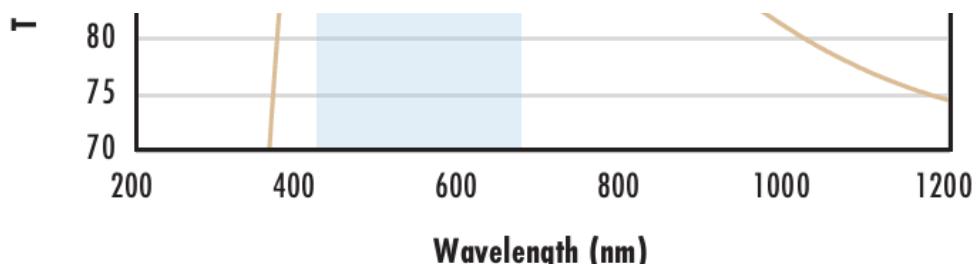
N-BK7 with VIS 0° Coating Typical Transmission



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

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

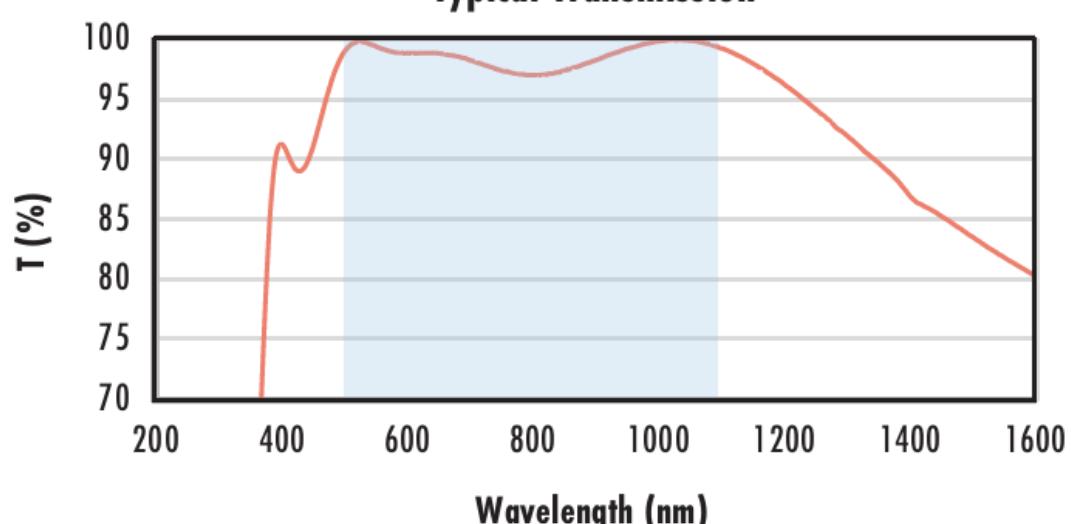
$$R_{\text{avg}} \leq 0.4\% \text{ @ 425 - 675nm}$$



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.

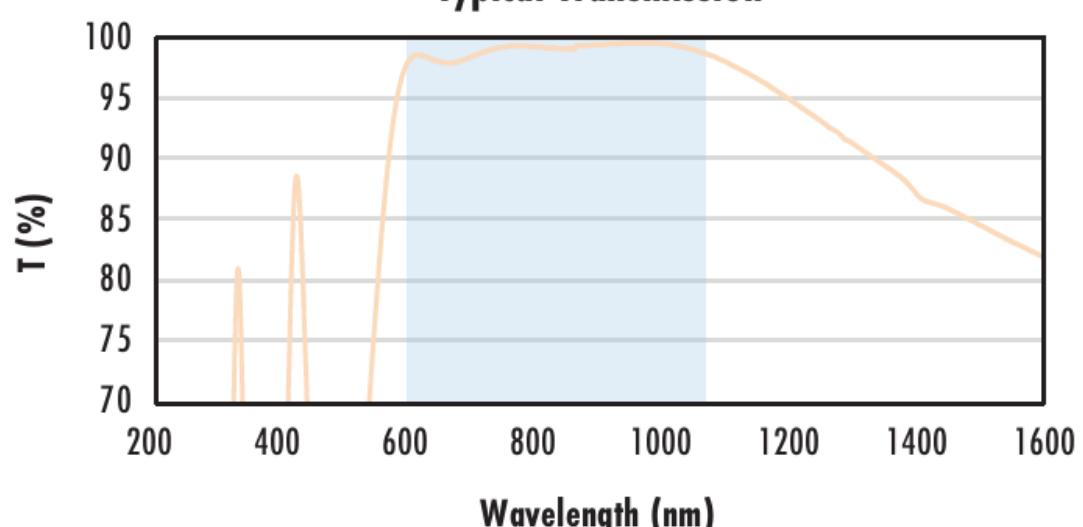
The blue shaded region indicates the coating design wavelength range, with the following specification:

$$\begin{aligned} R_{\text{abs}} &\leq 0.25\% @ 532\text{nm} \\ R_{\text{abs}} &\leq 0.25\% @ 1064\text{nm} \\ R_{\text{avg}} &\leq 1.0\% @ 500 - 1100\text{nm} \end{aligned}$$

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

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N-BK7 with NIR I Coating Typical Transmission



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

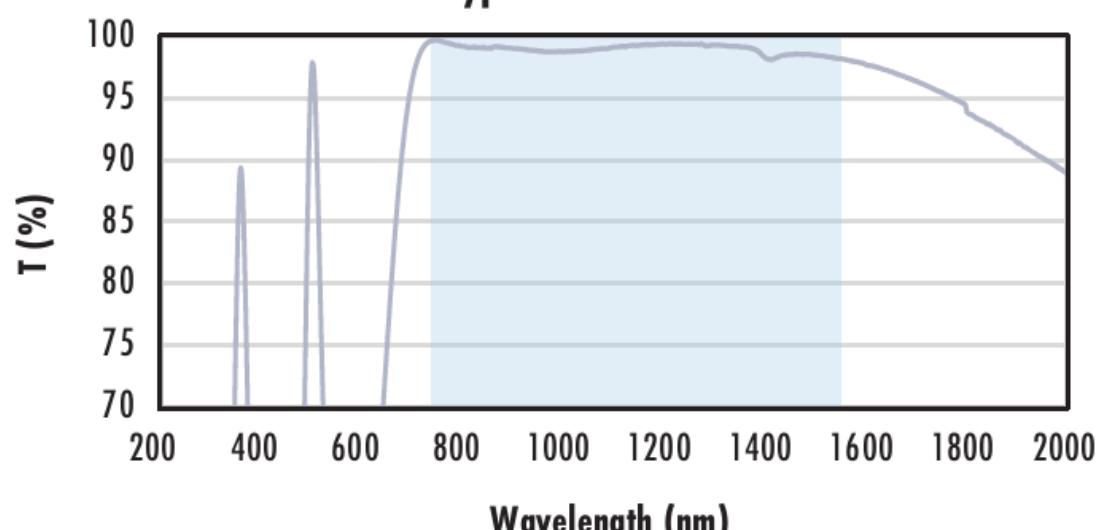
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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

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N-BK7 with NIR II Coating Typical Transmission



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

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

$$\begin{aligned} R_{\text{abs}} &\leq 1.5\% @ 750 - 800\text{nm} \\ R_{\text{abs}} &\leq 1.0\% @ 800 - 1550\text{nm} \\ R_{\text{avg}} &\leq 0.7\% @ 750 - 1550\text{nm} \end{aligned}$$

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

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COATING CURVES

CUSTOM

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](#).

