

TECHSPEC® 200m Dia., 10mm Thick, VIS-EXT Coated λ/4 N-BK7 Window



Stock **#29-601** **1 In Stock**

⊖ 1 ⊕ €1.440⁰⁰

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Volume Pricing	
Qty 1-5	€1.440,00 each
Qty 6-25	€1.150,00 each
Qty 26-49	€1.080,00 each
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ⓘ Prices shown are exclusive of VAT/local taxes

Product Downloads

SPECIFICATIONS

General

Protective Window

Type:

Surface Flatness is specified per inch **Note:**

Physical & Mechanical Properties

Protective as needed **Bevel:**

90 **Clear Aperture (%):**

180 **Clear Aperture CA (mm):**

200.00 +0.0/-0.25 **Diameter (mm):**

10.00 ±0.20 **Thickness (mm):**

Fine Ground **Edges:**

610.00 **Knoop Hardness (kg/mm²):**

<1 **Parallelism (arcmin):**

0.21 **Poisson's Ratio:**

82 **Young's Modulus (GPa):**

Optical Properties

64.17 **Abbe Number (v_d):**

MS-EXT (350-700nm) **Coating:**

R_{avg} <0.5% @ 350 - 700nm **Coating Specification:**

1.516 **Index of Refraction (n_d):**

N-BK7 **Substrate:**

60-40 **Surface Quality:**

λ/4 (per inch over clear aperture) **Transmitted Wavefront, P-V:**

350 - 700 **Wavelength Range (nm):**

5 J/cm² @ 532nm, 10ns **Damage Threshold, By Design:**

Material Properties

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

2.51 **Density (g/cm³):**

Regulatory Compliance

[View](#) **Certificate of Conformance:**

PRODUCT DETAILS

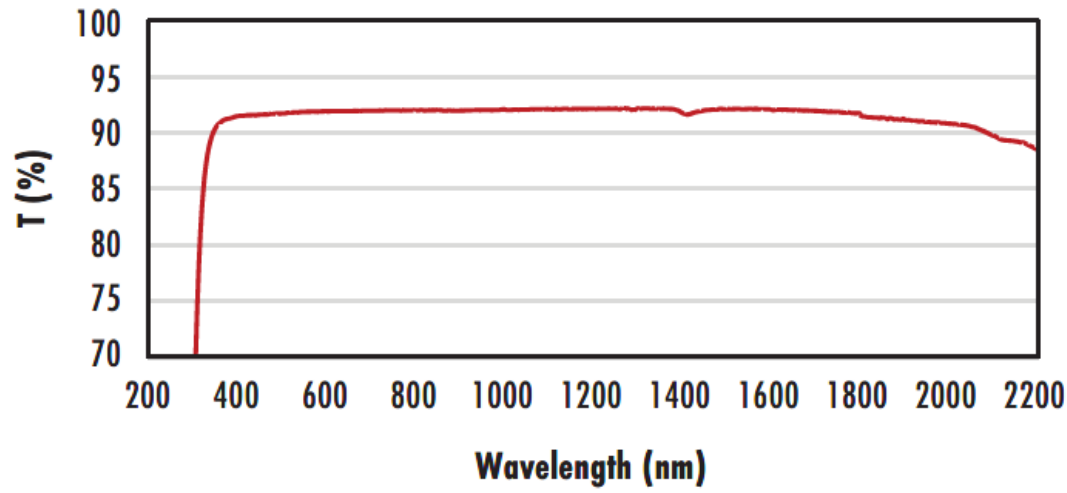
- Circular and Rectangular Sizes from 2mm to 200mm
- 8 Broadband Anti-Reflection Coating Options Available
- World's Largest Selection of Standard N-BK7 Windows
- Also Available with [Ultra-Thin N-BK7 Windows](#)

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

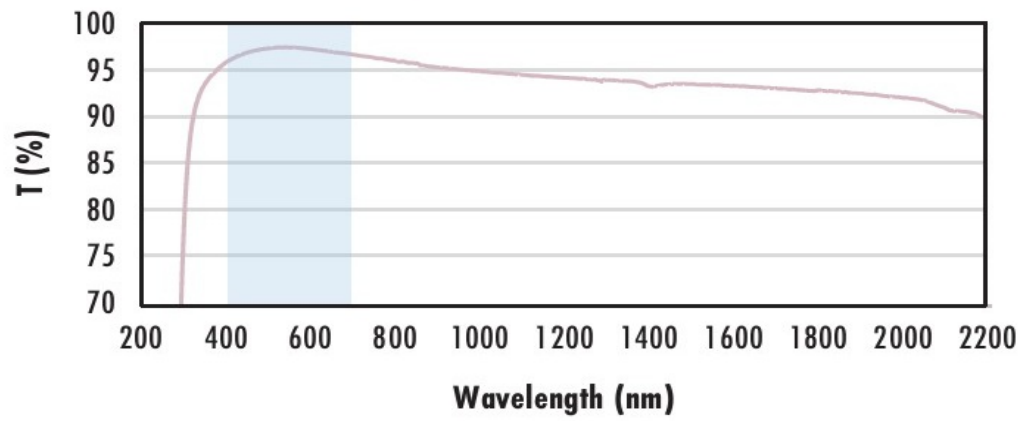
Uncoated N-BK7 Typical Transmission



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.

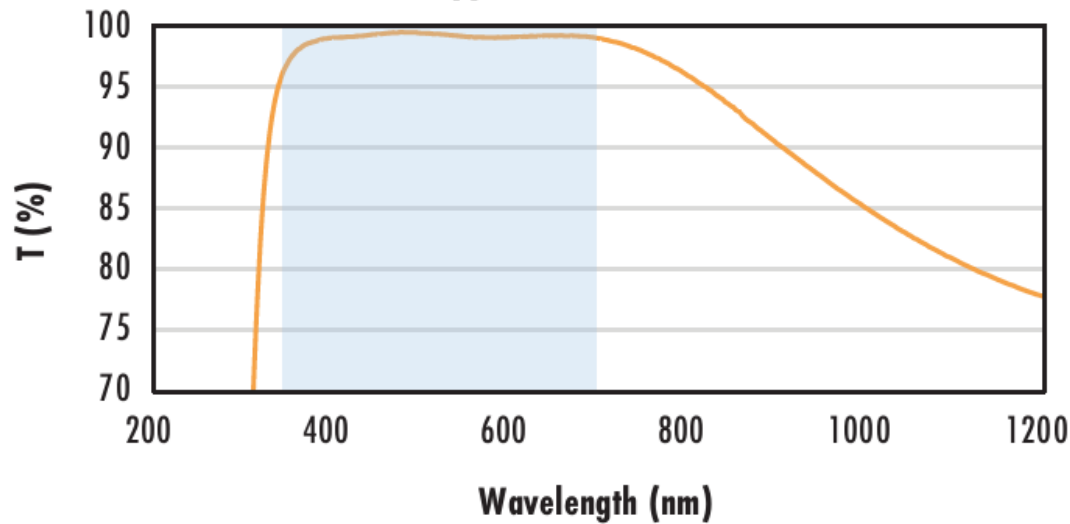
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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.

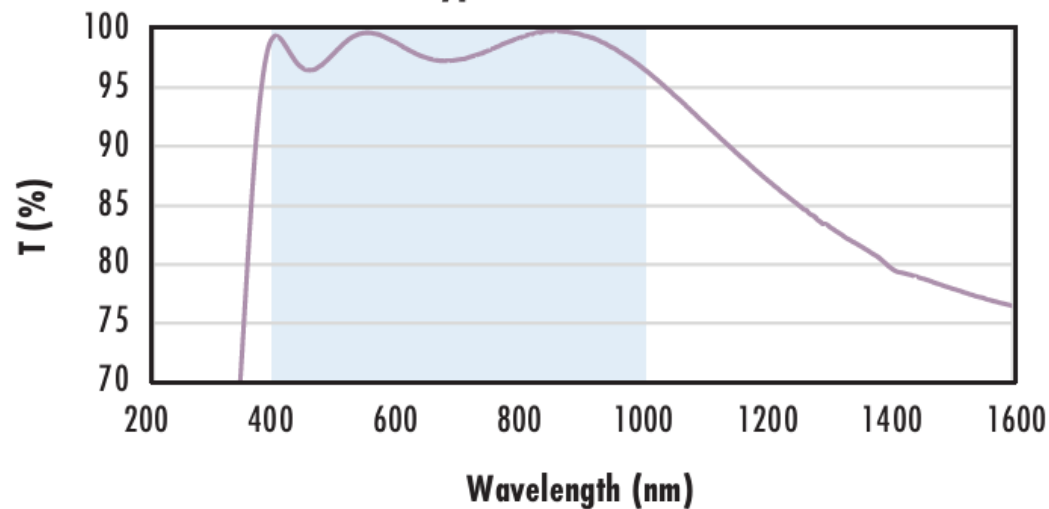
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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

[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:

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

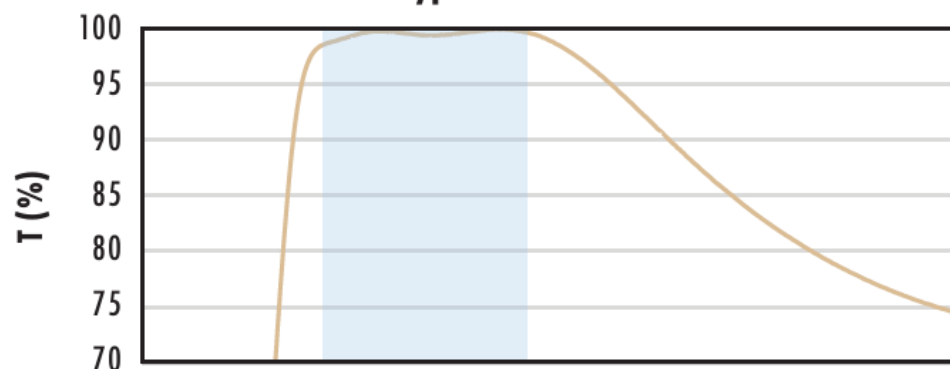
$$R_{avg} \leq 1.25\% @ 400 - 870\text{nm}$$

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

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



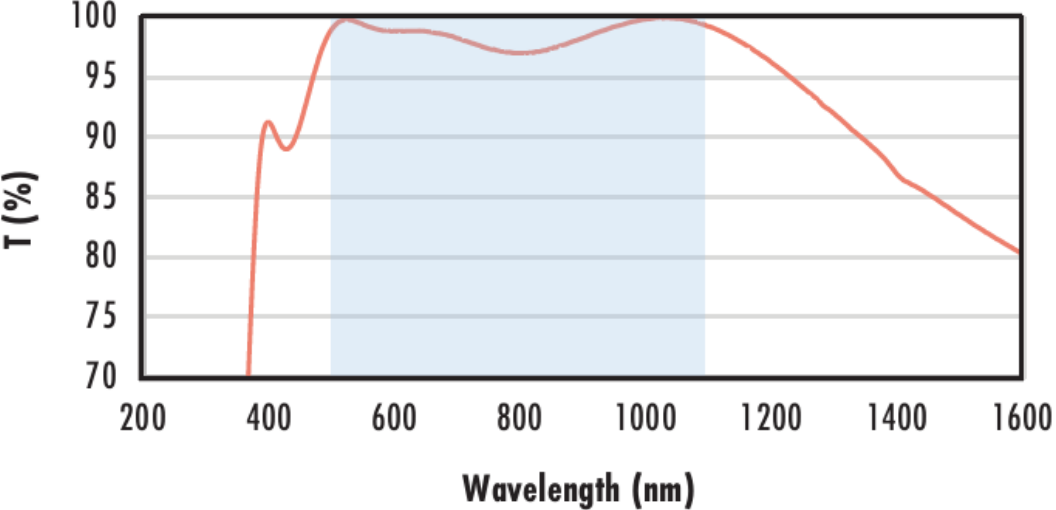
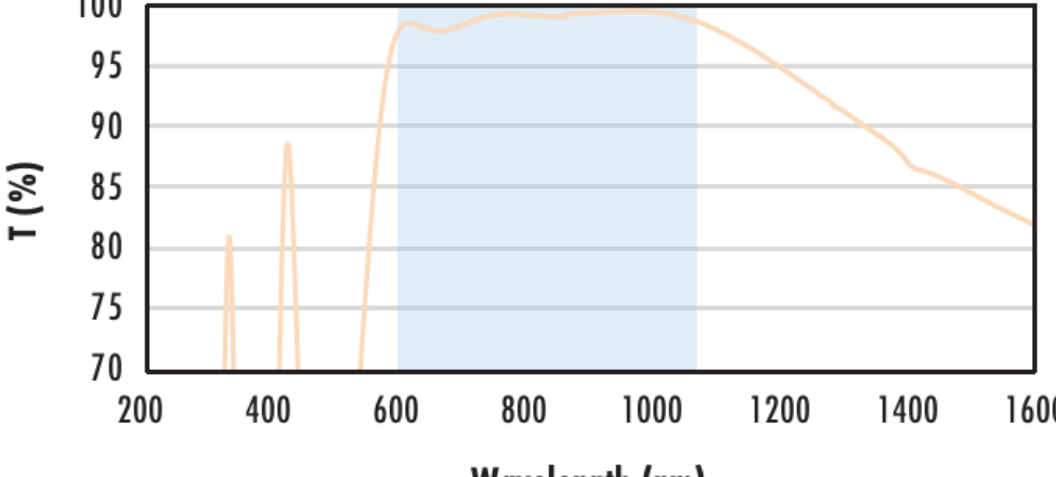
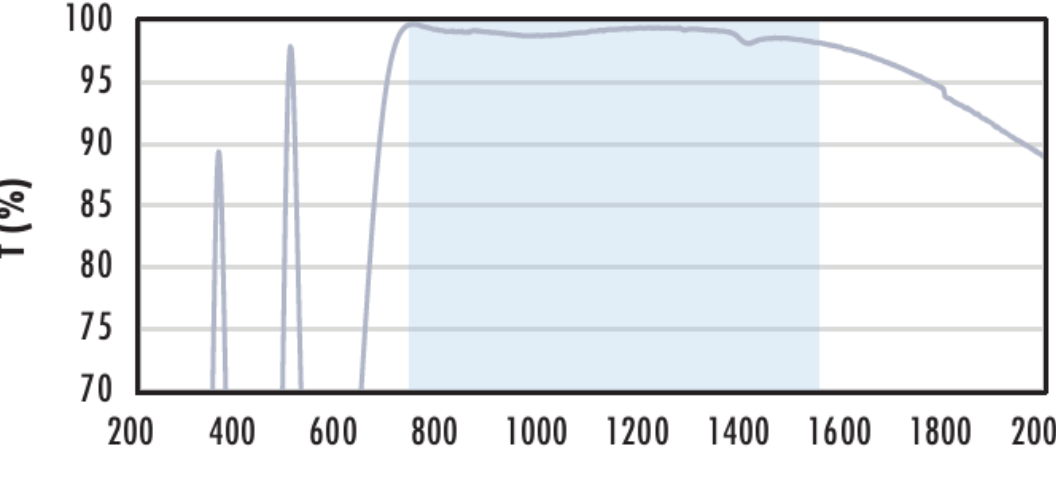
Typical transmission of a 3mm thick N-BK7 window with VIS 0° (425-675nm) coating at 0° AOI.

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

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

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

[Click Here to Download Data](#)

<p>200 400 600 800 1000 1200</p> <p>Wavelength (nm)</p>	
<p style="text-align: center;">N-BK7 with YAG-BBAR Coating Typical Transmission</p> 	<p>Typical transmission of a 3mm thick N-BK7 window with YAG-BBAR (500-1100nm) coating at 0° AOI.</p> <p>The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p style="text-align: center;">$R_{abs} \leq 0.25\%$ @ 532nm $R_{abs} \leq 0.25\%$ @ 1064nm $R_{avg} \leq 1.0\%$ @ 500 - 1100nm</p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p style="text-align: center;">Click Here to Download Data</p>
<p style="text-align: center;">N-BK7 with NIR I Coating Typical Transmission</p> 	<p>Typical transmission of a 3mm thick N-BK7 window with NIR I (600 - 1050nm) coating at 0° AOI.</p> <p>The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p style="text-align: center;">$R_{avg} \leq 0.5\%$ @ 600 - 1050nm</p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p style="text-align: center;">Click Here to Download Data</p>
<p style="text-align: center;">N-BK7 with NIR II Coating Typical Transmission</p> 	<p>Typical transmission of a 3mm thick N-BK7 window with NIR II (750 - 1550nm) coating at 0° AOI.</p> <p>The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p style="text-align: center;">$R_{abs} \leq 1.5\%$ @ 750 - 800nm $R_{abs} \leq 1.0\%$ @ 800 - 1550nm $R_{avg} \leq 0.7\%$ @ 750 - 1550nm</p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p style="text-align: center;">Click Here to Download Data</p>

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](#).