

TECHSPEC® 100mm Dia., 6mm Thick, NIR I Coated $\lambda/4$ N-BK7 Window



Stock **#17-295** **3 In Stock**

- 1 + £472.⁰⁰

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Volume Pricing	
Qty 1-5	£472.00 each
Qty 6-25	£376.80 each
Qty 26-49	£353.60 each
Need More?	Request Quote

! Prices shown are exclusive of VAT/local taxes

Product Downloads

404.00 #Sorting:

General

Protective Window **Type:**

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

Physical & Mechanical Properties

100.00 +0.0/-0.25 **Diameter (mm):**

6.00 ±0.20 **Thickness (mm):**

<1 **Parallelism (arcmin):**

Protective as needed **Bevel:**

90 **Clear Aperture (%):**

Fine Ground **Edges:**

0.21 **Poisson's Ratio:**

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

610.00 **Knoop Hardness (kg/mm²):**

Optical Properties

NIR I (600-1050nm) **Coating:**

N-BK7 **Substrate:**

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

60-40 **Surface Quality:**

64.17 **Abbe Number (v_d):**

R_{avg} ≤0.5% @ 600 - 1050nm **Coating Specification:**

600 - 1050 **Wavelength Range (nm):**

λ/4 **Surface Flatness (P-V):**

7 J/cm² @ 1064nm, 10ns **Damage Threshold, By Design:**

Material Properties

2.51 **Density (g/cm³):**

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

Regulatory Compliance

Compliant **RoHS 2015:**

View **Certificate of Conformance:**

Compliant **Reach 235:**

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

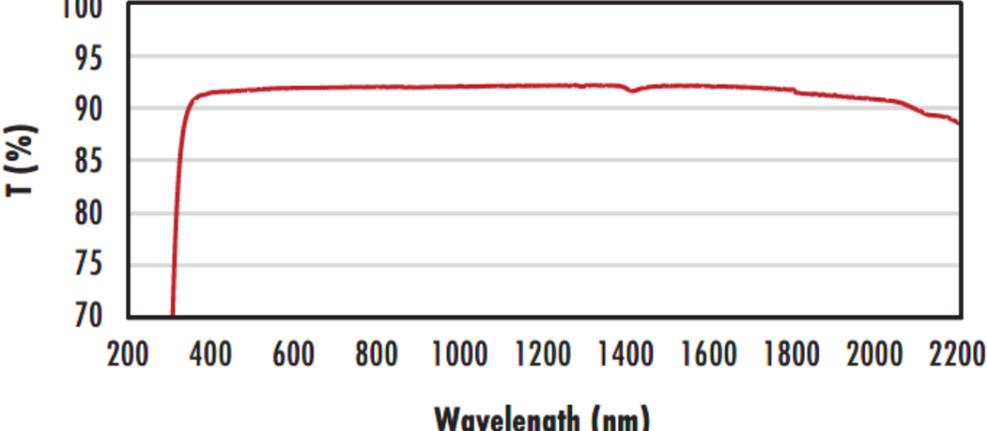
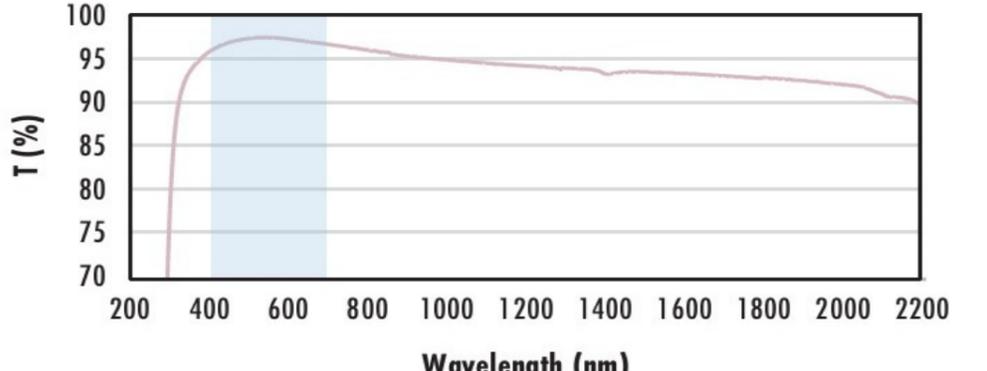
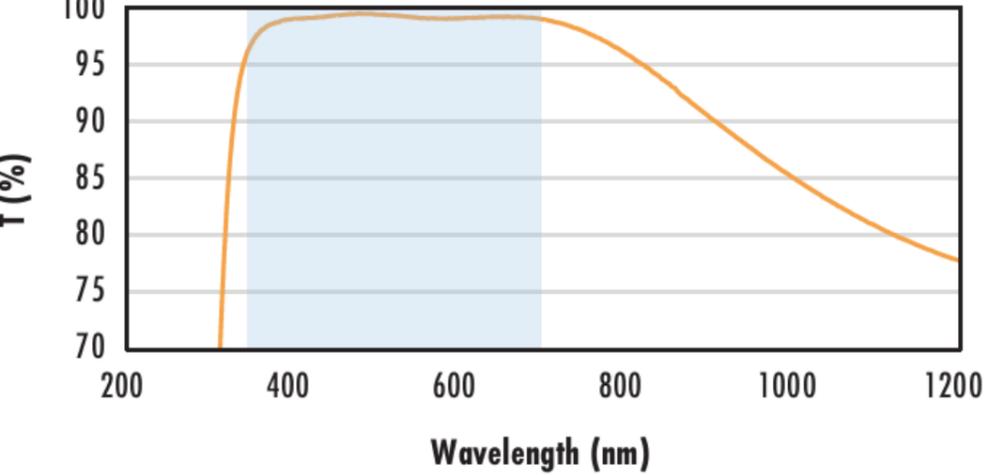
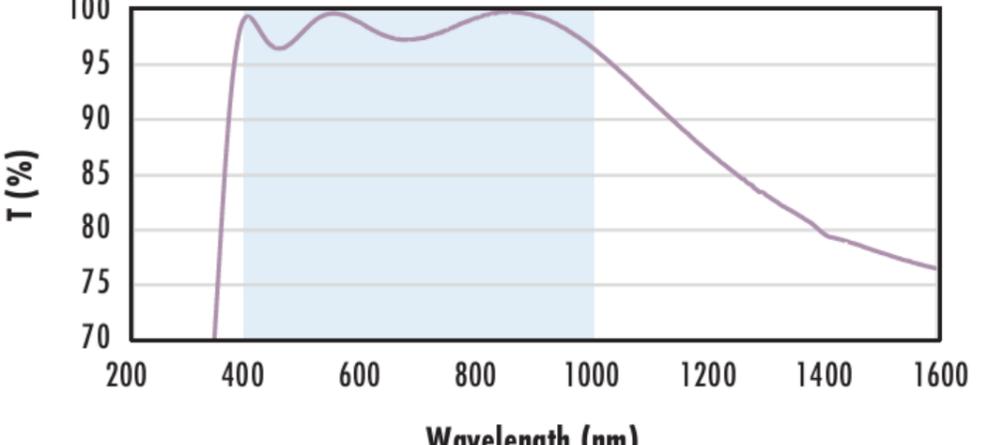
Learn more about our [custom manufacturing capabilities](#) or submit an inquiry [here](#).

Product Details

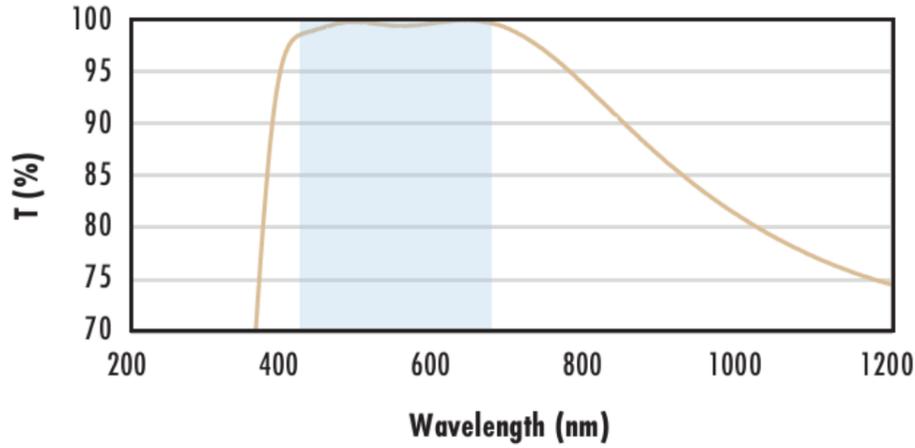
- Circular and Rectangular Sizes from 2mm to 200mm
- 8 Broadband Anti-Reflection Coating Options Available
- World's Largest Selection of Standard N-BK7 Windows
- Also Available with [Ultra-Thin N-BK7 Windows](#)

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.

Technical Information

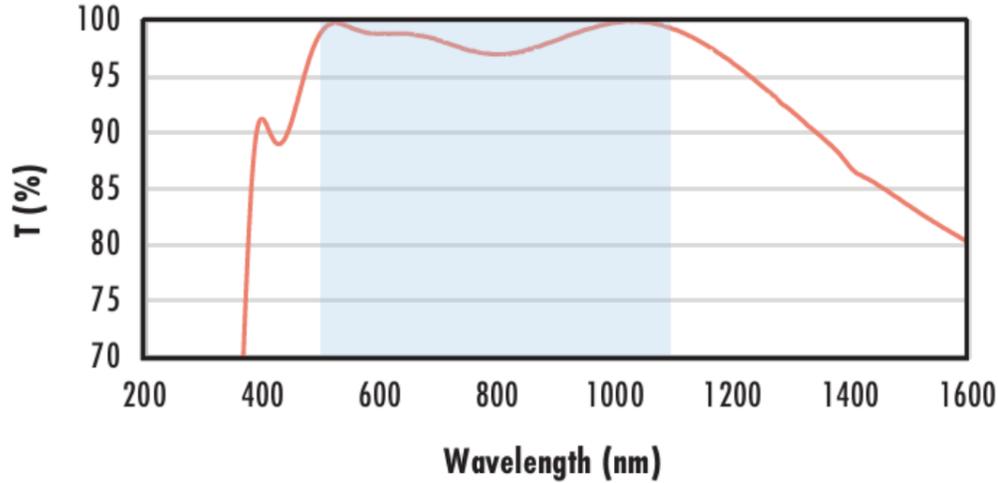
N-BK7	
<p style="text-align: center;">Uncoated N-BK7 Typical Transmission</p> 	<p>Typical transmission of a 3mm thick, uncoated N-BK7 window across the UV - NIR spectra.</p> <p>Click Here to Download Data</p>
<p style="text-align: center;">N-BK7 with MgF₂ Coating Typical Transmission</p> 	<p>Typical transmission of a 3mm thick N-BK7 window with MgF₂ (400-700nm) 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;">$R_{avg} \leq 1.75\% @ 400 - 700\text{nm}$ (N-BK7)</p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p>Click Here to Download Data</p>
<p style="text-align: center;">N-BK7 with VIS-EXT Coating Typical Transmission</p> 	<p>Typical transmission of a 3mm thick N-BK7 window with VIS-EXT (350-700nm) 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;">$R_{avg} \leq 0.5\% @ 350 - 700\text{nm}$</p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p>Click Here to Download Data</p>
<p style="text-align: center;">N-BK7 with VIS-NIR Coating Typical Transmission</p> 	<p>Typical transmission of a 3mm thick N-BK7 window with VIS-NIR (400-1000nm) 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;">$R_{abs} \leq 0.25\% @ 880\text{nm}$ $R_{avg} \leq 1.25\% @ 400 - 870\text{nm}$ $R_{avg} \leq 1.25\% @ 890 - 1000\text{nm}$</p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p>Click Here to Download Data</p>
N-BK7 with VIS 0° Coating	

**N-BK7 with VIS V Coating
Typical Transmission**



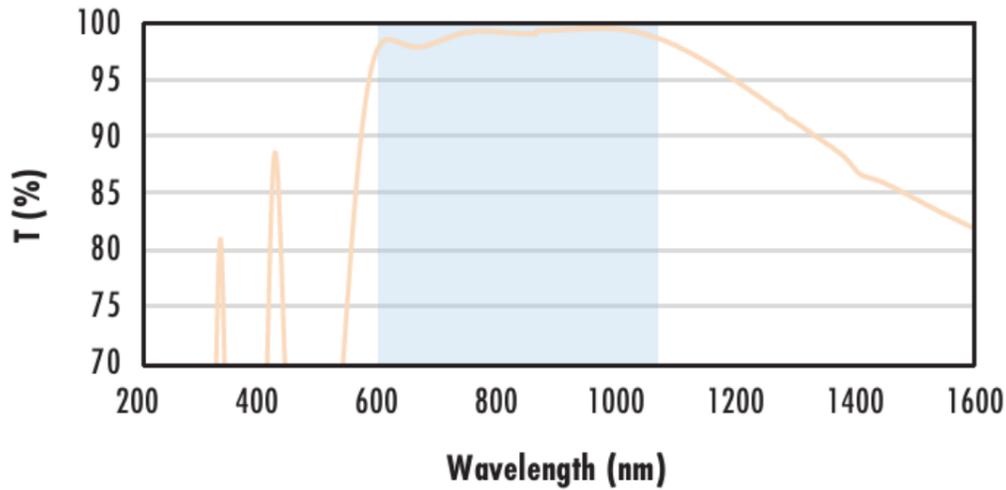
Typical transmission of a 3mm thick N-BK7 window with VIS V^o (425-675nm) coating at 0° AOI.
The blue shaded region indicates the coating design wavelength range, with the following specification:
 $R_{avg} \leq 0.4\% @ 425 - 675\text{nm}$
Data outside this range is not guaranteed and is for reference only.
[Click Here to Download Data](#)

**N-BK7 with YAG-BBAR Coating
Typical Transmission**



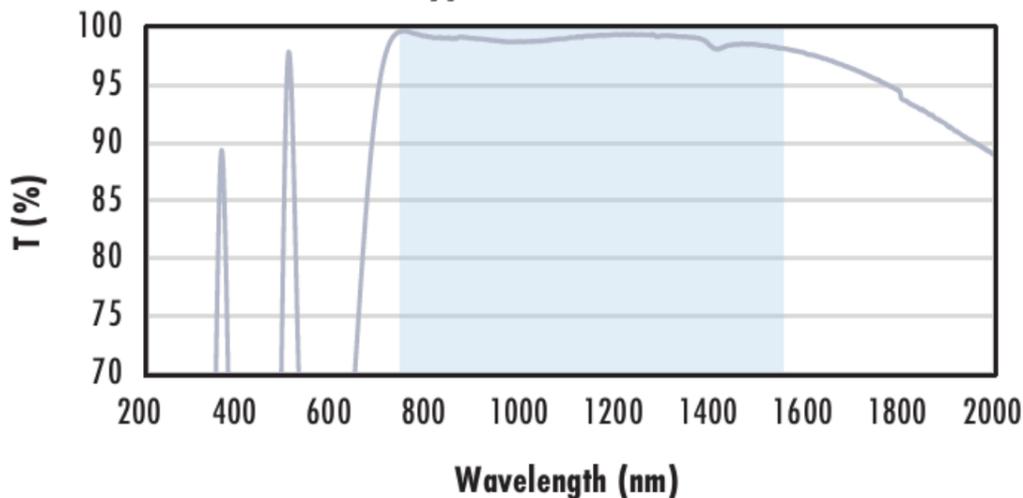
Typical transmission of a 3mm thick N-BK7 window with YAG-BBAR (500-1100nm) coating at 0° AOI.
The blue shaded region indicates the coating design wavelength range, with the following specification:
 $R_{abs} \leq 0.25\% @ 532\text{nm}$
 $R_{abs} \leq 0.25\% @ 1064\text{nm}$
 $R_{avg} \leq 1.0\% @ 500 - 1100\text{nm}$
Data outside this range is not guaranteed and is for reference only.
[Click Here to Download Data](#)

**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:
 $R_{avg} \leq 0.5\% @ 600 - 1050\text{nm}$
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 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.
[Click Here to Download Data](#)

Compatible Mounts