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TECHSPEC<sup>®</sup> 100mm Sq., 6mm Thick, Uncoated  $\lambda$ /4 N-BK7 Window



Stock #70-699 4 In Stock

-

1

+

₹15,844

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| Volume Pricing |                               |
|----------------|-------------------------------|
| Qty 1-5        | ₹15,844 each                  |
| Qty 6-25       | ₹12,690 each                  |
| Qty 26-49      | ₹11,883 each                  |
| Need More?     | <a href="#">Request Quote</a> |

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General

Protective Window

Type:

Physical & Mechanical Properties

Protective as needed

Bevel:

90

Clear Aperture (%):

|                    |                                       |
|--------------------|---------------------------------------|
| 90                 | Clear Aperture CA (mm):               |
| 100 x 100 +0/-0.25 | Dimensions (mm):                      |
| 6.00 0.20          | Thickness (mm):                       |
| Fine Ground        | Edges:                                |
| 610.00             | Knoop Hardness (kg/mm <sup>2</sup> ): |
| <1                 | Parallelism (arcmin):                 |
| 0.21               | Poisson's Ratio:                      |
| 82                 | Young's Modulus (GPa):                |
| 100.00             | Length (mm):                          |
| 100.00             | Width (mm):                           |

|                    |                                        |
|--------------------|----------------------------------------|
| Optical Properties |                                        |
| 64.17              | Abbe Number (v <sub>d</sub> ):         |
| Uncoated           | Coating:                               |
| 1.516              | Index of Refraction (n <sub>d</sub> ): |
| N-BK7              | Substrate:                             |
| λ/4                | Surface Flatness (P-V):                |
| 60-40              | Surface Quality:                       |
| λ/4                | Transmitted Wavefront, P-V:            |
| 350 - 2200         | Wavelength Range (nm):                 |

|                                           |                                                              |
|-------------------------------------------|--------------------------------------------------------------|
| Material Properties                       |                                                              |
| 7.1 (-30 to +70°C)<br>8.3 (+20 to +300°C) | Coefficient of Thermal Expansion CTE (10 <sup>-6</sup> /°C): |
| 2.51                                      | Density (g/cm <sup>3</sup> ):                                |

|                                     |                             |
|-------------------------------------|-----------------------------|
| Regulatory Compliance               |                             |
| View                                | Certificate of Conformance: |
| Vietnam                             | Country of Origin:          |
| Edmund Optics India Private Limited | Imported By:                |

## Product Details

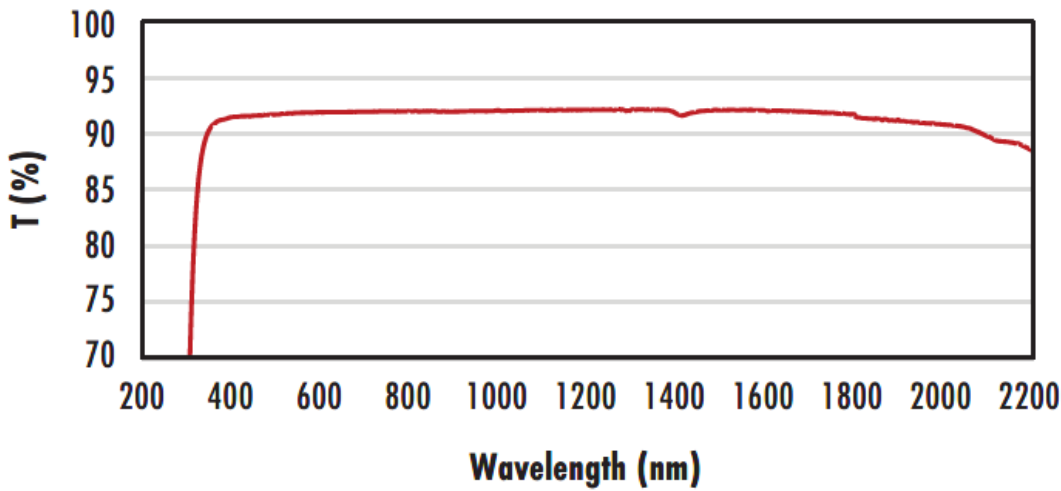
- Circular and Rectangular Sizes from 2mm to 200mm
- 8 Broadband Anti-Reflection Coating Options Available
- World's Largest Selection of Standard N-BK7 Windows
- Also Available with [Ultra-Thin N-BK7 Windows](#)

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](#).

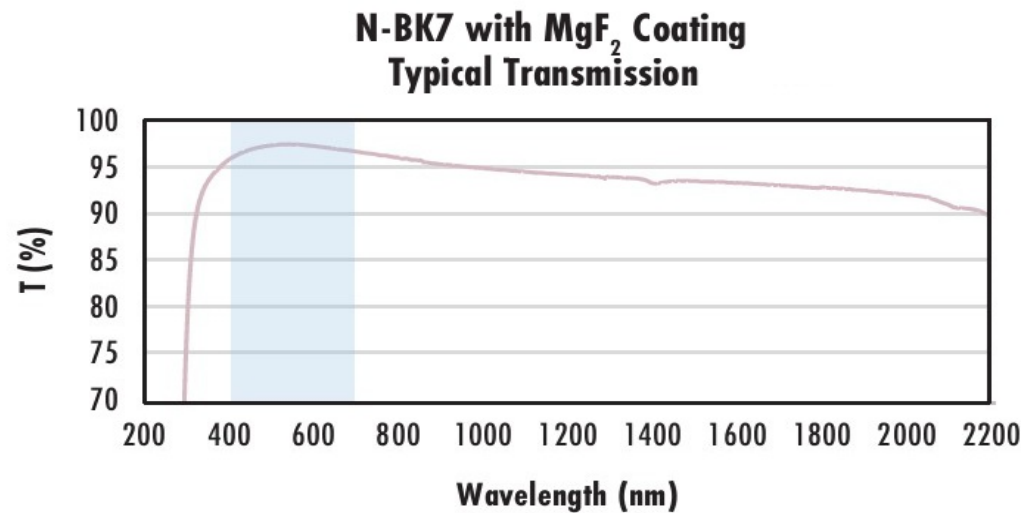
## Technical Information

|                                     |
|-------------------------------------|
| N-BK7                               |
| Uncoated N-BK7 Typical Transmission |



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

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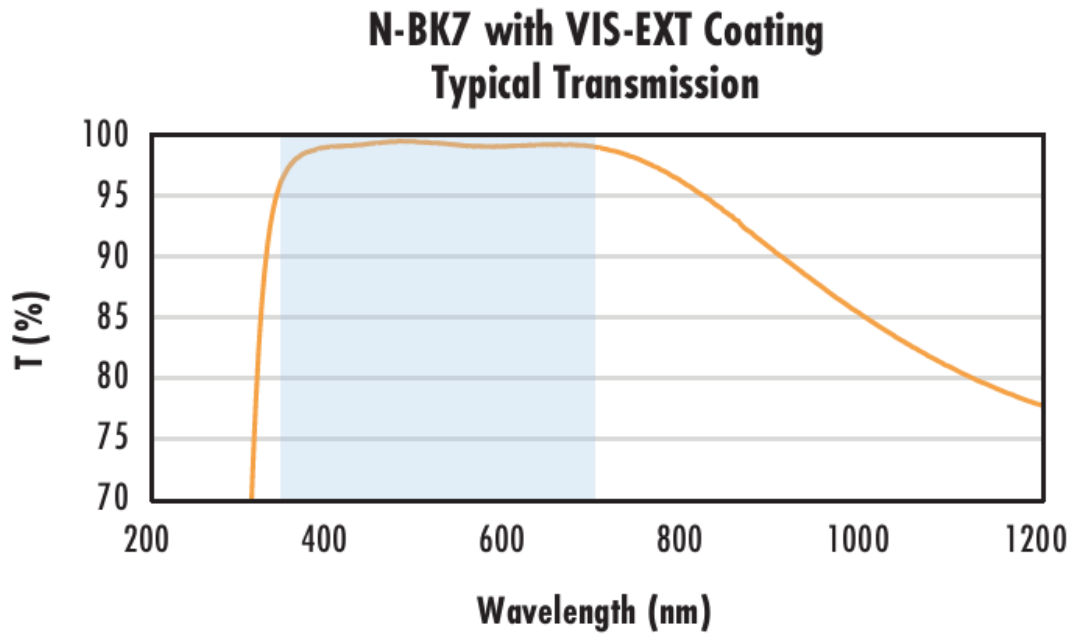
Typical transmission of a 3mm thick N-BK7 window with MgF<sub>2</sub> (400-700nm) coating at 0° AOI.

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.

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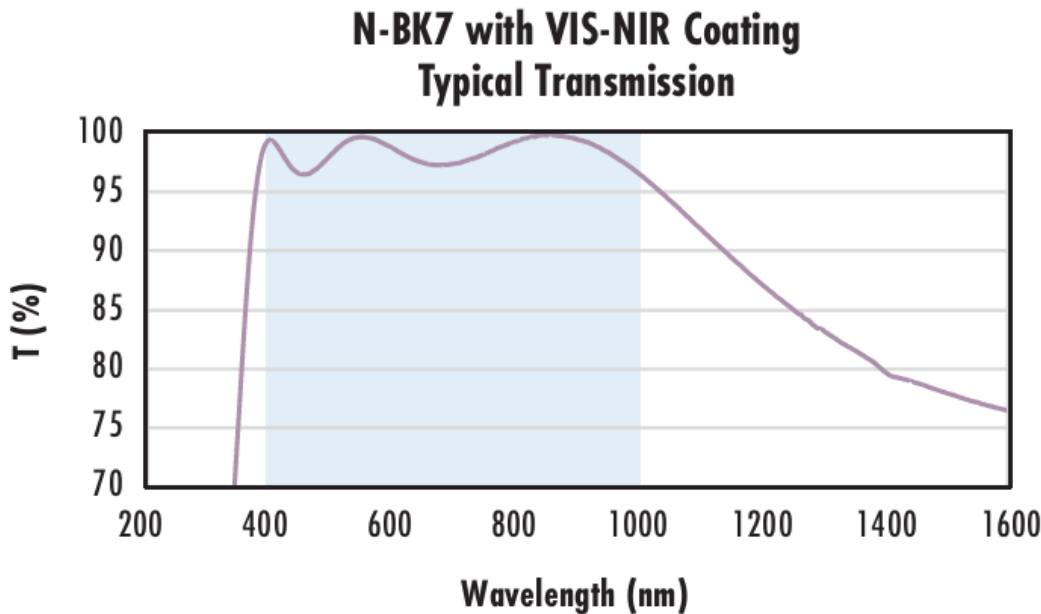
Typical transmission of a 3mm thick N-BK7 window with VIS-EXT (350-700nm) coating at 0° AOI.

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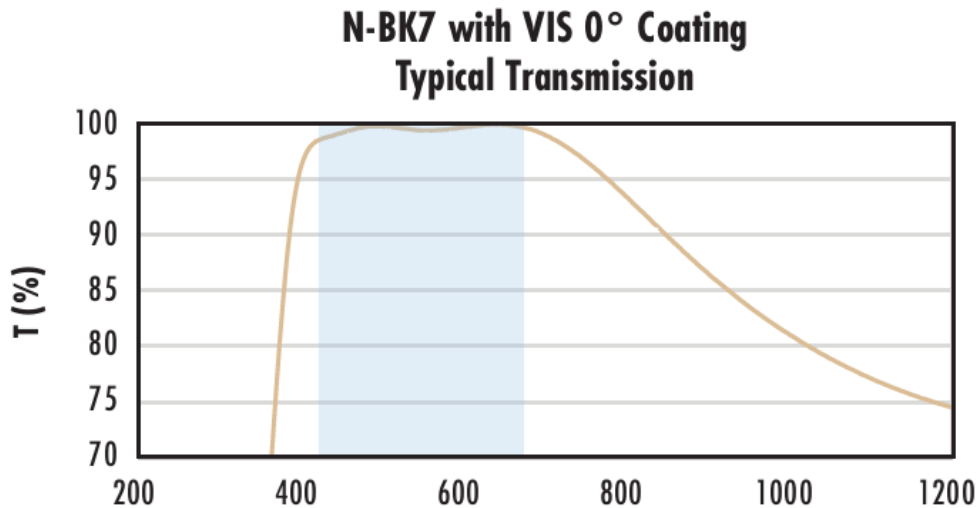
Typical transmission of a 3mm thick N-BK7 window with VIS-NIR (400-1000nm) coating at 0° AOI.

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.

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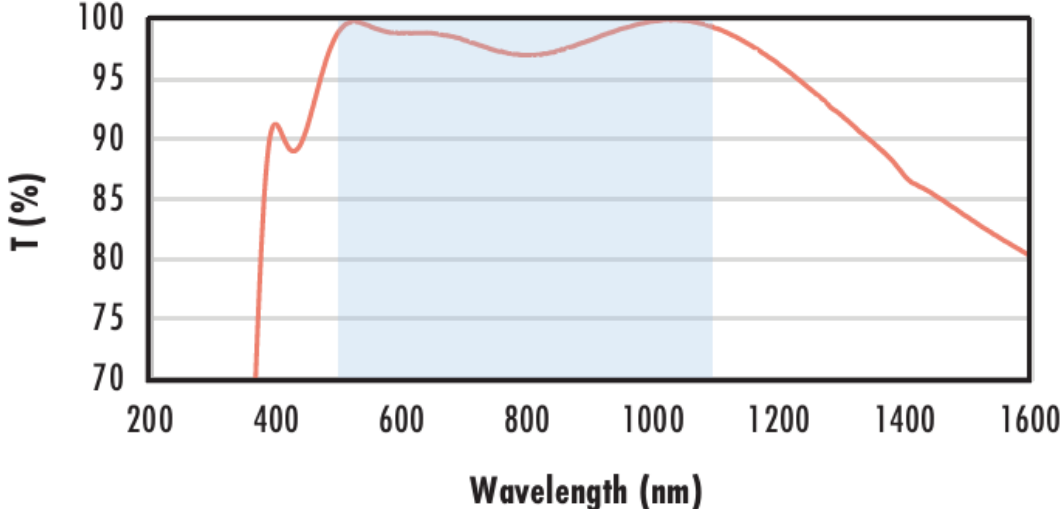
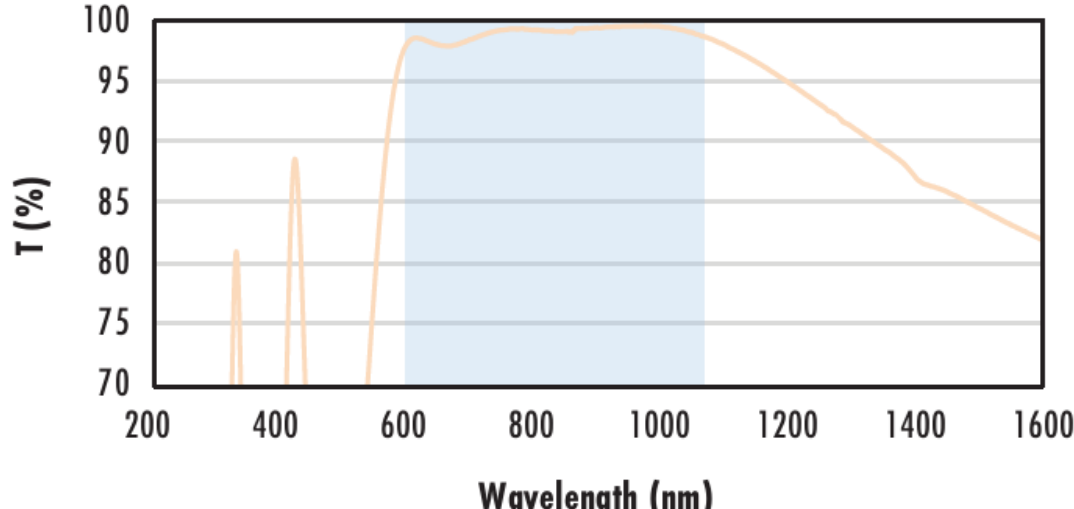
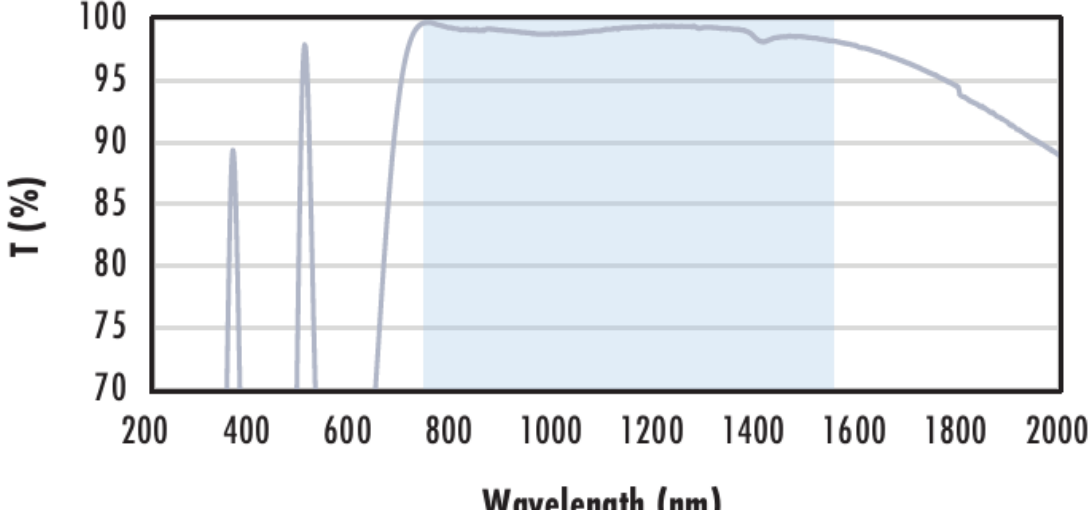
Typical transmission of a 3mm thick N-BK7 window with VIS 0° (425-675nm) coating at 0° AOI.

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.

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|                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Wavelength (nm)</p> <p><b>N-BK7 with YAG-BBAR Coating</b><br/><b>Typical Transmission</b></p>  <p>T (%)</p> <p>Wavelength (nm)</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><math>R_{abs} \leq 0.25\%</math> @ 532nm<br/><math>R_{abs} \leq 0.25\%</math> @ 1064nm<br/><math>R_{avg} \leq 1.0\%</math> @ 500 - 1100nm</p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p><a href="#">Click Here to Download Data</a></p>           |
| <p><b>N-BK7 with NIR I Coating</b><br/><b>Typical Transmission</b></p>  <p>T (%)</p> <p>Wavelength (nm)</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><math>R_{avg} \leq 0.5\%</math> @ 600 - 1050nm</p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p><a href="#">Click Here to Download Data</a></p>                                                                                                       |
| <p><b>N-BK7 with NIR II Coating</b><br/><b>Typical Transmission</b></p>  <p>T (%)</p> <p>Wavelength (nm)</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><math>R_{abs} \leq 1.5\%</math> @ 750 - 800nm<br/><math>R_{abs} \leq 1.0\%</math> @ 800 - 1550nm<br/><math>R_{avg} \leq 0.7\%</math> @ 750 - 1550nm</p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p><a href="#">Click Here to Download Data</a></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](#).