

TECHSPEC<sup>®</sup> 25.4mm Dia., 4mm Thick, VIS-NIR Coated λ/4 N-BK7 Window



Stock **#15-437** 6 In Stock

-

1

+

C\$159<sup>.60</sup>

ADD TO CART

| Volume Pricing |                               |
|----------------|-------------------------------|
| Qty 1-5        | C\$159.60 each                |
| Qty 6-25       | C\$127.40 each                |
| Qty 26-49      | C\$119.00 each                |
| Need More?     | <a href="#">Request Quote</a> |

Product Downloads

SPECIFICATIONS

General

Type:  
Protective Window

Physical & Mechanical Properties

|                      |                          |
|----------------------|--------------------------|
| Protective as needed | Bevel:                   |
| 90                   | Clear Aperture (%):      |
| 22.86                | Clear Aperture CA (mm):  |
| 25.40 +0.0/-0.25     | Diameter (mm):           |
| 4.00 ±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 <sub>d</sub> ):                        |
| VIS-NIR (400-1000nm)                                                                                                | Coating:                                              |
| R <sub>abs</sub> ≤0.25% @ 880nm<br>R <sub>avg</sub> ≤1.25% @ 400 - 870 nm<br>R <sub>avg</sub> ≤1.25% @ 890 - 1000nm | Coating Specification:                                |
| 1.516                                                                                                               | Index of Refraction (n <sub>d</sub> ):                |
| N-BK7                                                                                                               | Substrate:                                            |
| λ/4                                                                                                                 | Surface Flatness (P-V):                               |
| 60-40                                                                                                               | Surface Quality:                                      |
| 400 - 1000                                                                                                          | Wavelength Range (nm):                                |
| 5 J/cm² @ 532nm, 10ns                                                                                               | Damage Threshold, By Design: <input type="checkbox"/> |

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/cm³):                                             |

Regulatory Compliance

|           |                             |
|-----------|-----------------------------|
| Compliant | RoHS 2015:                  |
| View      | Certificate of Conformance: |
| Compliant | Reach 235:                  |

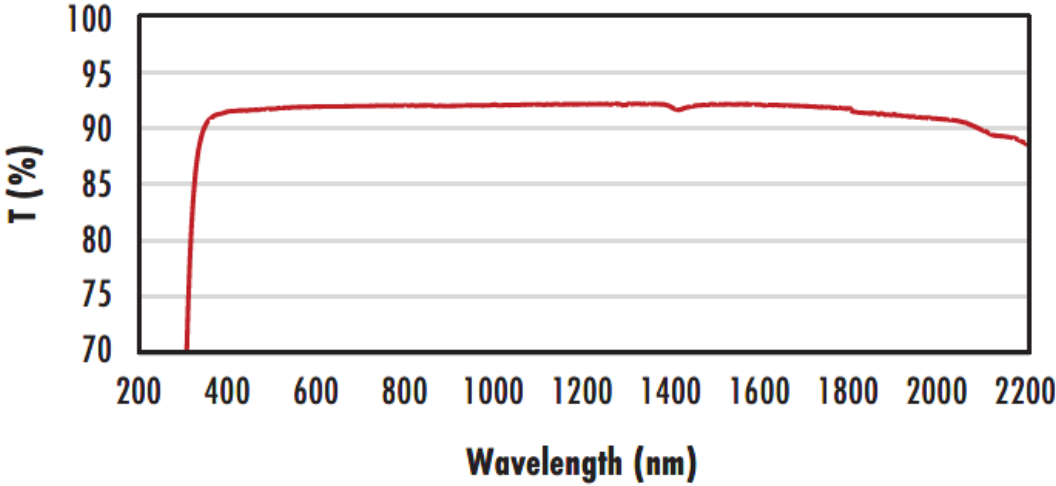
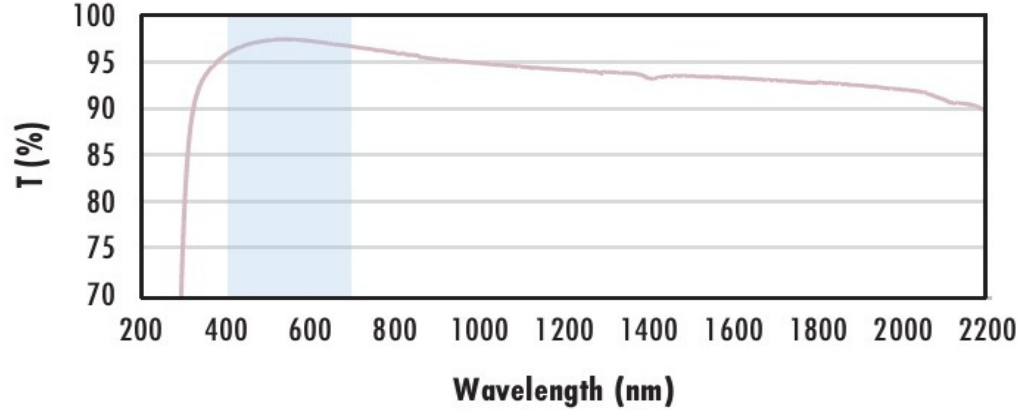
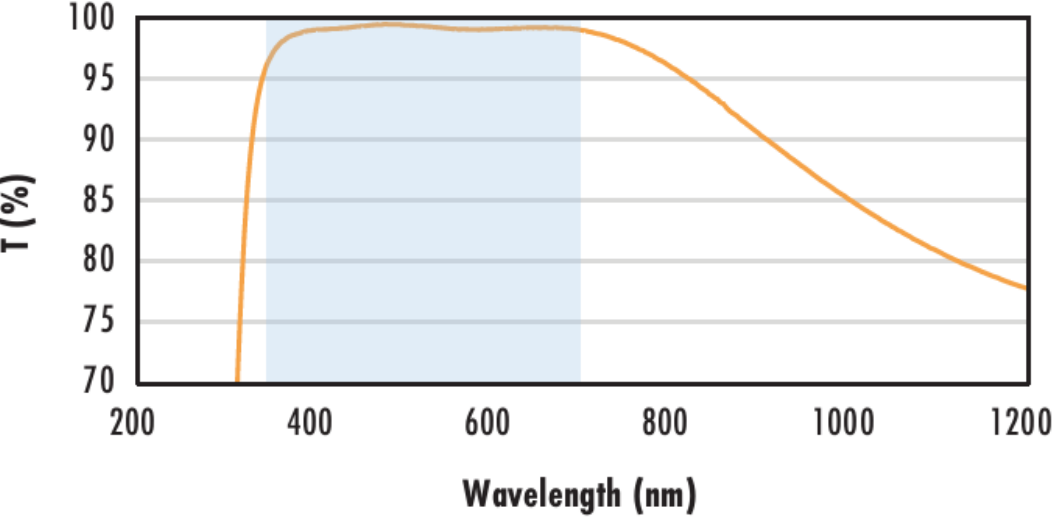
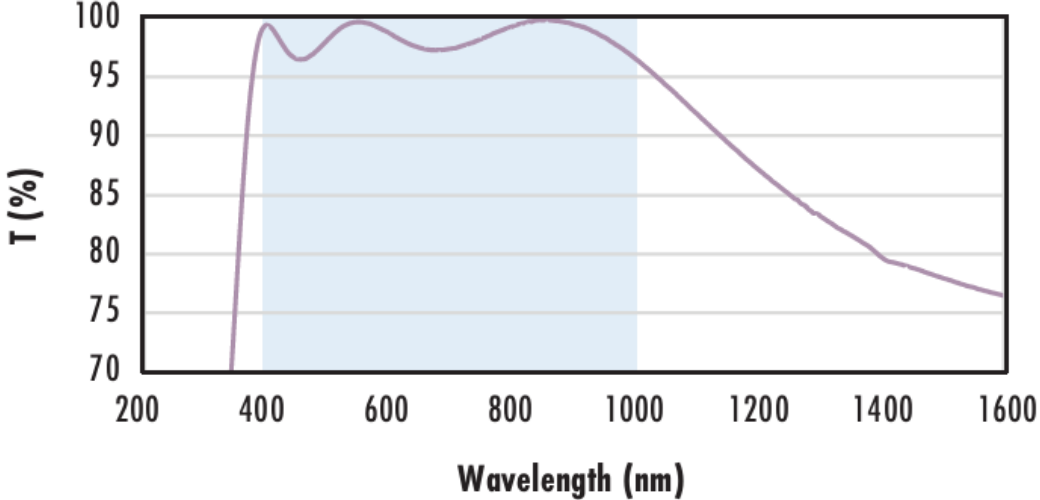
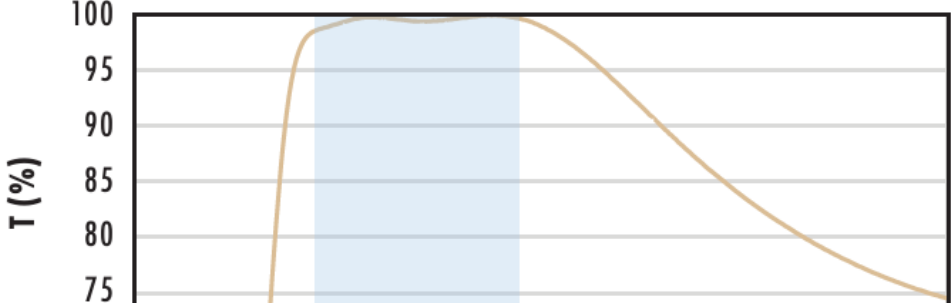
PRODUCT DETAILS

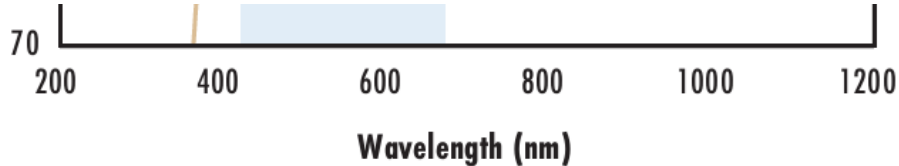
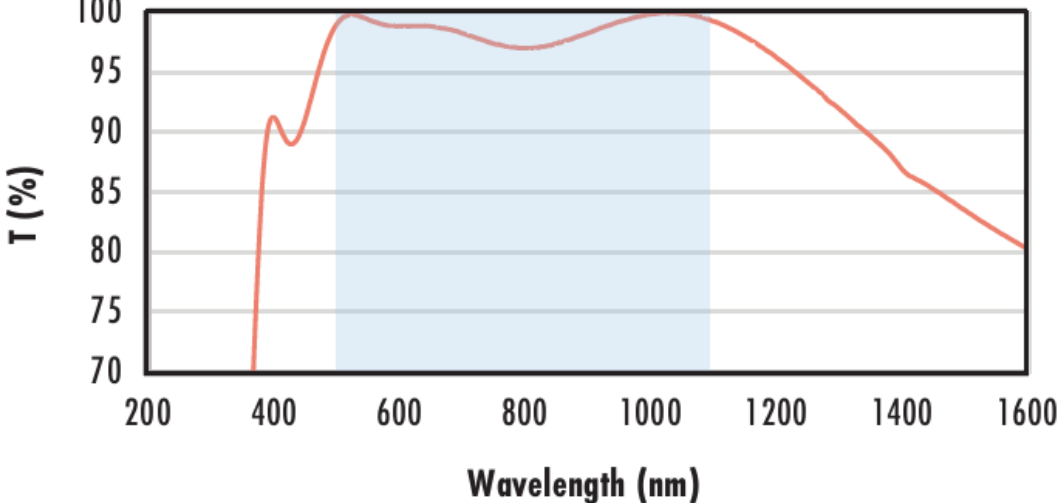
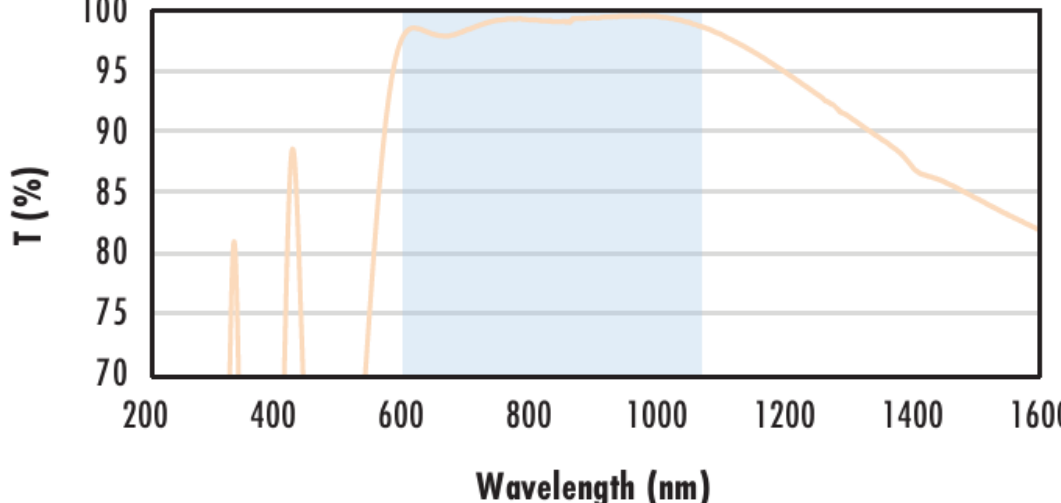
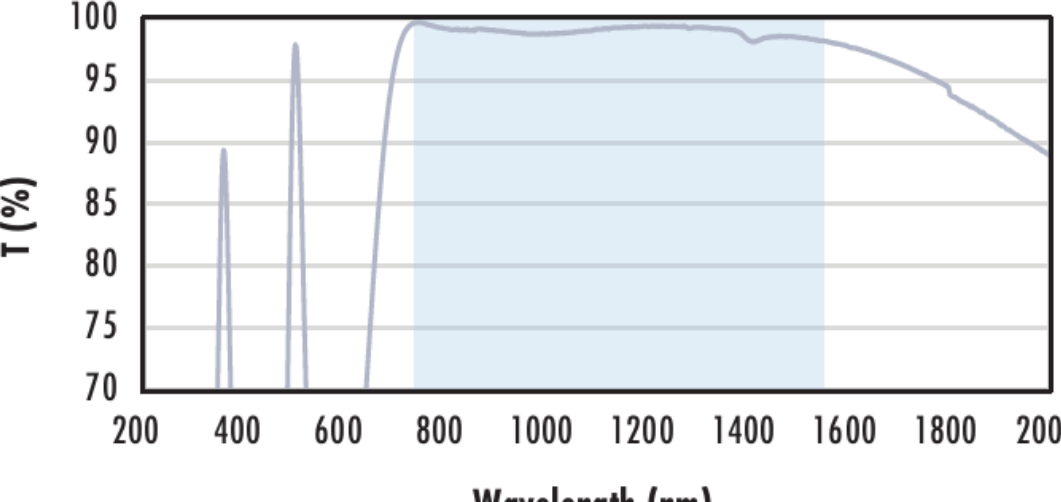
- Circular and Rectangular Sizes from 2mm to 200mm
- 8 Broadband Anti-Reflection Coating Options Available
- World's Largest Selection of Standard N-BK7 Windows
- Also Available with [Ultra-Thin N-BK7 Windows](#)

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

|                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <div data-bbox="527 130 1085 181" data-label="Caption"><p>Uncoated N-BK7 Typical Transmission</p></div> <div data-bbox="262 201 1249 655" data-label="Figure"></div>                      | <p>Typical transmission of a 3mm thick, uncoated N-BK7 window across the UV - NIR spectra.</p> <p><a href="#">Click Here to Download Data</a></p>                                                                                                                                                                                                                                                                                                                                                                              |
| <div data-bbox="590 733 957 813" data-label="Caption"><p>N-BK7 with MgF<sub>2</sub> Coating Typical Transmission</p></div> <div data-bbox="262 825 1213 1207" data-label="Figure"></div> | <p>Typical transmission of a 3mm thick N-BK7 window with MgF<sub>2</sub> (400-700nm) 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 1.75\% @ 400 - 700\text{nm}</math> (N-BK7)</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>                                                                                                 |
| <div data-bbox="590 1246 1018 1341" data-label="Caption"><p>N-BK7 with VIS-EXT Coating Typical Transmission</p></div> <div data-bbox="262 1350 1249 1834" data-label="Figure"></div>    | <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><math>R_{avg} \leq 0.5\% @ 350 - 700\text{nm}</math></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>                                                                                                                  |
| <div data-bbox="585 1887 1008 1982" data-label="Caption"><p>N-BK7 with VIS-NIR Coating Typical Transmission</p></div> <div data-bbox="262 1991 1234 2457" data-label="Figure"></div>    | <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><math>R_{abs} \leq 0.25\% @ 880\text{nm}</math><br/><math>R_{avg} \leq 1.25\% @ 400 - 870\text{nm}</math><br/><math>R_{avg} \leq 1.25\% @ 890 - 1000\text{nm}</math></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> |
| <div data-bbox="594 2510 976 2599" data-label="Caption"><p>N-BK7 with VIS 0° Coating Typical Transmission</p></div> <div data-bbox="283 2611 1171 2893" data-label="Figure"></div>      | <p>Typical transmission of a 3mm thick N-BK7 window with VIS 0° (425-675nm) 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 0.4\% @ 425 - 675\text{nm}</math></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 data-bbox="569 281 1039 379"><b>N-BK7 with YAG-BBAR Coating</b><br/><b>Typical Transmission</b></p>    | <p data-bbox="1339 412 1839 463">Typical transmission of a 3mm thick N-BK7 window with YAG-BBAR (500-1100nm) coating at 0° AOI.</p> <p data-bbox="1331 477 1850 525">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <div data-bbox="1467 537 1711 611"><p><math>R_{abs} \leq 0.25\%</math> @ 532nm</p><p><math>R_{abs} \leq 0.25\%</math> @ 1064nm</p><p><math>R_{avg} \leq 1.0\%</math> @ 500 - 1100nm</p></div> <p data-bbox="1339 623 1839 670">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1472 685 1707 706"><a href="#">Click Here to Download Data</a></p>                     |
| <p data-bbox="617 911 1008 1009"><b>N-BK7 with NIR I Coating</b><br/><b>Typical Transmission</b></p>    | <p data-bbox="1339 1074 1839 1124">Typical transmission of a 3mm thick N-BK7 window with NIR I (600 - 1050nm) coating at 0° AOI.</p> <p data-bbox="1331 1139 1850 1187">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <div data-bbox="1467 1199 1711 1222"><p><math>R_{avg} \leq 0.5\%</math> @ 600 - 1050nm</p></div> <p data-bbox="1339 1237 1839 1285">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1472 1299 1707 1320"><a href="#">Click Here to Download Data</a></p>                                                                                                           |
| <p data-bbox="606 1555 1018 1653"><b>N-BK7 with NIR II Coating</b><br/><b>Typical Transmission</b></p>  | <p data-bbox="1339 1685 1839 1736">Typical transmission of a 3mm thick N-BK7 window with NIR II (750 - 1550nm) coating at 0° AOI.</p> <p data-bbox="1331 1751 1850 1798">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <div data-bbox="1467 1810 1711 1884"><p><math>R_{abs} \leq 1.5\%</math> @ 750 - 800nm</p><p><math>R_{abs} \leq 1.0\%</math> @ 800 - 1550nm</p><p><math>R_{avg} \leq 0.7\%</math> @ 750 - 1550nm</p></div> <p data-bbox="1339 1917 1839 1964">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1472 1979 1707 2000"><a href="#">Click Here to Download Data</a></p> |

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](#).

