

TECHSPEC<sup>®</sup> 5mm Dia., 1mm Thick, VIS 0° Coated  $\lambda$ /4 N-BK7 Window



Stock **#23-377** [CONTACT US](#)

-

1

+

₹6,125

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| Volume Pricing |                               |
|----------------|-------------------------------|
| Qty 1-5        | ₹6,125 each                   |
| Qty 6-25       | ₹4,914 each                   |
| Qty 26-49      | ₹4,621 each                   |
| Need More?     | <a href="#">Request Quote</a> |

Product Downloads

General

Protective Window

Type:

Physical & Mechanical Properties

Protective as needed

Bevel:

90

Clear Aperture (%):

|                  |                          |
|------------------|--------------------------|
| 4.50             | Clear Aperture CA (mm):  |
| 5.00 +0.00/-0.25 | Diameter (mm):           |
| 1.00 ±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> ):         |
| VS 0° (425-675nm)                                      | Coating:                               |
| R <sub>avg</sub> ≤0.4% @425 - 675nm                    | Coating Specification:                 |
| 1.516                                                  | Index of Refraction (n <sub>d</sub> ): |
| N-BK7                                                  | Substrate:                             |
| 60-40                                                  | Surface Quality:                       |
| λ/4                                                    | Transmitted Wavefront, P-V:            |
| 425 - 675                                              | Wavelength Range (nm):                 |
| Damage Threshold, Reference: □<br>5 J/cm² @532nm, 10ns |                                        |

|                                           |                                                              |
|-------------------------------------------|--------------------------------------------------------------|
| 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:                  |
| 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

|                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>Uncoated N-BK7 Typical Transmission</b></p>                       | <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>                                                                                                                                                                                                                                                                                                                                                                              |
| <p><b>N-BK7 with MgF<sub>2</sub> Coating Typical Transmission</b></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><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>                                                                                                            |
| <p><b>N-BK7 with VIS-EXT Coating Typical Transmission</b></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><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>                                                                                                                  |
| <p><b>N-BK7 with VIS-NIR Coating Typical Transmission</b></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><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> |
| <p><b>N-BK7 with VIS 0° Coating Typical Transmission</b></p>          | <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>                                                                                                                   |



