

TECHSPEC[®] 75mm Dia., 2mm Thick, NIR II Coated λ /4 N-BK7 Window



Stock #25-829 12 In Stock

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1

+

£191^{.20}

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Volume Pricing	
Qty 1-5	£191.20 each
Qty 6-25	£152.80 each
Qty 26-49	£143.20 each
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 Prices shown are exclusive of VAT/local taxes

Product Downloads

General

Protective Window

Type:

Physical & Mechanical Properties

Protective as needed

Bevel:

90

Clear Aperture (%):

67.50	Clear Aperture CA (mm):
75.00 +0.00/-0.25	Diameter (mm):
2.00 ±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):
NIR II (750-1550nm)	Coating:
R _{abs} ≤1.5% @ 750 - 800nm R _{abs} ≤1.0% @ 800 - 1550nm R _{avg} ≤0.7% @ 750 - 1550nm	Coating Specification:
1.516	Index of Refraction (n _d):
N-BK7	Substrate:
60-40	Surface Quality:
λ/4	Transmitted Wavefront, P-V:
750 - 1550	Wavelength Range (nm):

8 J/cm² @ 1064nm, 10ns	Damage Threshold, By Design: □
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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

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

Product Details

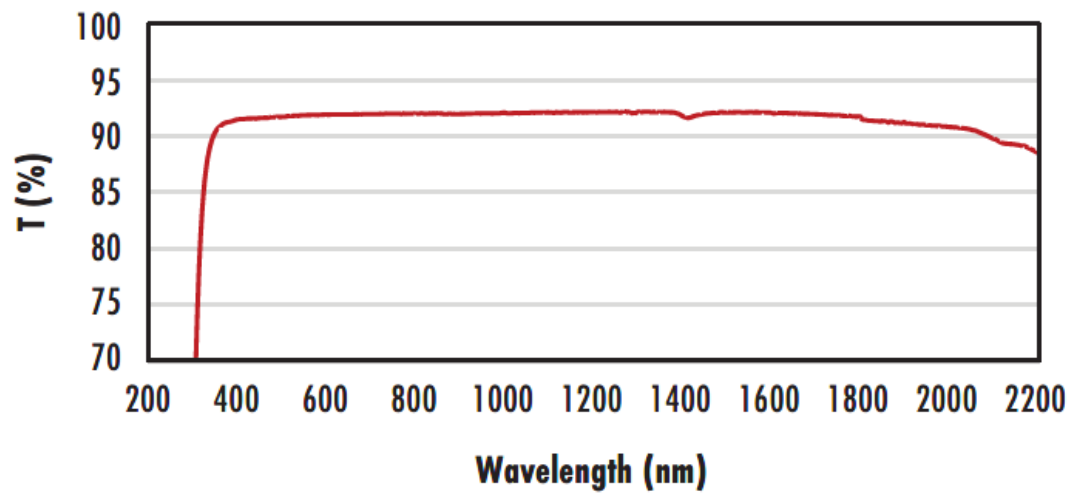
- Circular and Rectangular Sizes from 2mm to 200mm
- 8 Broadband Anti-Reflection Coating Options Available
- World's Largest Selection of Standard N-BK7 Windows
- Also Available with [Ultra-Thin N-BK7 Windows](#)

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](#).

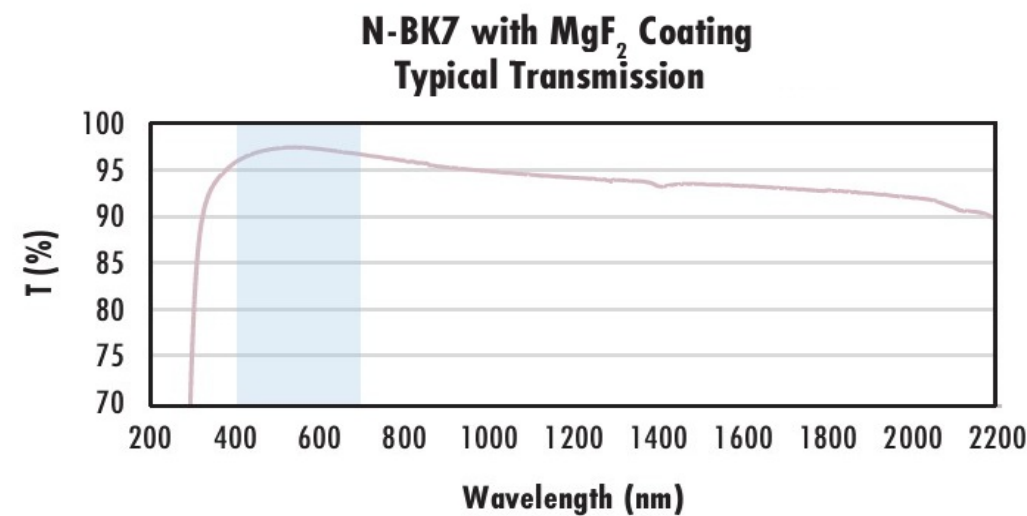
Technical Information

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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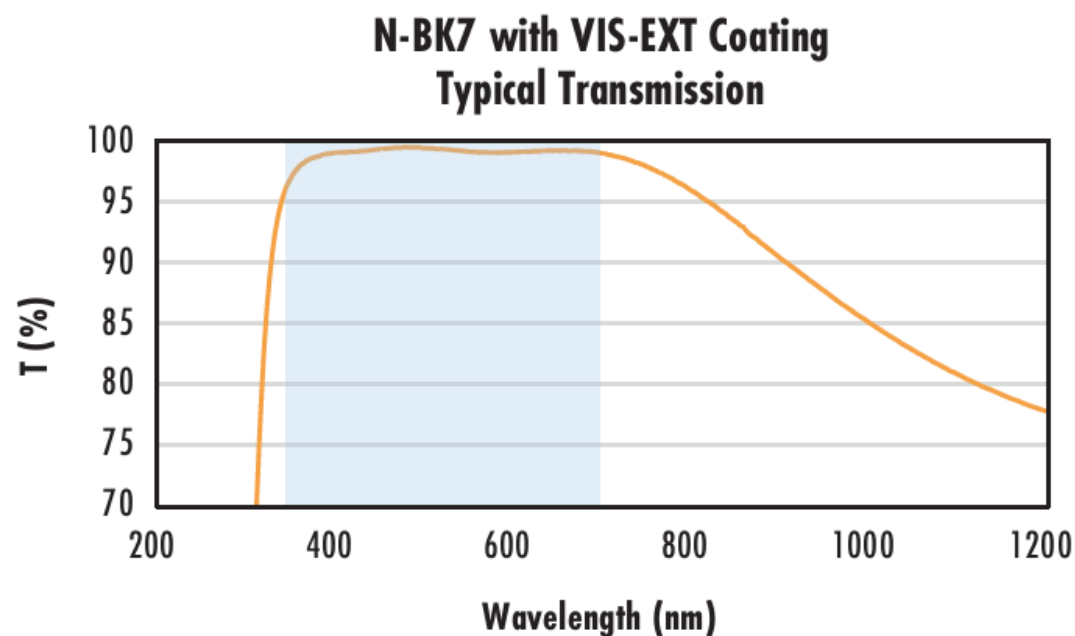
Typical transmission of a 3mm thick N-BK7 window with MgF₂ (400-700nm) coating at 0° AOI.

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.

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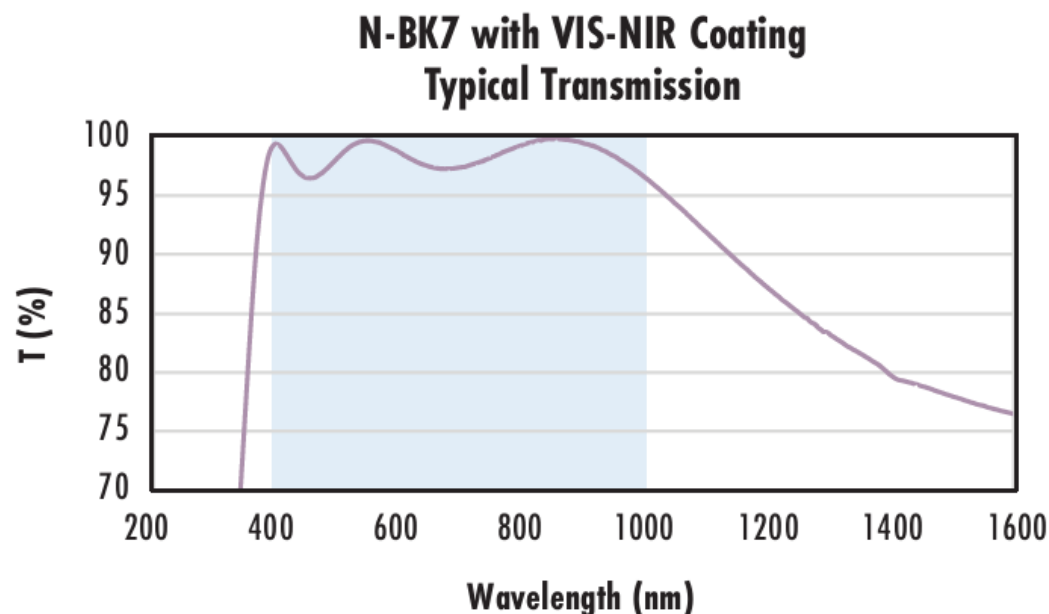
Typical transmission of a 3mm thick N-BK7 window with VIS-EXT (350-700nm) coating at 0° AOI.

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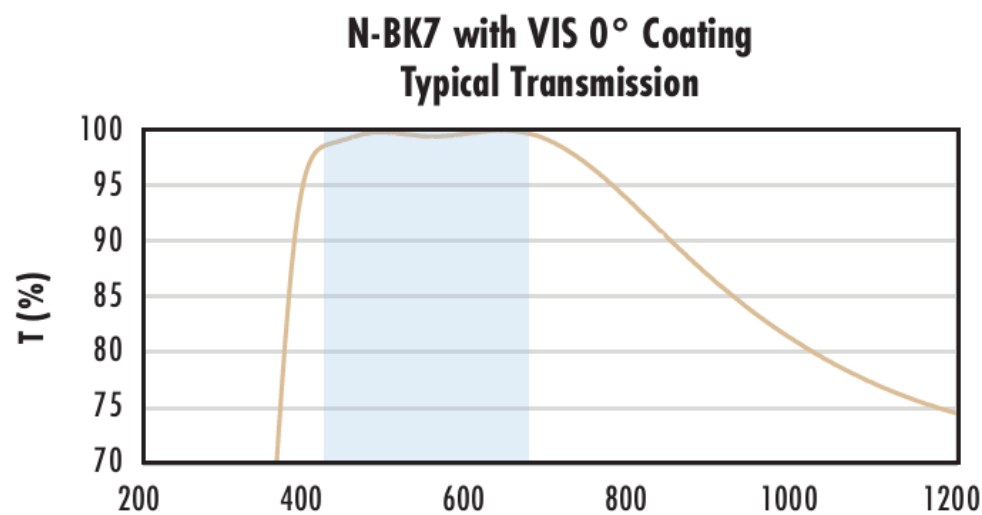
Typical transmission of a 3mm thick N-BK7 window with VIS-NIR (400-1000nm) coating at 0° AOI.

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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