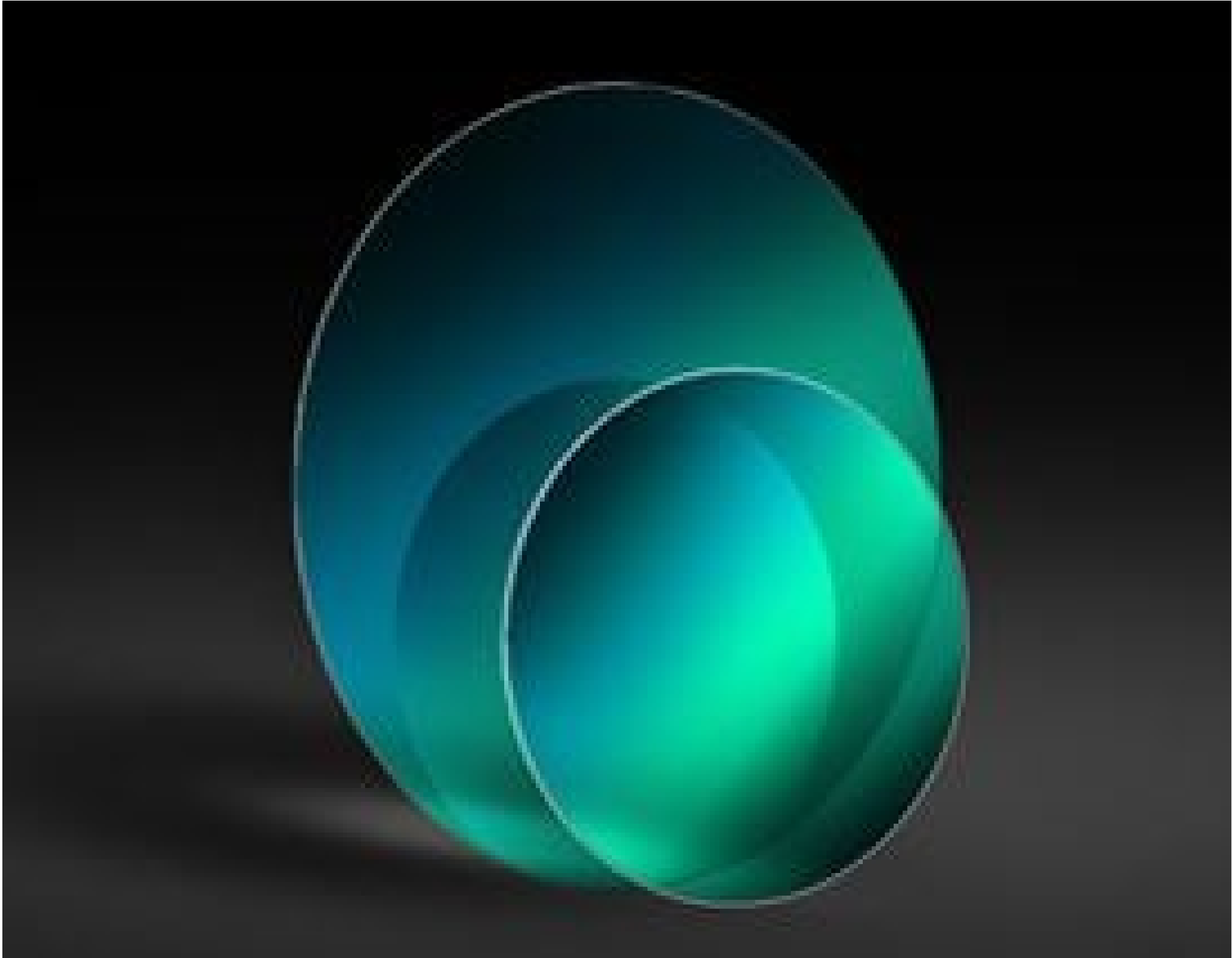


TECHSPEC® 50mm Diameter Uncoated, Ultra-Thin N-BK7 Window

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Ultra-Thin N-BK7 Windows

Stock #66-191 20+ In Stock

-

1

+

€184^{.37}

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Volume Pricing	
Qty 1-5	€184,37 each
Qty 6-25	€148,32 each
Qty 26-49	€139,05 each
Need More?	Request Quote

i Prices shown are exclusive of VAT/local taxes

Product Downloads

SPECIFICATIONS

General

Protective Window

Type:

Physical & Mechanical Properties	
Protective as needed	Bevel:
45.00	Clear Aperture CA (mm):
50.00 +0.00/-0.10	Diameter (mm):
0.20 ±0.025	Thickness (mm):
Fine Ground	Edges:
610.00	Knoop Hardness (kg/mm²):
<30	Parallelism (arcsec):
0.21	Poisson's Ratio:
82	Young's Modulus (GPa):
Optical Properties	
64.17	Abbe Number (v _d):
Uncoated	Coating:
1.516	Index of Refraction (n _d):
N-BK7	Substrate:
40-20	Surface Quality:
λ/2	Transmitted Wavefront, P-V:
350 - 2200	Wavelength Range (nm):
Material Properties	
Coefficient of Thermal Expansion CTE (10 ⁻⁶ /°C): 7.1 (-30 to +70°C) 8.3 (+20 to +300°C)	
2.51	Density (g/cm³):
Regulatory Compliance	
Compliant	RoHS 2015:
Compliant	Reach 219:
View	Certificate of Conformance:

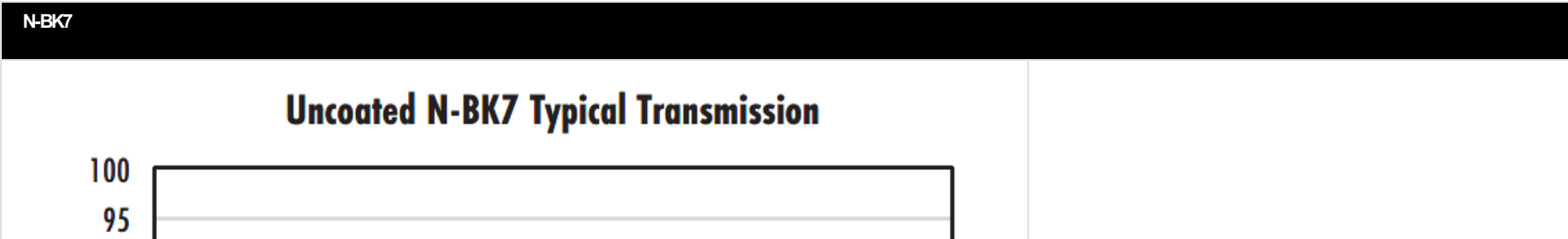
PRODUCT DETAILS

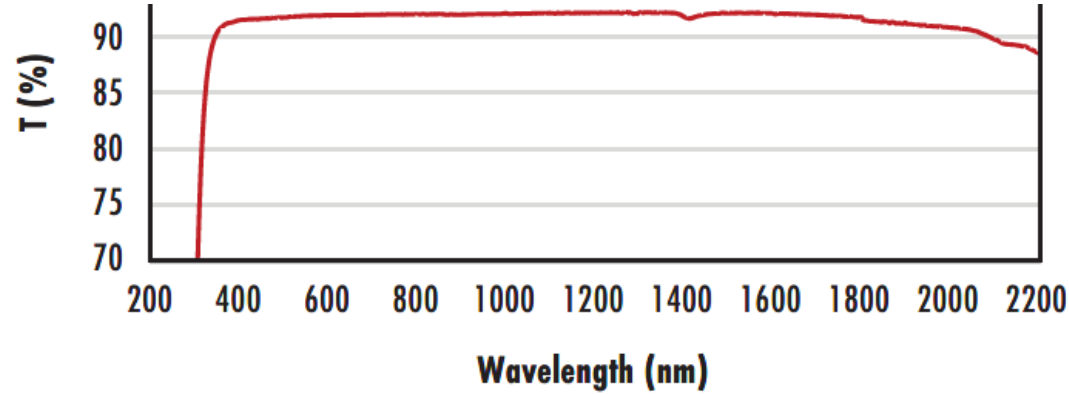
- Ultra-Thin 0.20mm Thickness
- Precision N-BK7 Substrate
- Extremely Lightweight

TECHSPEC® Ultra-Thin N-BK7 Windows are our thinnest windows available and are at least 1/10 the thickness of our traditional N-BK7 windows. Their extremely thin designs make them ideal for both weight and size-sensitive applications. Additionally, their high tolerance design yields minimal beam distortion and scatter. TECHSPEC® Ultra-Thin N-BK7 Windows are available uncoated or with a MgF2 anti-reflection coating. For custom sizes or coating options, please contact our [Sales Department](#).

Note: The Ultra-Thin N-BK7 Wndows are very fragile. Handle these windows with care.

TECHNICAL INFORMATION

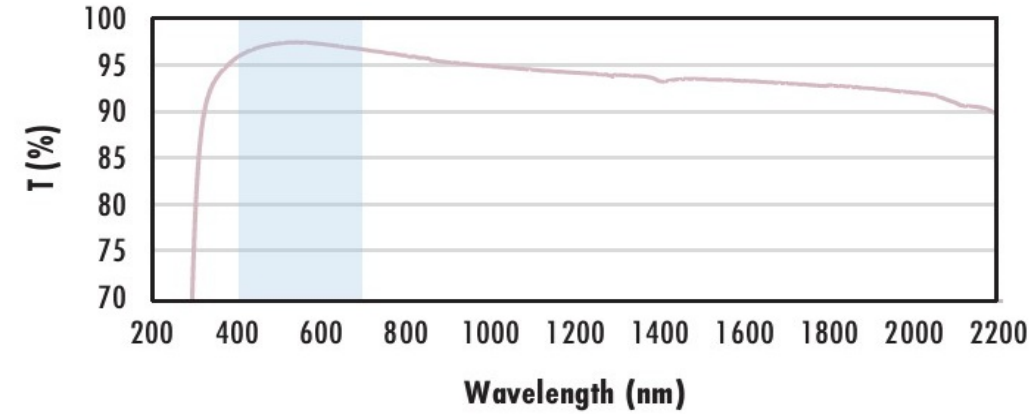




Typical transmission of a 3mm thick, uncoated N-BK7 window across the UV - NIR spectra.

[Click Here to Download Data](#)

**N-BK7 with MgF₂ Coating
Typical Transmission**



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

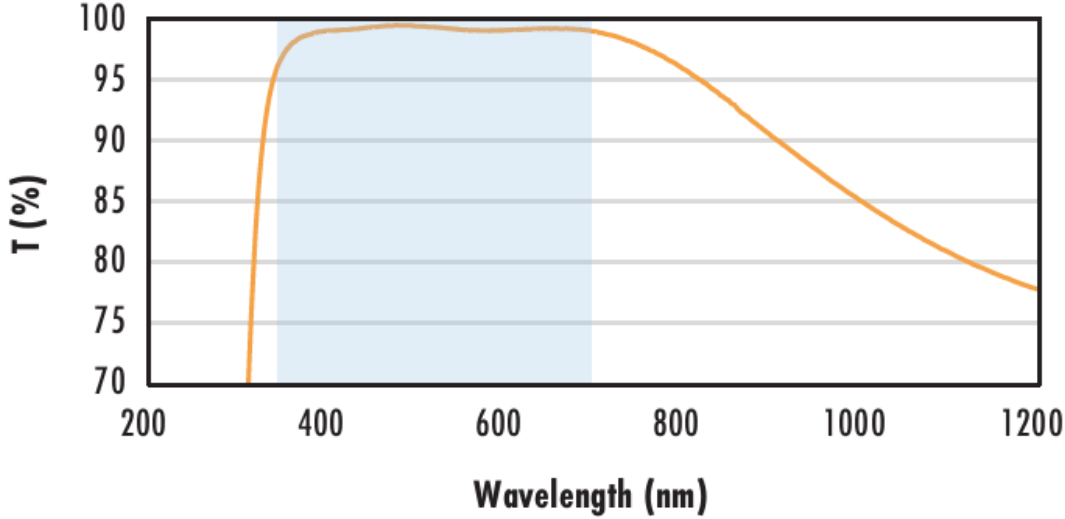
The blue shaded region indicates the coating design wavelength range, with the following specification:

$$R_{avg} \leq 1.75\% \text{ @ } 400 - 700\text{nm (N-BK7)}$$

Data outside this range is not guaranteed and is for reference only.

[Click Here to Download Data](#)

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



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

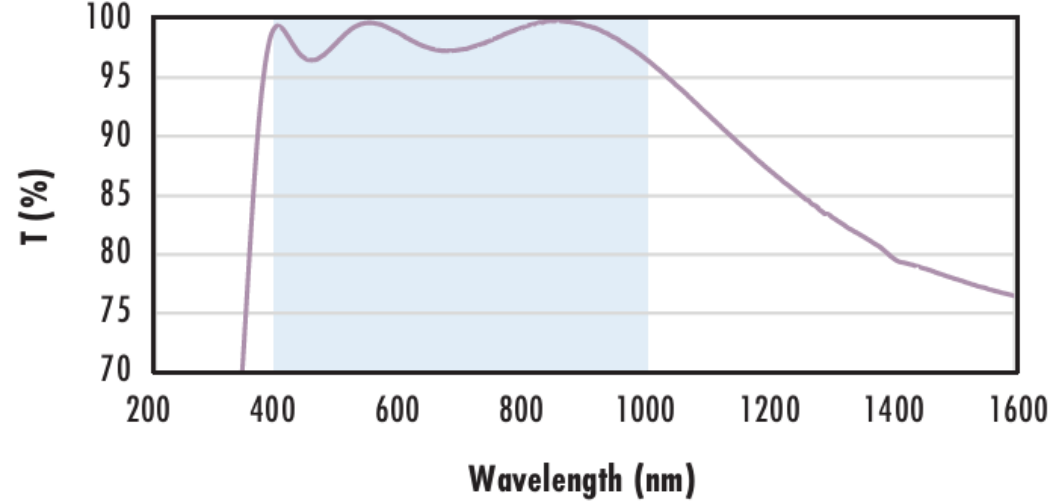
The blue shaded region indicates the coating design wavelength range, with the following specification:

$$R_{avg} \leq 0.5\% \text{ @ } 350 - 700\text{nm}$$

Data outside this range is not guaranteed and is for reference only.

[Click Here to Download Data](#)

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



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:

$$R_{abs} \leq 0.25\% \text{ @ } 880\text{nm}$$

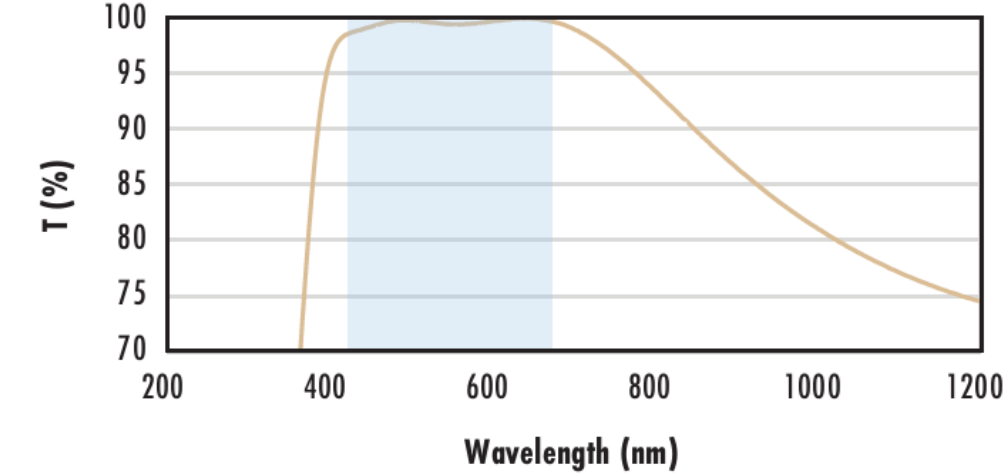
$$R_{avg} \leq 1.25\% \text{ @ } 400 - 870\text{nm}$$

$$R_{avg} \leq 1.25\% \text{ @ } 890 - 1000\text{nm}$$

Data outside this range is not guaranteed and is for reference only.

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**N-BK7 with VIS 0° Coating
Typical Transmission**



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:

$$R_{avg} \leq 0.4\% \text{ @ } 425 - 675\text{nm}$$

Data outside this range is not guaranteed and is for reference only.

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