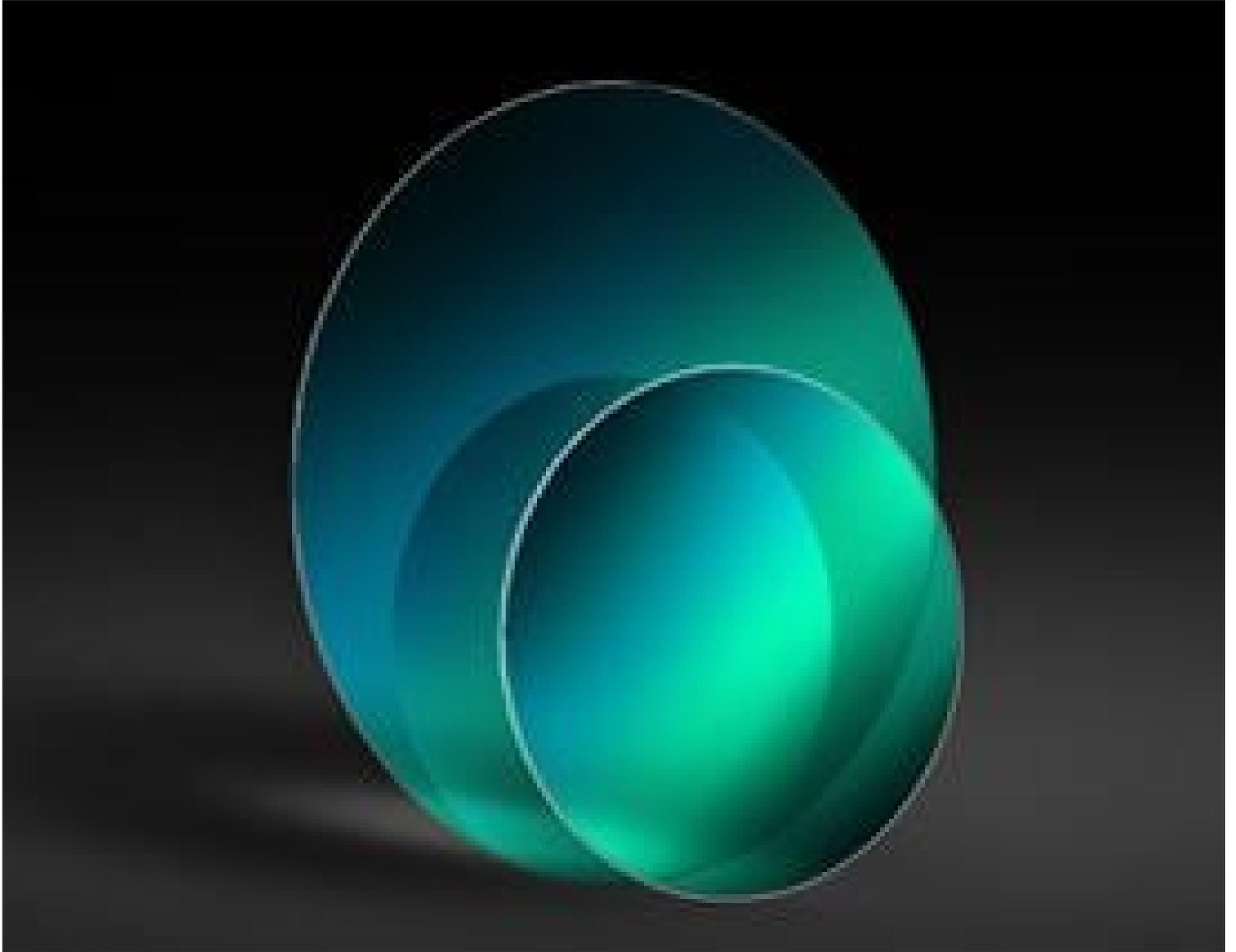


[See all 40 Products in Family](#)

## TECHSPEC® 10mm Diameter MgF<sub>2</sub> Coated, Ultra-Thin N-BK7 Window

See More by [SCHOTT Optical Components](#)



Ultra-Thin N-BK7 Windows

Stock #66-193 **20+ In Stock**

⊖ 1 ⊕ C\$166.<sup>00</sup>

**ADD TO CART**

### Volume Pricing

Qty 1-5	C\$166.60 each
Qty 6-25	C\$133.00 each
Qty 26-49	C\$124.60 each
Need More?	<a href="#">Request Quote</a>

### Product Downloads

### General

Protective Window      Type:

### Physical & Mechanical Properties

9.00      Clear Aperture CA (mm):

Diameter (mm):

10.00 +0.00/-0.10

0.20 ±0.025 **Thickness (mm):**

Protective as needed **Bevel:**

Fine Ground **Edges:**

<30 **Parallelism (arcsec):**

0.21 **Poisson's Ratio:**

82 **Young's Modulus (GPa):**

610.00 **Knoop Hardness (kg/mm<sup>2</sup>):**

## Optical Properties

MgF<sub>2</sub> (400-700nm) **Coating:**

[N-BK7](#) **Substrate:**

1.516 **Index of Refraction (n<sub>d</sub>):**

20-10 **Surface Quality:**

λ/2 **Transmitted Wavefront, P-V:**

64.17 **Abbe Number (v<sub>d</sub>):**

R<sub>avg</sub> ≤1.75% @400 - 700nm **Coating Specification:**

400 - 700 **Wavelength Range (nm):**

10 J/cm<sup>2</sup> @532nm, 10ns **Damage Threshold, Reference:**

## Material Properties

2.51 **Density (g/cm<sup>3</sup>):**

**Coefficient of Thermal Expansion CTE (10<sup>-6</sup>/°C):**  
7.1 (-30 to +70°C)  
8.3 (+20 to +300°C)

## Regulatory Compliance

[Compliant](#) **RoHS 2015:**

[Compliant](#) **Reach 219:**

[View](#) **Certificate of Conformance:**

## Product Details

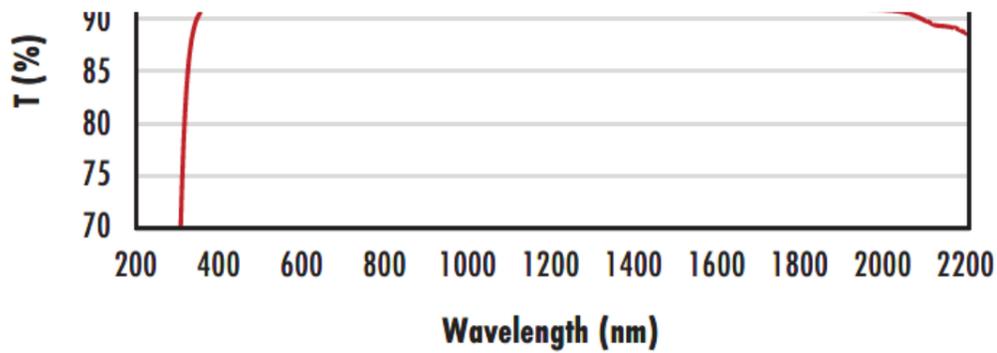
- Ultra-Thin 0.20mm Thickness
- Precision N-BK7 Substrate
- Extremely Lightweight

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 MgF<sub>2</sub> anti-reflection coating. For custom sizes or coating options, please contact our [Sales Department](#).

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

## Technical Information

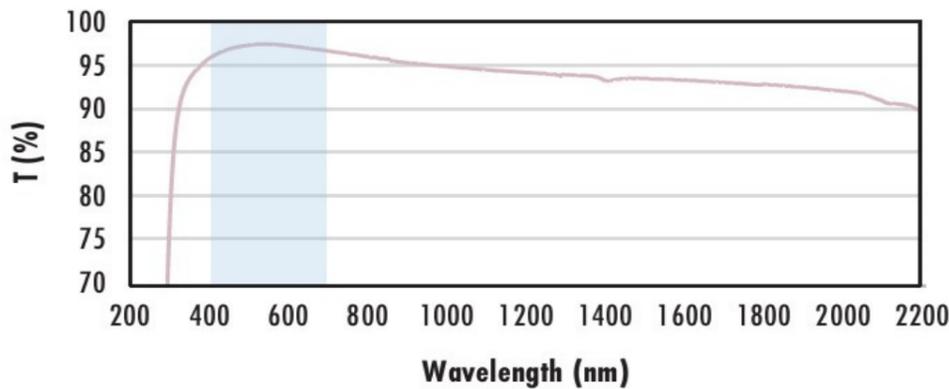




Typical transmission of a 3mm thick, uncoated N-BK7 window across the UV - NIR spectra.

[Click Here to Download Data](#)

**N-BK7 with MgF<sub>2</sub> Coating  
Typical Transmission**



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

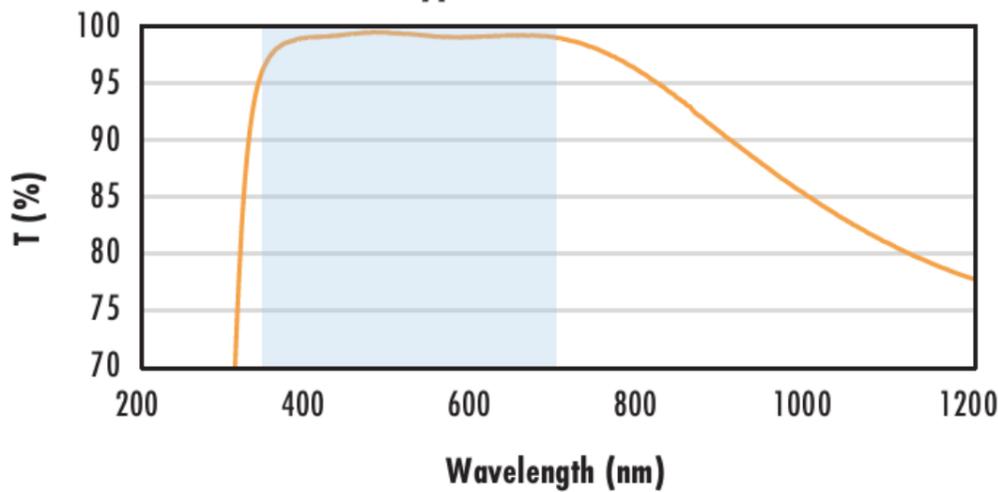
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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

[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.

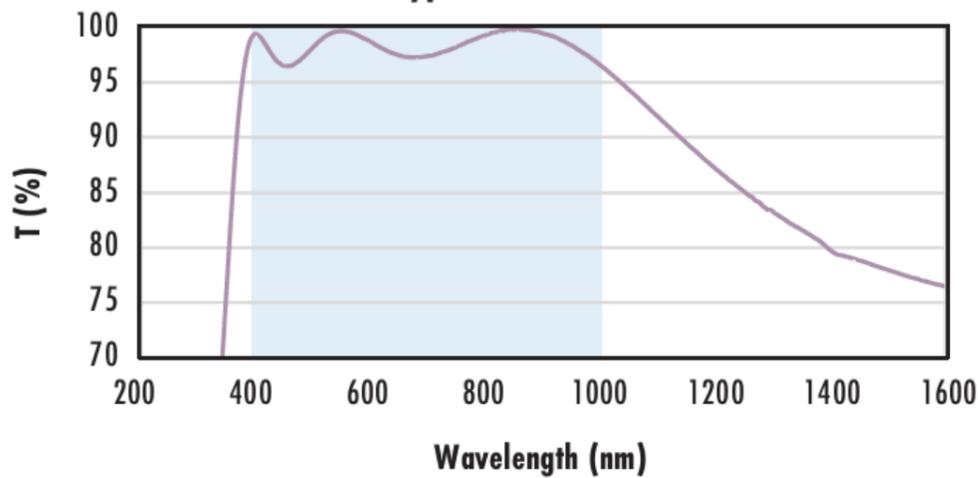
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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:

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

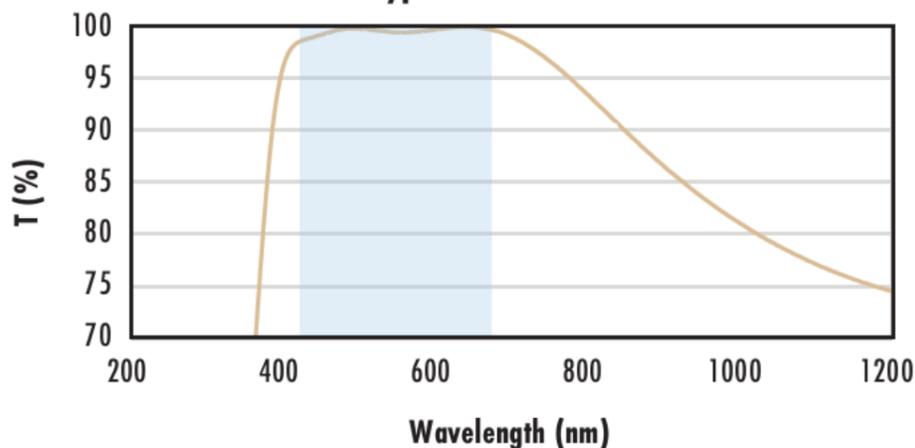
$$R_{avg} \leq 1.25\% @ 400 - 870\text{nm}$$

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

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

[Click Here to Download Data](#)

**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.

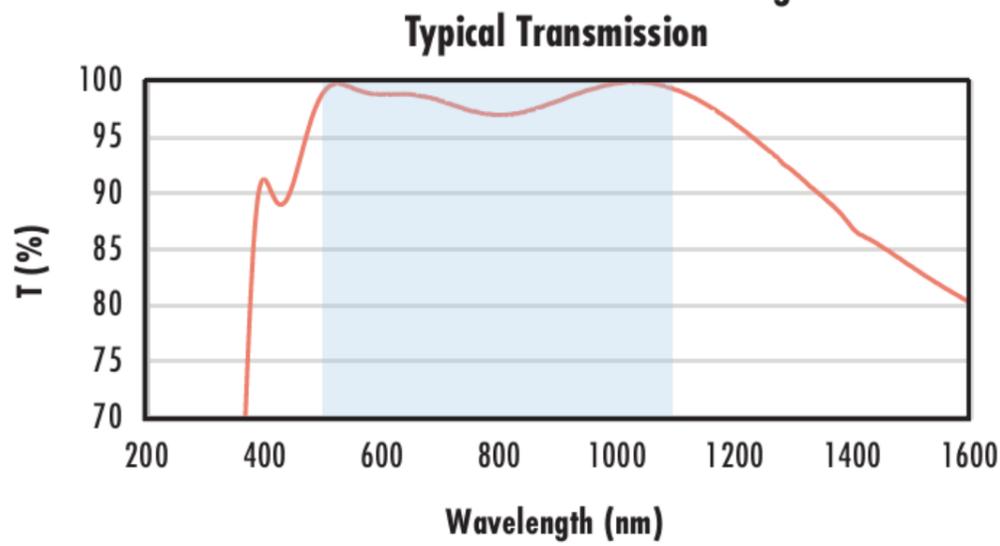
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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

[Click Here to Download Data](#)

**N-BK7 with YAG-BBAR Coating**



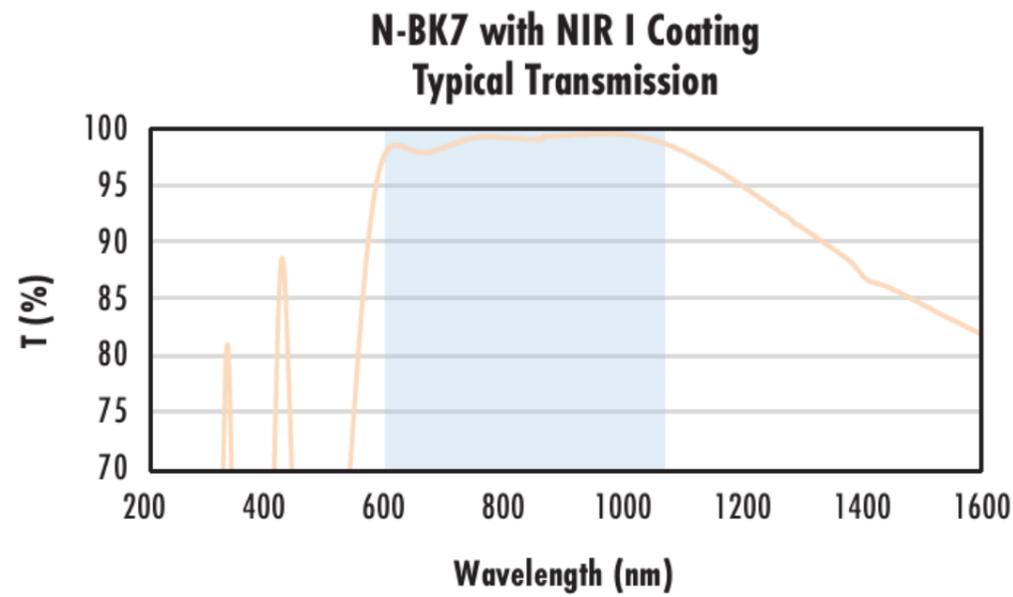
Typical transmission of a 3mm thick N-BK7 window with YAG-BBAR (500-1100nm) coating at 0° AOI.

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

$R_{abs} \leq 0.25\%$  @ 532nm  
 $R_{abs} \leq 0.25\%$  @ 1064nm  
 $R_{avg} \leq 1.0\%$  @ 500 - 1100nm

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

[Click Here to Download Data](#)



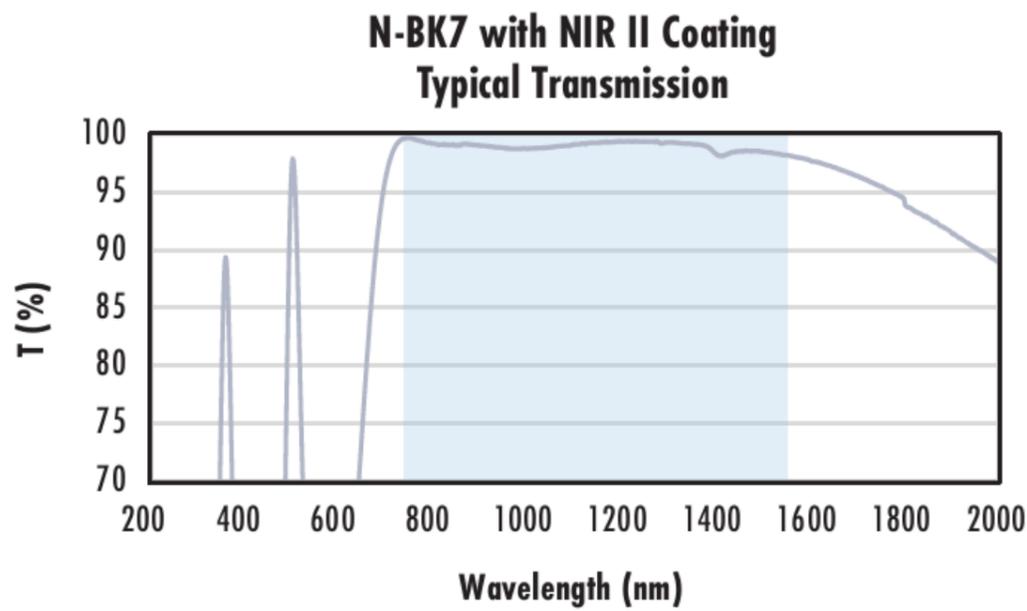
Typical transmission of a 3mm thick N-BK7 window with NIR I (600 - 1050nm) coating at 0° AOI.

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

$R_{avg} \leq 0.5\%$  @ 600 - 1050nm

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

[Click Here to Download Data](#)



Typical transmission of a 3mm thick N-BK7 window with NIR II (750 - 1550nm) coating at 0° AOI.

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

$R_{abs} \leq 1.5\%$  @ 750 - 800nm  
 $R_{abs} \leq 1.0\%$  @ 800 - 1550nm  
 $R_{avg} \leq 0.7\%$  @ 750 - 1550nm

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

[Click Here to Download Data](#)

## 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](#).

## Compatible Mounts