

**TECHSPEC® 18.0mm Dia. x 20.0mm FL, NIR II, Inked, Plano-Convex Lens**



Stock **#38-415-INK** [CONTACT US](#)

[Other Coating Options](#)

1  **A\$95<sup>20</sup>**

**ADD TO CART**

Volume Pricing	
Qty 1-9	<b>A\$95.20</b> each
Qty 10-24	<b>A\$85.60</b> each
Qty 25-49	<b>A\$76.40</b> each
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**SPECIFICATIONS**

**General**

Type:

**Physical & Mechanical Properties**

18.00 ±0.025      **Diameter (mm):**

<1      **Centering (arcmin):**

4.30 ±0.10      **Center Thickness CT (mm):**

1.46      **Edge Thickness ET (mm):**

17      **Clear Aperture CA (mm):**

Protective as needed      **Bevel:**

**Optical Properties**

20.00 @ 587.6nm      **Effective Focal Length EFL (mm):**

17.59      **Back Focal Length BFL (mm):**

NIR II (750-1550nm)      **Coating:**

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

**N-SF11**      **Substrate:**

40-20      **Surface Quality:**

1.5λ      **Power (P-V) @ 632.8nm:**

λ/4      **Irregularity (P-V) @ 632.8nm:**

±1      **Focal Length Tolerance (%):**

15.70      **Radius R<sub>1</sub> (mm):**

1.11      **f#:**

0.45      **Numerical Aperture NA:**

750 - 1550      **Wavelength Range (nm):**

8 J/cm<sup>2</sup> @ 1064nm, 10ns      **Damage Threshold, By Design:**

**Regulatory Compliance**

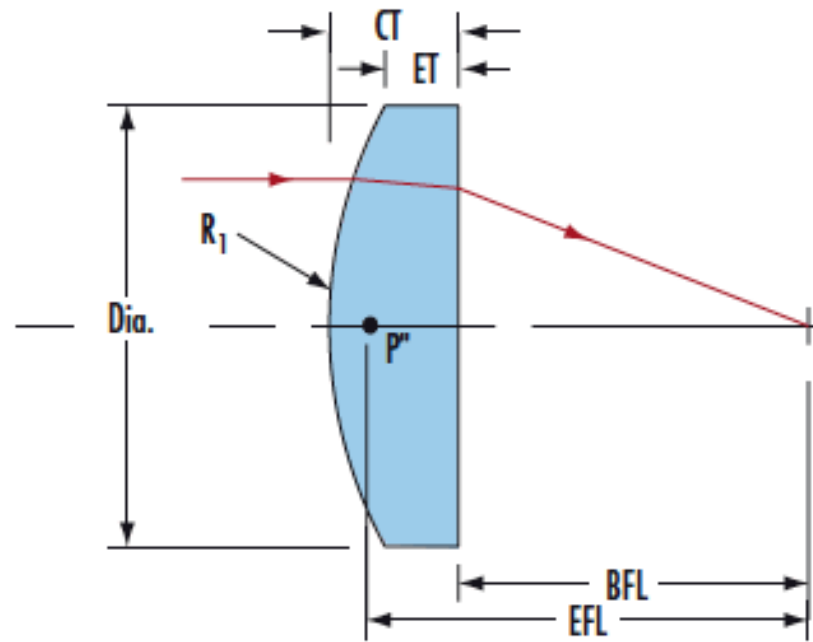
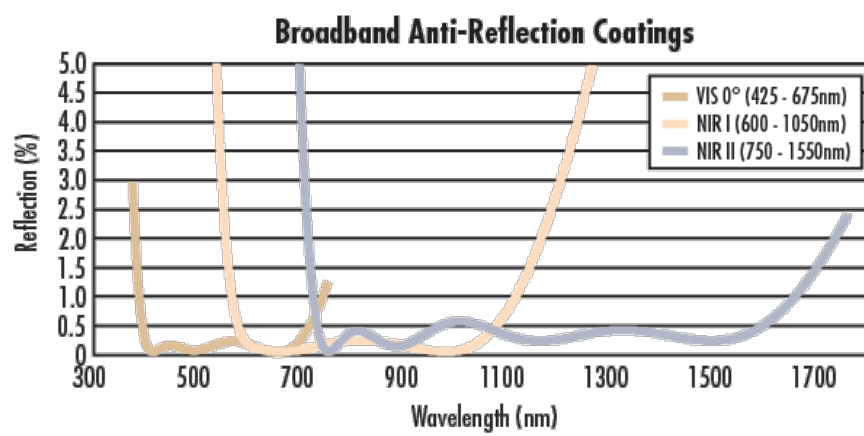
[View](#)      **Certificate of Conformance:**

**PRODUCT DETAILS**

- AR Coated to Provide <0.7% Reflectance per Surface for 750 - 1550nm
- Designed for 0° Angle of Incidence
- Various PCX Coating Options: [Uncoated](#), [MgF<sub>2</sub>](#), [VIS 0°](#), [VIS-NIR](#), [NIR I](#), [VIS-EXT](#), and [YAG-BBAR](#)

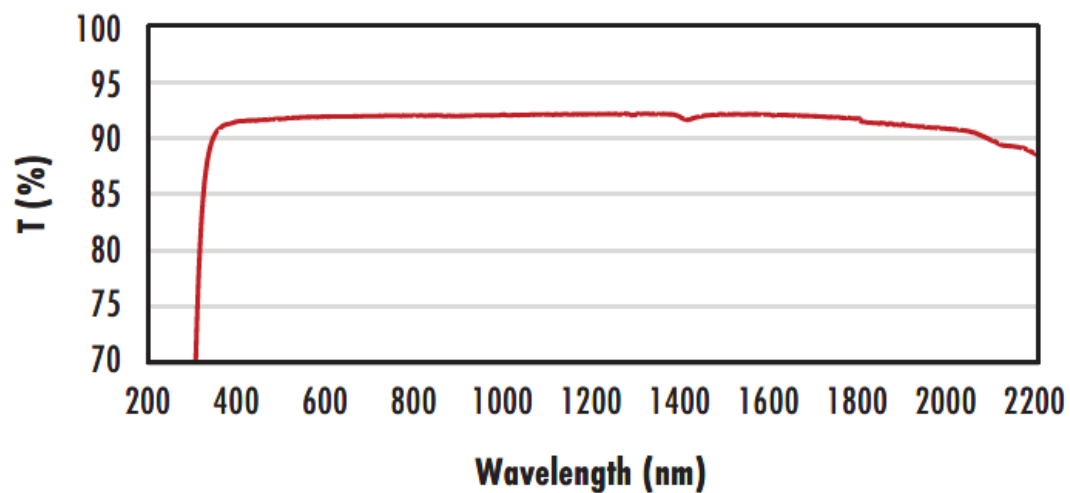
TECHSPEC® NIR II Coated Plano-Convex Lenses have a positive focal length, making them ideal for collecting and focusing light in imaging applications. They are also useful in a variety of applications involving emitters, detectors, lasers, and fiber optics. TECHSPEC® NIR II Coated Plano-Convex Lenses are available in a wide variety of diameters and focal lengths. Identical designs of these PCX lenses are also offered [uncoated](#) or with broadband anti-reflective (BBAR) coatings, which include [MgF<sub>2</sub>](#), [VIS 0°](#), [VIS-NIR](#), [NIR I](#), [VIS-EXT](#), and [YAG-BBAR](#).

**TECHNICAL INFORMATION**



N-BK7

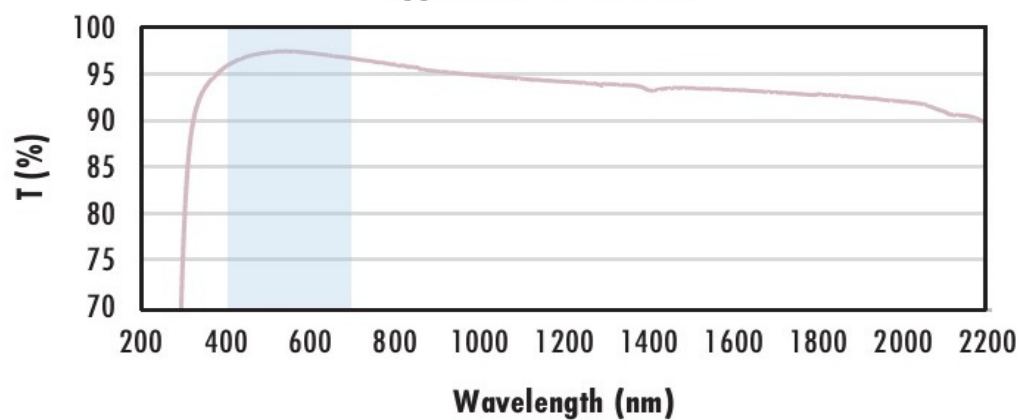
#### Uncoated N-BK7 Typical Transmission



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

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#### 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.

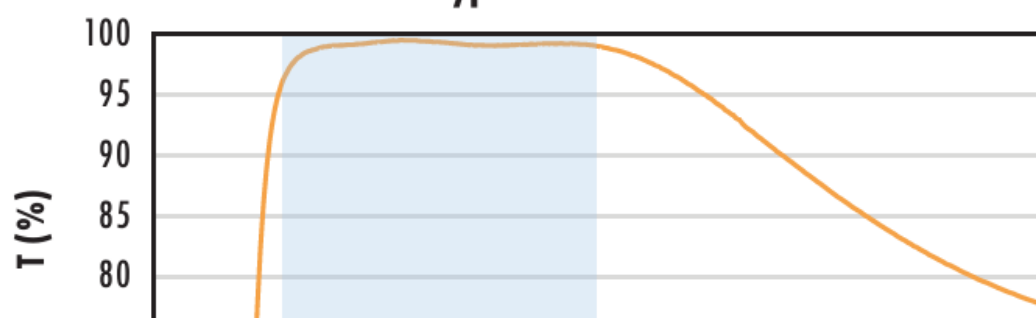
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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

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

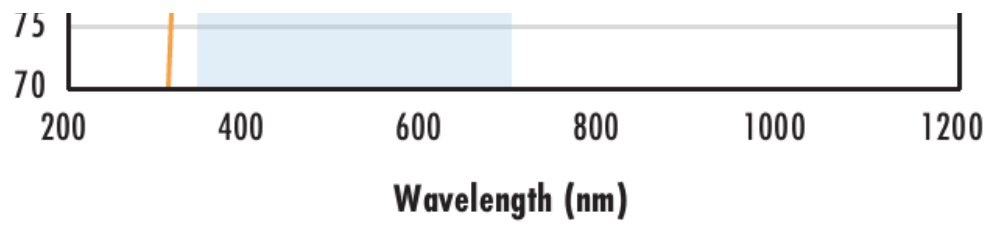


Typical transmission of a 3mm thick N-BK7 window with VIS-EXT (350-700nm) coating at 0° AOI.

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

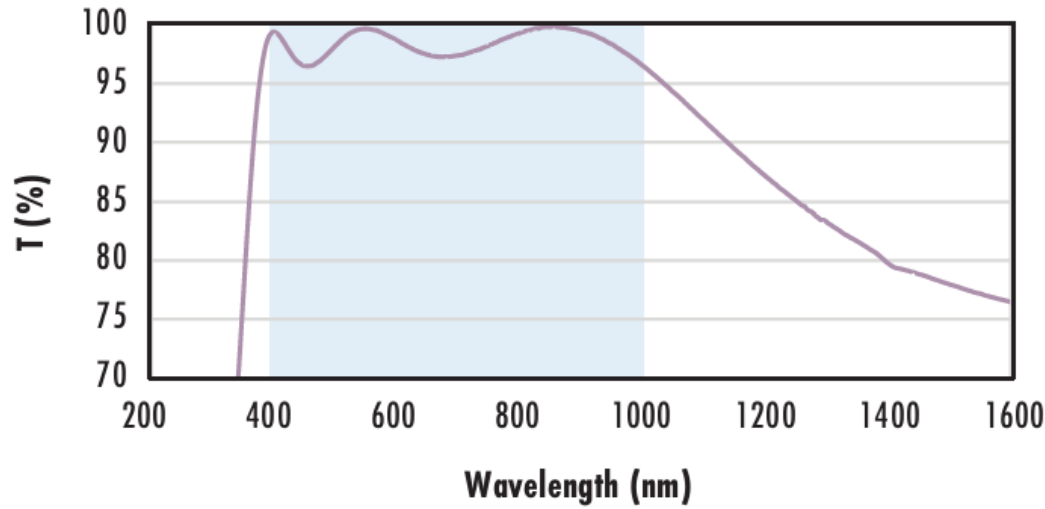
$$R_{avg} \leq 0.5\% @ 350 - 700\text{nm}$$

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



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**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:

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

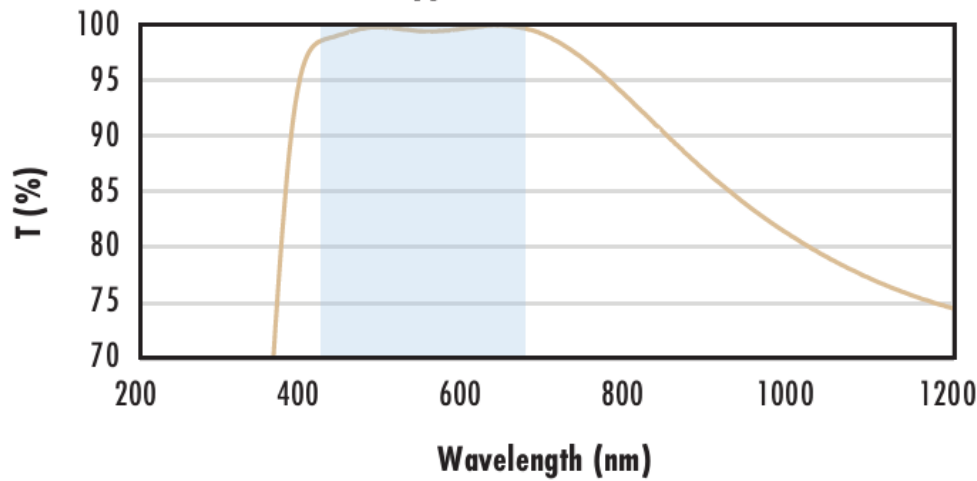
$$R_{avg} \leq 1.25\% @ 400 - 870\text{nm}$$

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

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

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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.

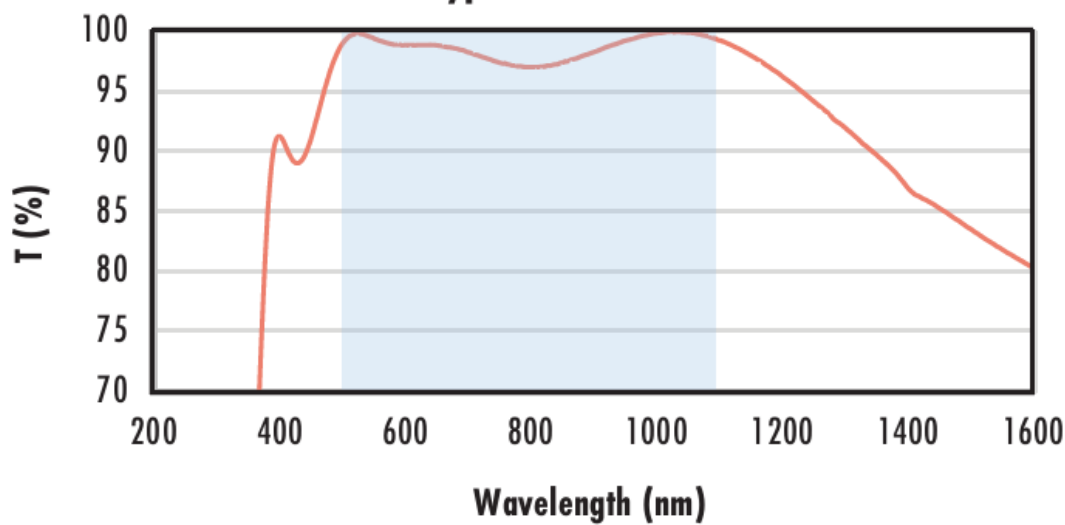
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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**



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:

$$R_{abs} \leq 0.25\% @ 532\text{nm}$$

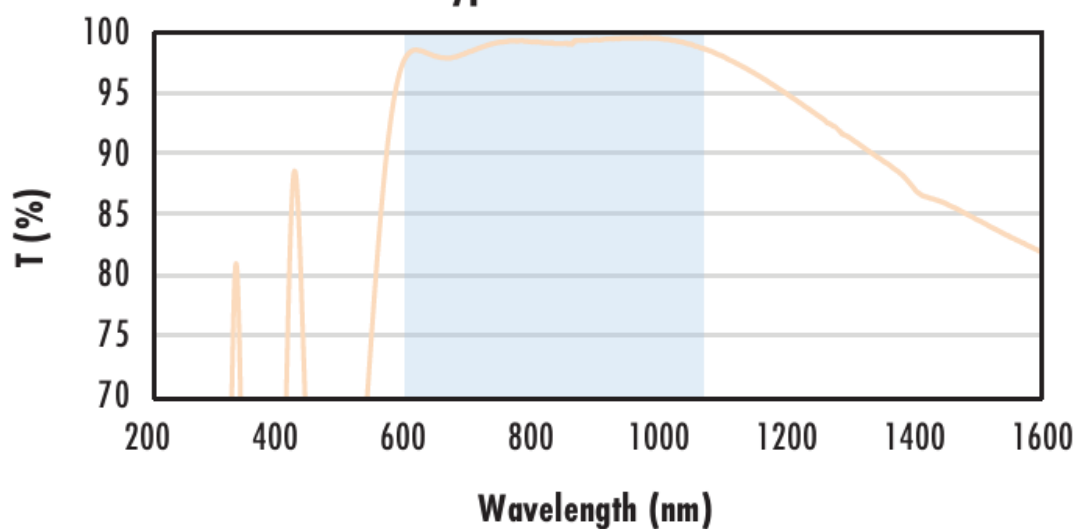
$$R_{abs} \leq 0.25\% @ 1064\text{nm}$$

$$R_{avg} \leq 1.0\% @ 500 - 1100\text{nm}$$

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

[Click Here to Download Data](#)

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



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

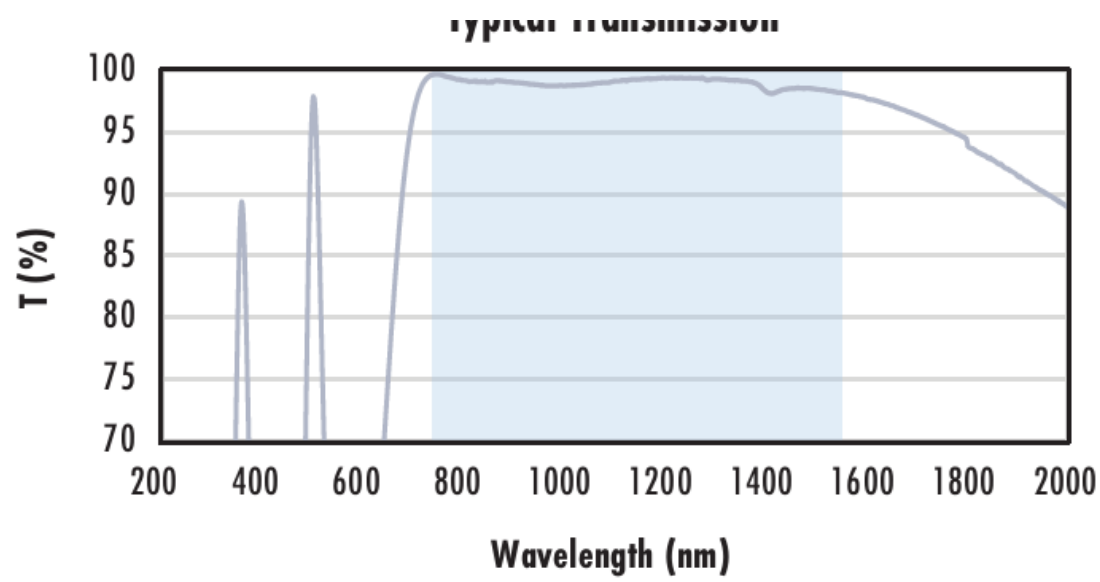
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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

[Click Here to Download Data](#)

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



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.

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## 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