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**TECHSPEC® 9.0mm Diameter x -18 FL, NIR II Coated, Plano-Concave Lens**



Stock **#67-989** **20+ In Stock**

[Other Coating Options](#)

⊖ 1 ⊕ £36<sup>00</sup>

**ADD TO CART**

Volume Pricing	
Qty 1-9	£36.80 each
Qty 10-25	£33.00 each
Qty 26-49	£29.40 each
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ⓘ Prices shown are exclusive of VAT/local taxes

Product Downloads

**General**

Plano-Concave Lens **Type:**

**Physical & Mechanical Properties**

9.00 +0.0/-0.025	<b>Diameter (mm):</b>
2.25	<b>Center Thickness CT (mm):</b>
±0.05	<b>Center Thickness Tolerance (mm):</b>
<1	<b>Centering (arcmin):</b>
8.10	<b>Clear Aperture CA (mm):</b>
2.89	<b>Edge Thickness ET (mm):</b>

## Optical Properties

-18.00	<b>Effective Focal Length EFL (mm):</b>
<b>N-SF11</b>	<b>Substrate:</b> <input type="checkbox"/>
2.00	<b>f#:</b>
NIR II (750-1550nm)	<b>Coating:</b>
750 - 1550	<b>Wavelength Range (nm):</b>
-19.26	<b>Back Focal Length BFL (mm):</b>
<b>Coating Specification:</b> $R_{abs} \leq 1.5\% @ 750 - 800nm$ $R_{abs} \leq 1.0\% @ 800 - 1550nm$ $R_{avg} \leq 0.7\% @ 750 - 1550nm$	
587.6	<b>Focal Length Specification Wavelength (nm):</b>
±1.00	<b>Focal Length Tolerance (%):</b>
-14.12	<b>Radius R<sub>1</sub> (mm):</b>
40-20	<b>Surface Quality:</b>
8 J/cm <sup>2</sup> @ 1064nm, 10ns	<b>Damage Threshold, By Design:</b> <input type="checkbox"/>
1.5λ	<b>Power (P-V) @ 632.8nm:</b>
λ/4	<b>Irregularity (P-V) @ 632.8nm:</b>

## Regulatory Compliance

<b>Compliant</b>	<b>RoHS 2015:</b>
<b>Compliant</b>	<b>Reach 219:</b>
<b>View</b>	<b>Certificate of Conformance:</b>

## Product Details

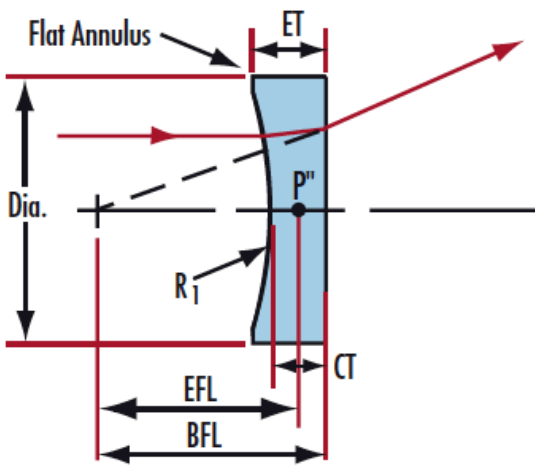
- AR Coated to Provide <0.7% Reflectance per Surface for 750 - 1550nm

- Designed for 0° Angle of Incidence

- Various Coating Options: [Uncoated](#), [VIS-EXT](#), [MgF<sub>2</sub>](#), [VIS 0°](#), [VIS-NIR](#), [YAG-BBAR](#), and [NIR I](#)

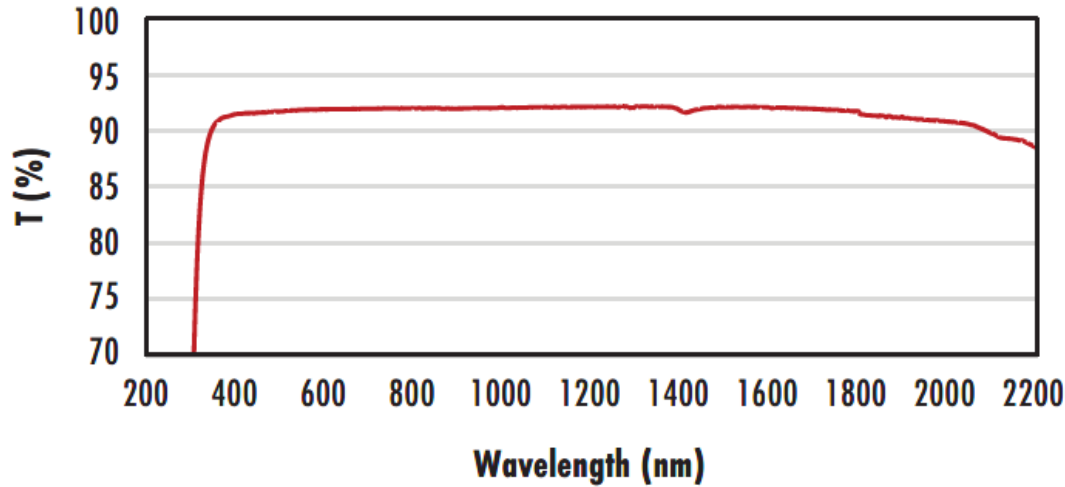
TECHSPEC® NIR II Coated Plano-Concave (PCV) Lenses are designed to bend parallel input rays to diverge from one another on the lens's output side causing this lens to have a negative focal length. These lenses can be used for balancing aberrations created by other lenses within a system due to their negative spherical aberration. Plano-Concave (PCV) lenses are commonly used in a variety of applications including image reduction, beam expansion and telescopes. TECHSPEC NIR II Coated Plano-Concave (PCV) Lenses offer optimal performance in the 750 to 1550nm range. These lenses are also available [Uncoated](#), [VIS-EXT](#), [MgF<sub>2</sub>](#), [VIS 0°](#), [VIS-NIR](#), [YAG-BBAR](#), or with [NIR I](#) AR coating options.

## Technical Information



N-BK7

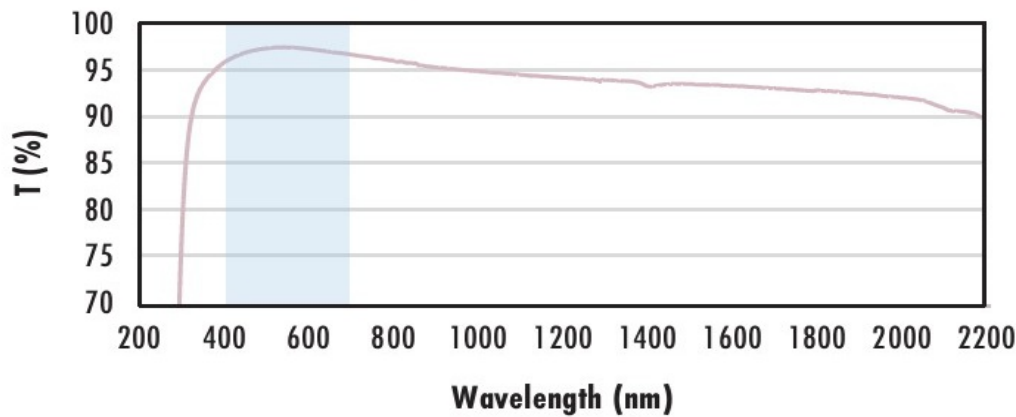
### Uncoated N-BK7 Typical Transmission



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.

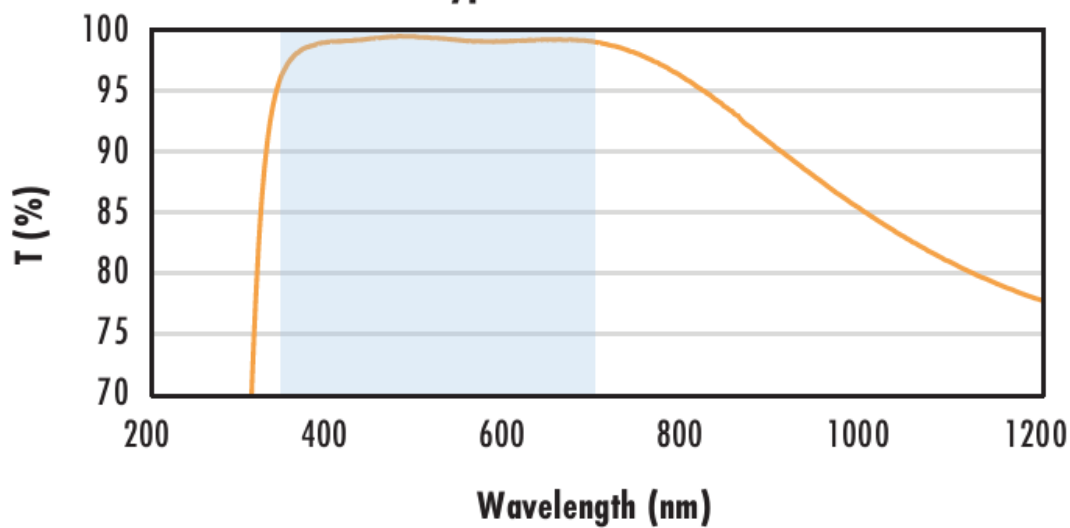
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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

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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.

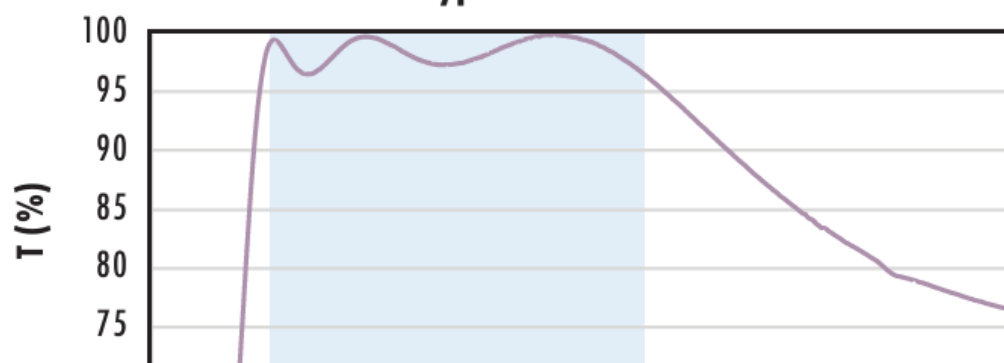
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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

[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:

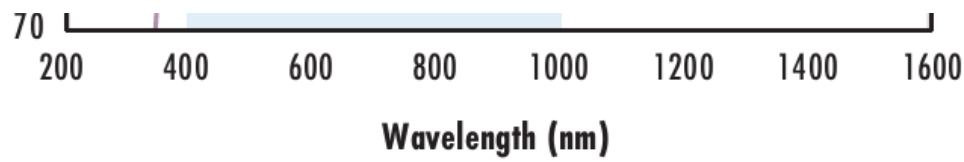
$$R_{abs} \leq 0.25\% @ 880\text{nm}$$

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

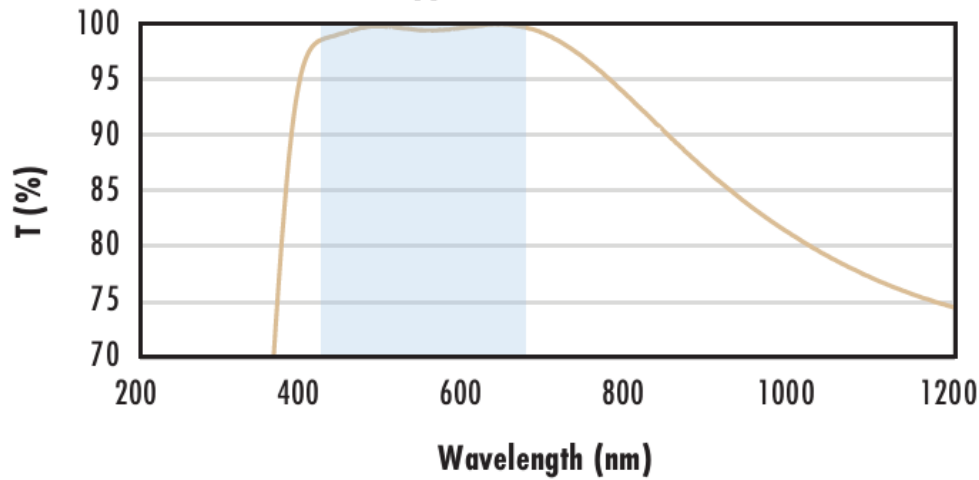
$$R_{avg} \leq 1.25\% @ 890 - 1000\text{nm}$$

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

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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.

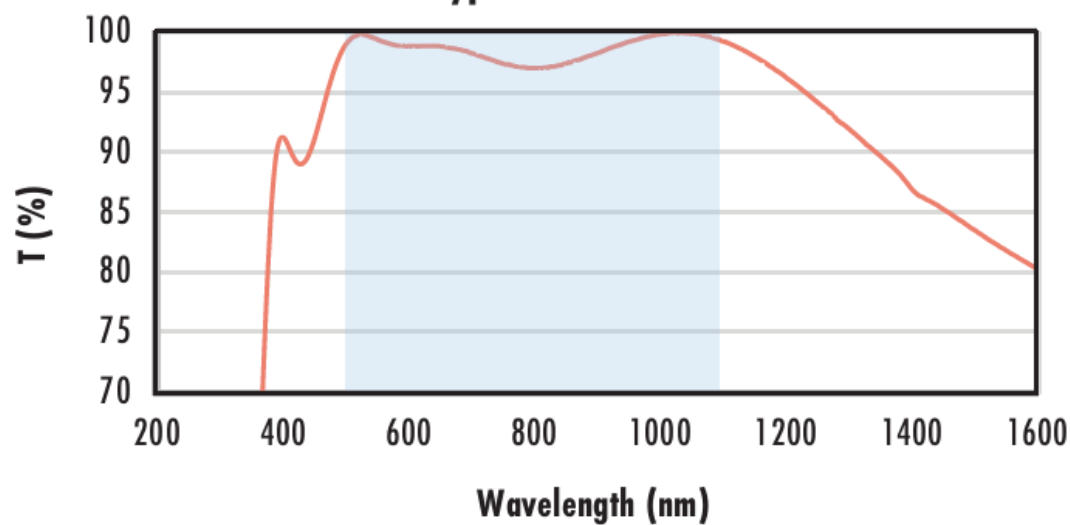
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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:

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

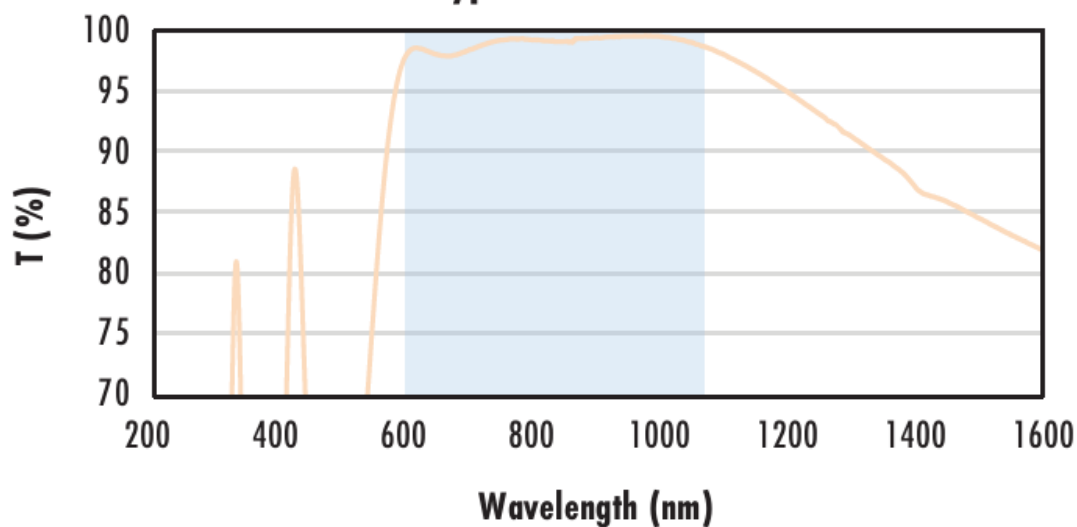
$$R_{abs} \leq 0.25\% @ 1064\text{nm}$$

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

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.

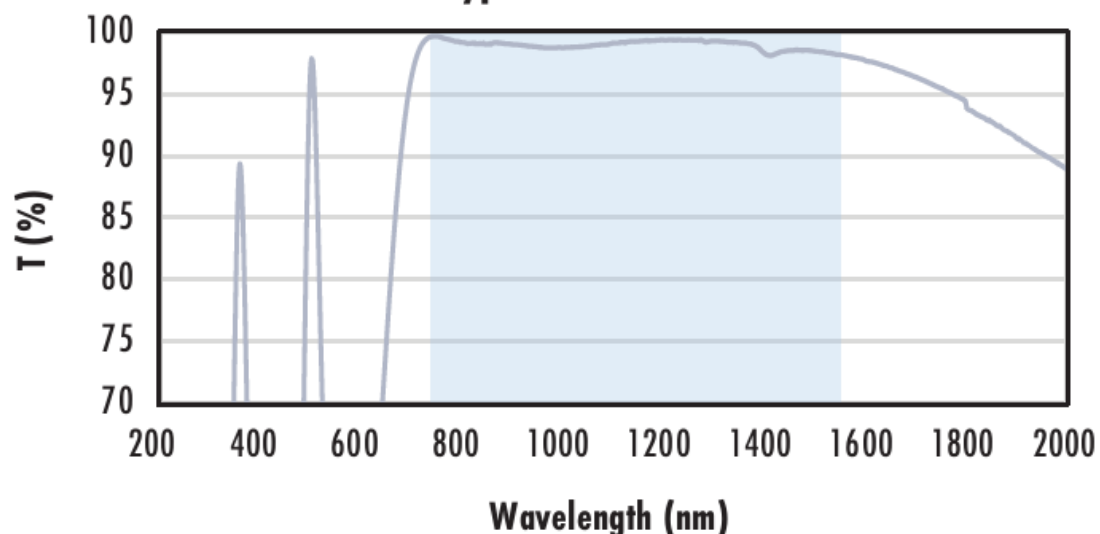
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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:

$$R_{abs} \leq 1.5\% @ 750 - 800\text{nm}$$

$$R_{abs} \leq 1.0\% @ 800 - 1550\text{nm}$$

$$R_{avg} \leq 0.7\% @ 750 - 1550\text{nm}$$

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

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