

[See all 413 Products in Family](#)

TECHSPEC<sup>®</sup> 12.5mm Dia. x 45.0mm FL, VIS 0° Coated, Plano-Convex Lens



Stock **#38-294** **3 In Stock**

☐ [Other Coating Options](#)

-

1

+

A\$74<sup>.00</sup>

ADD TO CART

| Volume Pricing |                               |
|----------------|-------------------------------|
| Qty 1-9        | A\$74.00 each                 |
| Qty 10-24      | A\$66.40 each                 |
| Qty 25-49      | A\$59.60 each                 |
| Need More?     | <a href="#">Request Quote</a> |

Product Downloads

General

Type:

Plano-Convex Lens

Physical & Mechanical Properties

Diameter (mm):

12.50 +0.0/-0.025

|                      |                           |
|----------------------|---------------------------|
| <1                   | Centering (arcmin):       |
| 2.00 ±0.05           | Center Thickness CT (mm): |
| 1.14                 | Edge Thickness ET (mm):   |
| 11.5                 | Clear Aperture CA (mm):   |
| Protective as needed | Bevel:                    |

|                                      |                                                       |
|--------------------------------------|-------------------------------------------------------|
| Optical Properties                   |                                                       |
| 45.00 @ 587.6nm                      | Effective Focal Length EFL (mm):                      |
| 43.68                                | Back Focal Length BFL (mm):                           |
| VIS 0° (425-675nm)                   | Coating:                                              |
| R <sub>avg</sub> ≤0.4% @ 425 - 675nm | Coating Specification:                                |
| N-BK7                                | Substrate: <input type="checkbox"/>                   |
| 40-20                                | Surface Quality:                                      |
| 1.5λ                                 | Power (P-V) @ 632.8nm:                                |
| λ/4                                  | Irregularity (P-V) @ 632.8nm:                         |
| ±1                                   | Focal Length Tolerance (%):                           |
| 23.26                                | Radius R <sub>1</sub> (mm):                           |
| 3.6                                  | f/#:                                                  |
| 0.14                                 | Numerical Aperture NA:                                |
| 425 - 675                            | Wavelength Range (nm):                                |
| 5 J/cm² @ 532nm, 10ns                | Damage Threshold, Reference: <input type="checkbox"/> |

|                       |                             |
|-----------------------|-----------------------------|
| Regulatory Compliance |                             |
| Compliant             | RoHS 2015:                  |
| View                  | Certificate of Conformance: |
| Compliant             | Reach 235:                  |

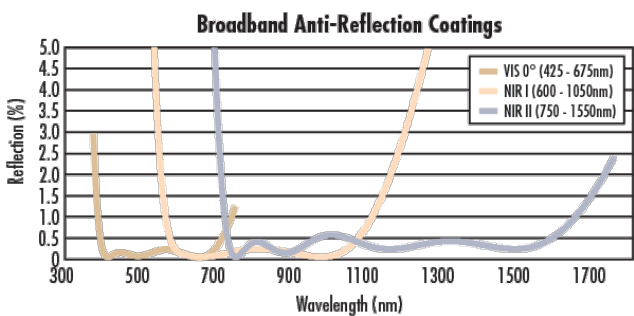
## Product Details

- AR Coated to Provide <0.4% Reflectance per Surface for 425 - 675nm
- Designed for 0° Angle of Incidence
- Various PCX Coating Options: [Uncoated](#), [MgF<sub>2</sub>](#), [VIS-NIR](#), [NIR I](#), [NIR II](#), [VIS-EXT](#), and [YAG-BBAR](#)

TECHSPEC® VIS 0° Coated Plano-Convex (PCX) 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. Plano-Convex lenses are ideal for a multitude of optics and photonics applications, including biotech instruments such as DNA sequencers and polymerase chain reaction (PCR) testing platforms. TECHSPEC® VIS 0° Coated Plano-Convex (PCX) 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-NIR](#), [NIR I](#), [NIR II](#), [VIS-EXT](#), and [YAG-BBAR](#).

These coated lenses can be utilized in a host of optics and photonics applications, including biotech instruments such as DNA sequencers and polymerase chain reaction (PCR) testing platforms.

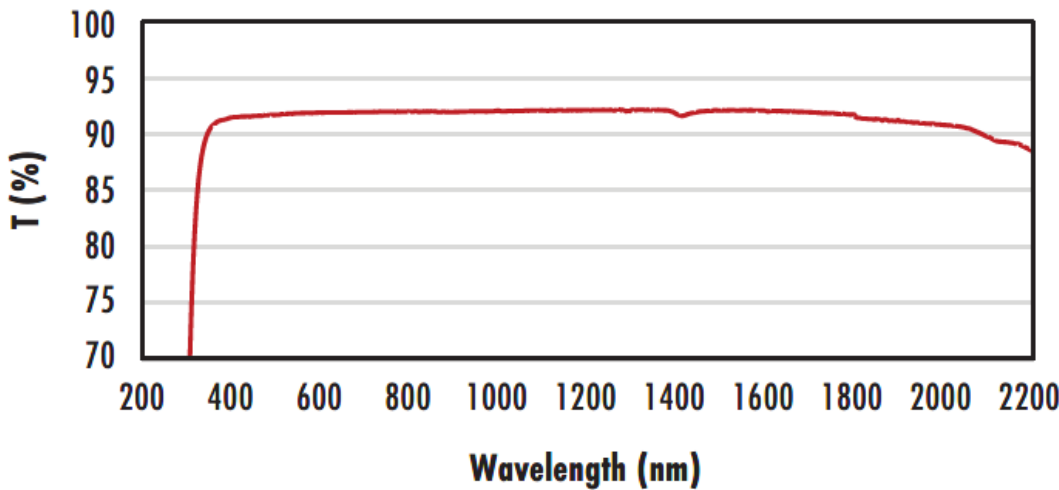
## Technical Information





N-BK7

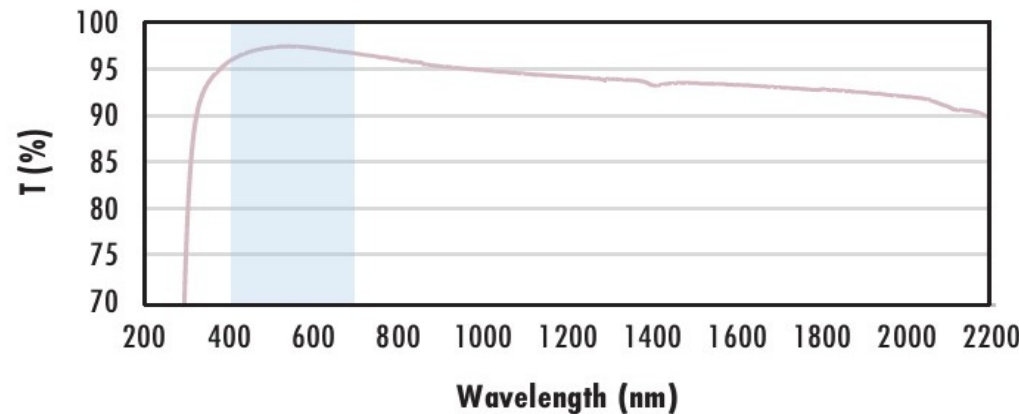
### Uncoated N-BK7 Typical Transmission



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.

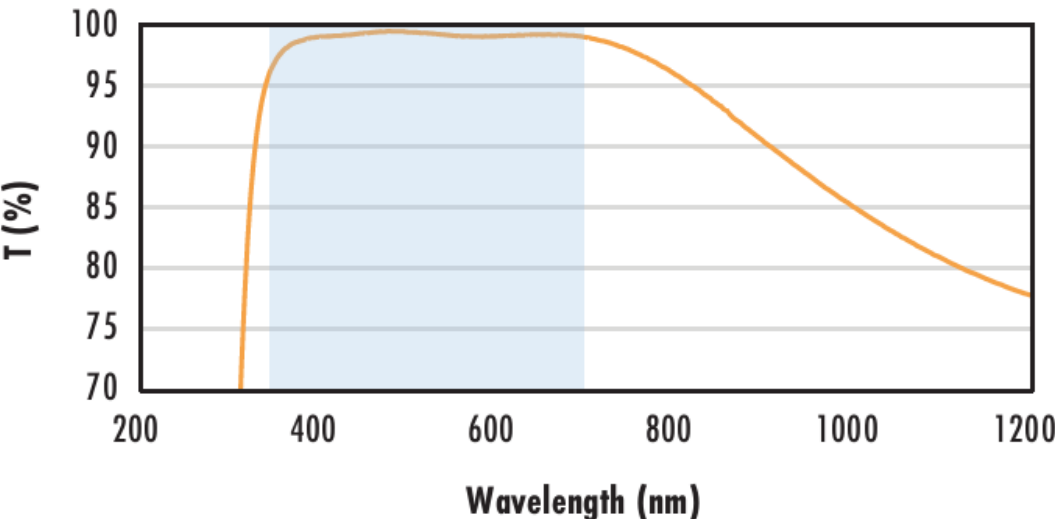
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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.

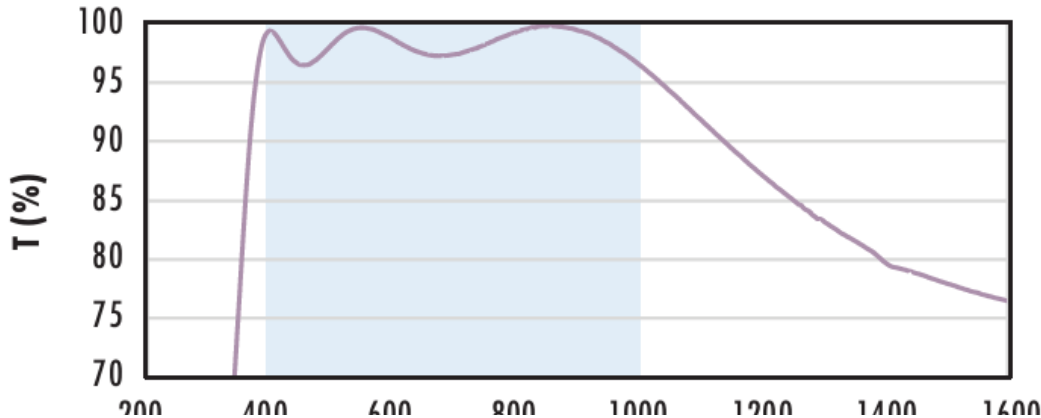
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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



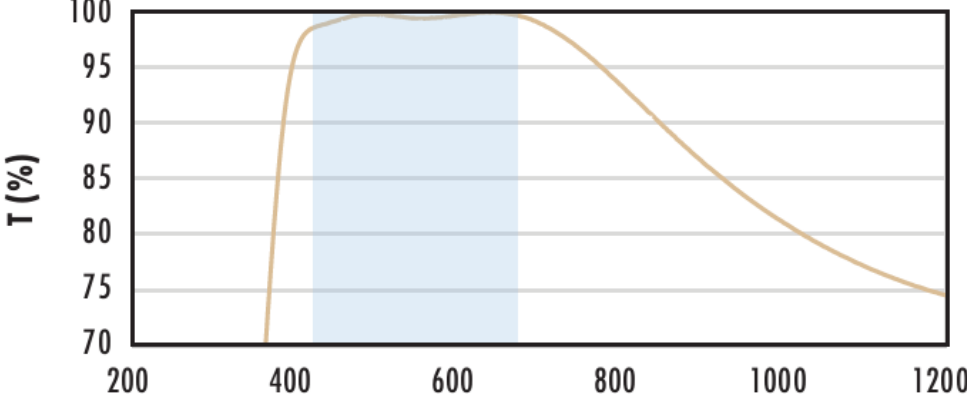
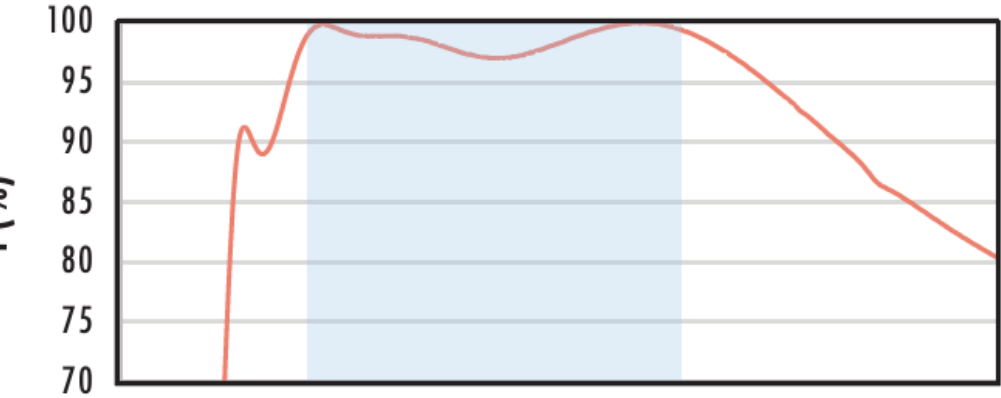
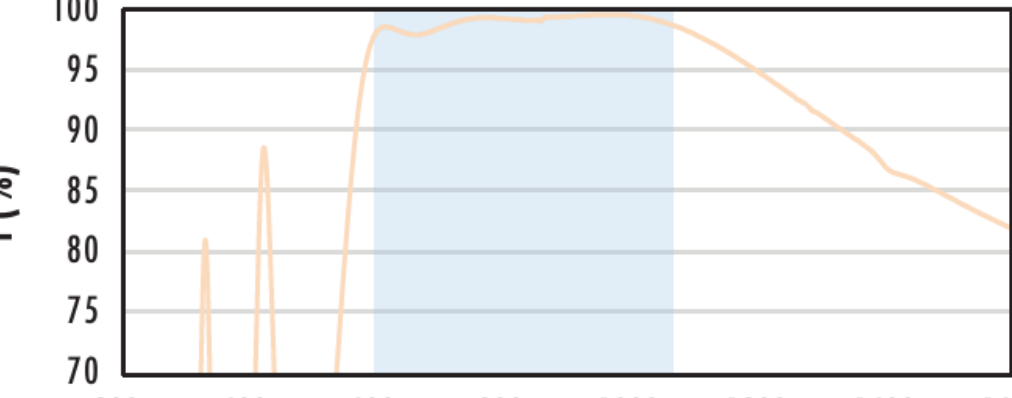
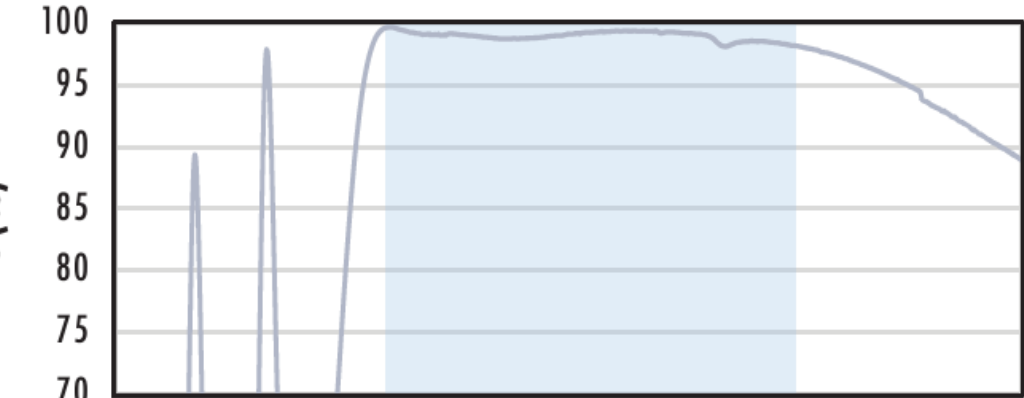
Typical transmission of a 3mm thick N-BK7 window with VIS-NIR (400-1000nm) coating at 0° AOI.

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

$$\begin{aligned} R_{abs} &\leq 0.25\% \text{ @ } 880\text{nm} \\ R_{avg} &\leq 1.25\% \text{ @ } 400 - 870\text{nm} \\ R_{avg} &\leq 1.25\% \text{ @ } 890 - 1000\text{nm} \end{aligned}$$

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

[Click Here to Download Data](#)

|                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <div>2004006008001000120014001600</div> <div>Wavelength (nm)</div>                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <div>N-BK7 with VIS 0° Coating</div> <div>Typical Transmission</div> <div></div> <div>Wavelength (nm)</div>    | <p>Typical transmission of a 3mm thick N-BK7 window with VIS 0° (425-675nm) coating at 0° AOI.</p> <p>The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p><math>R_{avg} \leq 0.4\%</math> @ 425 - 675nm</p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p><a href="#">Click Here to Download Data</a></p>                                                                                                          |
| <div>N-BK7 with YAG-BBAR Coating</div> <div>Typical Transmission</div> <div></div> <div>Wavelength (nm)</div> | <p>Typical transmission of a 3mm thick N-BK7 window with YAG-BBAR (500-1100nm) coating at 0° AOI.</p> <p>The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p><math>R_{abs} \leq 0.25\%</math> @ 532nm<br/><math>R_{abs} \leq 0.25\%</math> @ 1064nm<br/><math>R_{avg} \leq 1.0\%</math> @ 500 - 1100nm</p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p><a href="#">Click Here to Download Data</a></p>           |
| <div>N-BK7 with NIR I Coating</div> <div>Typical Transmission</div> <div></div> <div>Wavelength (nm)</div>   | <p>Typical transmission of a 3mm thick N-BK7 window with NIR I (600 - 1050nm) coating at 0° AOI.</p> <p>The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p><math>R_{avg} \leq 0.5\%</math> @ 600 - 1050nm</p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p><a href="#">Click Here to Download Data</a></p>                                                                                                       |
| <div>N-BK7 with NIR II Coating</div> <div>Typical Transmission</div> <div></div> <div>Wavelength (nm)</div>  | <p>Typical transmission of a 3mm thick N-BK7 window with NIR II (750 - 1550nm) coating at 0° AOI.</p> <p>The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p><math>R_{abs} \leq 1.5\%</math> @ 750 - 800nm<br/><math>R_{abs} \leq 1.0\%</math> @ 800 - 1550nm<br/><math>R_{avg} \leq 0.7\%</math> @ 750 - 1550nm</p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p><a href="#">Click Here to Download Data</a></p> |

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