

TECHSPEC<sup>®</sup> 18.0mm Dia. x 54.0mm FL, NIR I Coated, Plano-Convex Lens



Stock **#48-755** 20+ In Stock

☐ Other Coating Options

-

1

+

₹3,309

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| Volume Pricing |                               |
|----------------|-------------------------------|
| Qty 1-9        | ₹3,309 each                   |
| Qty 10-24      | ₹2,978 each                   |
| Qty 25-49      | ₹2,647 each                   |
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General

Type:  
Plano-Convex Lens

Physical & Mechanical Properties

Diameter (mm):  
18.00 +0.0/-0.025

|                      |                           |
|----------------------|---------------------------|
| <1                   | Centering (arcmin):       |
| 3.00 ±0.10           | Center Thickness CT (mm): |
| 1.51                 | Edge Thickness ET (mm):   |
| 17                   | Clear Aperture CA (mm):   |
| Protective as needed | Bevel:                    |

|                                       |                                                       |
|---------------------------------------|-------------------------------------------------------|
| Optical Properties                    |                                                       |
| 54.00 @ 587.6nm                       | Effective Focal Length EFL (mm):                      |
| 52.02                                 | Back Focal Length BFL (mm):                           |
| NIR I (600-1050nm)                    | Coating:                                              |
| R <sub>avg</sub> ≤0.5% @ 600 - 1050nm | 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 (%):                           |
| 27.91                                 | Radius R <sub>1</sub> (mm):                           |
| 3                                     | f/#:                                                  |
| 0.17                                  | Numerical Aperture NA:                                |
| 600 - 1050                            | Wavelength Range (nm):                                |
| 7 J/cm² @ 1064nm, 10ns                | Damage Threshold, By Design: <input type="checkbox"/> |

|                                     |                             |
|-------------------------------------|-----------------------------|
| Regulatory Compliance               |                             |
| Compliant                           | RoHS 2015:                  |
| Compliant                           | Reach 219:                  |
| View                                | Certificate of Conformance: |
| Japan                               | Country of Origin:          |
| Edmund Optics India Private Limited | Imported By:                |

## Product Details

- AR Coated to Provide <0.5% Reflectance per Surface for 600 - 1050nm
- Designed for 0° Angle of Incidence
- Various PCX Coating Options: [Uncoated](#), [MgF<sub>2</sub>](#), [VIS 0°](#), [VIS-NIR](#), [NIR II](#), [VIS-EXT](#), and [YAG-BBAR](#)

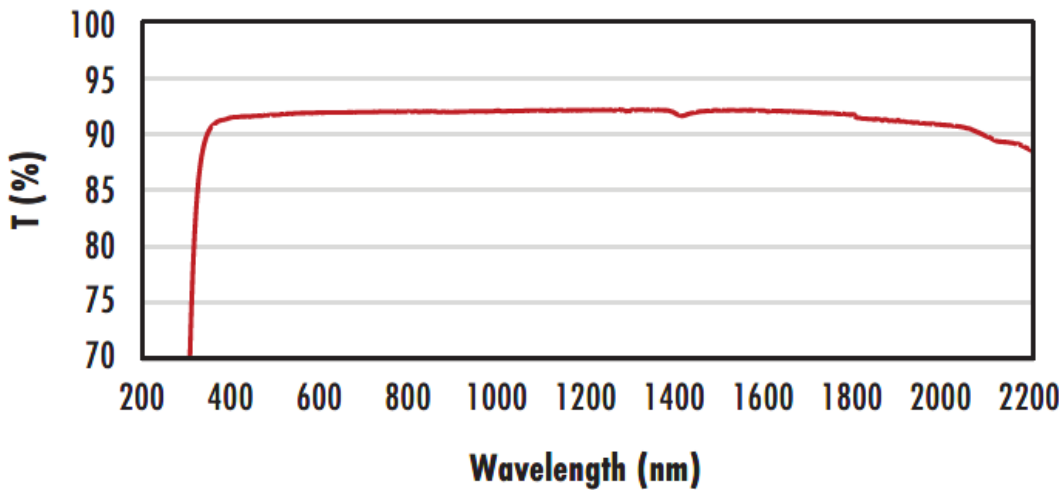
TECHSPEC® NIR I Coated Plano-Convex (PCX) Lenses have a positive focal length, making them ideal for collecting and focusing light in imaging applications. They are also useful in a variety of applications involving emitters, detectors, lasers, and fiber optics. TECHSPEC® NIR I Coated Plano-Convex (PCX) 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 0°](#), [VIS-NIR](#), [NIR II](#), [VIS-EXT](#), and [YAG-BBAR](#).

## Technical Information



N-BK7

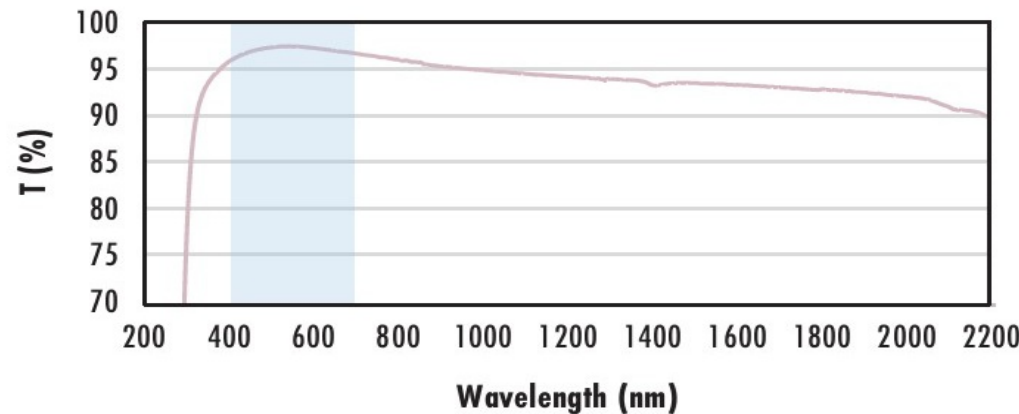
### Uncoated N-BK7 Typical Transmission



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

[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.

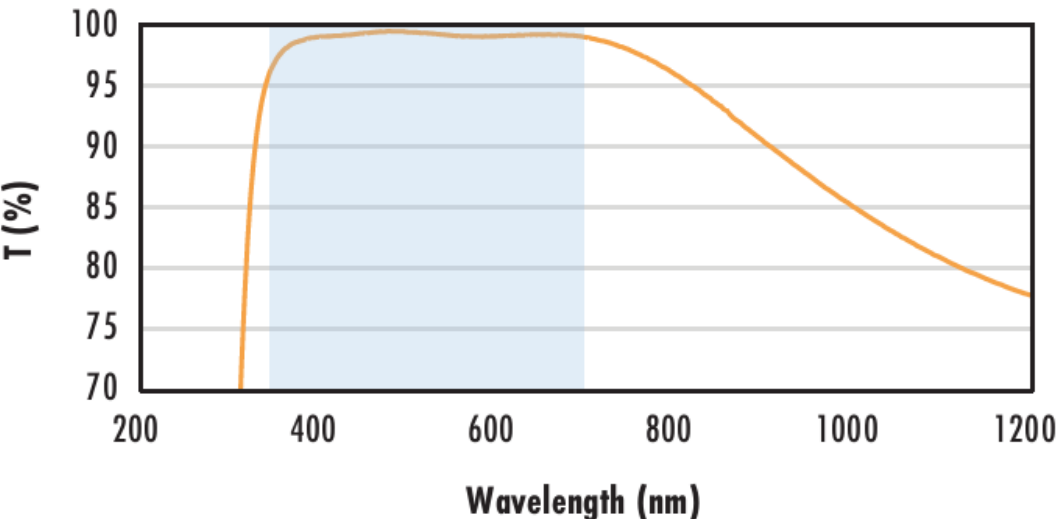
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

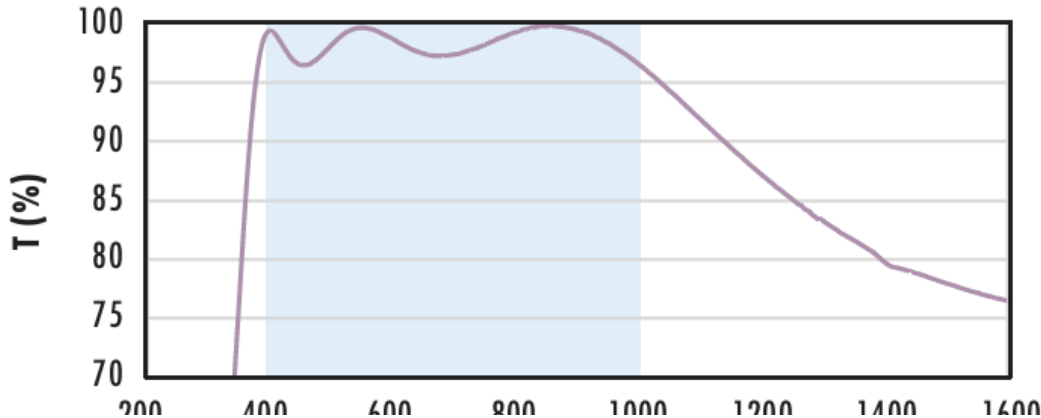
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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

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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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provide flexible solutions to meet your needs. Our experienced engineers are here to assist—from concept to completion.

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## Compatible Mounts

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