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TECHSPEC<sup>®</sup> 12.0mm Dia. x 30.0mm FL, NIR I, Inked, Plano-Convex Lens



Stock **#48-736-INK** [CONTACT US](#)

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-

1

+

A\$93<sup>.60</sup>

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| Volume Pricing |                               |
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| Qty 1-9        | A\$93.60 each                 |
| Qty 10-24      | A\$84.00 each                 |
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General

Type:

Plano-Convex Lens

Physical & Mechanical Properties

Diameter (mm):

12.00 ±0.025

|                      |                           |
|----------------------|---------------------------|
| <1                   | Centering (arcmin):       |
| 3.00 ±0.05           | Center Thickness CT (mm): |
| 1.79                 | Edge Thickness ET (mm):   |
| 11                   | Clear Aperture CA (mm):   |
| Protective as needed | Bevel:                    |

|                                       |                                                       |
|---------------------------------------|-------------------------------------------------------|
| Optical Properties                    |                                                       |
| 30.00 @ 587.6nm                       | Effective Focal Length EFL (mm):                      |
| 28.02                                 | 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 (%):                           |
| 15.50                                 | Radius R <sub>1</sub> (mm):                           |
| 2.5                                   | f/#:                                                  |
| 0.20                                  | Numerical Aperture NA:                                |
| 600 - 1050                            | Wavelength Range (nm):                                |
| 7 J/cm² @ 1064nm, 10ns                | Damage Threshold, By Design: <input type="checkbox"/> |

|                       |                             |
|-----------------------|-----------------------------|
| Regulatory Compliance |                             |
| View                  | Certificate of Conformance: |

## 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](#)

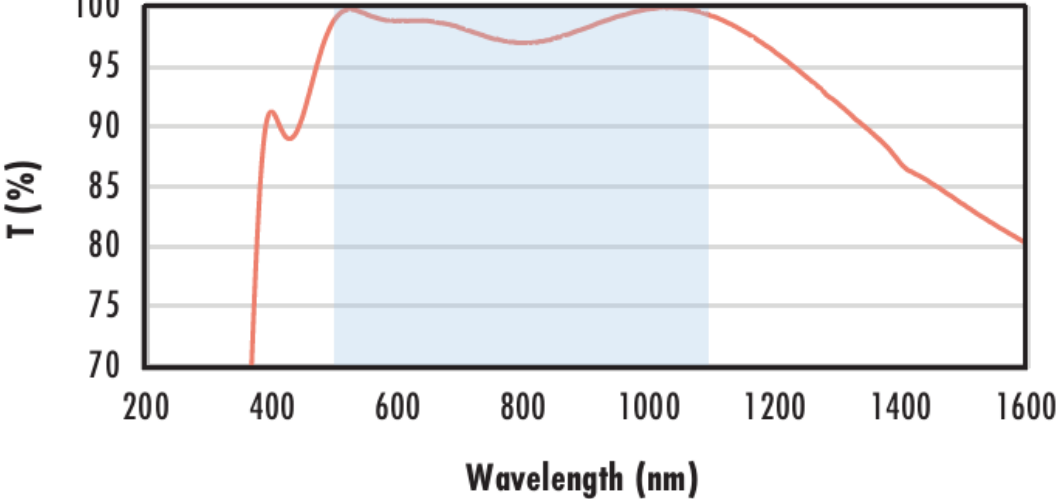
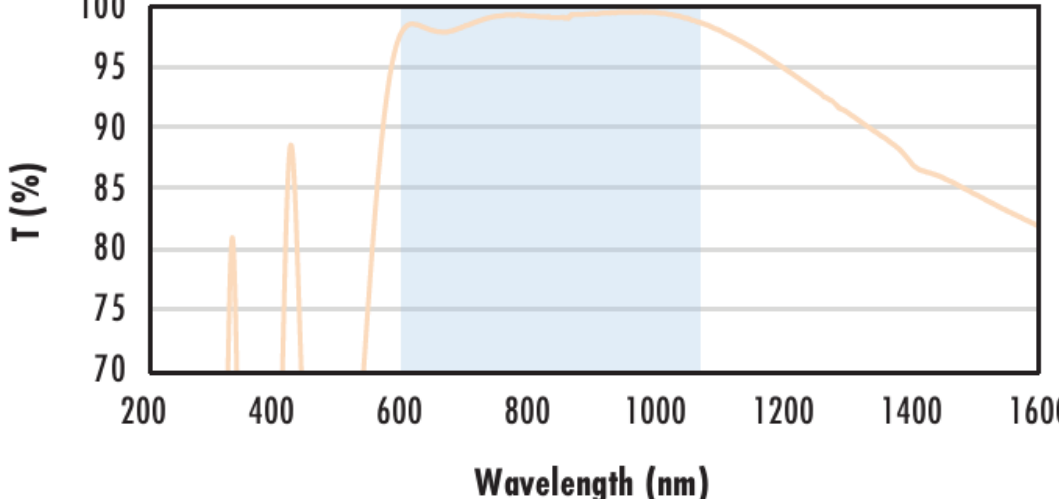
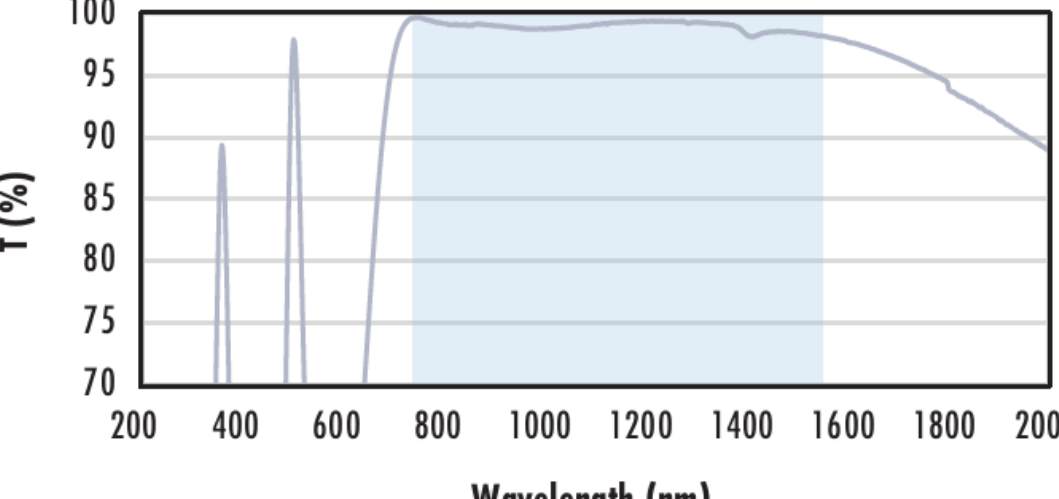
TECHSPEC® NIR I Coated Plano-Convex (PCX) Lenses have a positive focal length, making them ideal for collecting and focusing light in imaging applications. They are also useful in a variety of applications involving emitters, detectors, lasers, and fiber optics. TECHSPEC® NIR I Coated Plano-Convex (PCX)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

|                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <div data-bbox="262 97 1249 617"><h3>Uncoated N-BK7 Typical Transmission</h3></div>                        | <p>Typical transmission of a 3mm thick, uncoated N-BK7 window across the UV - NIR spectra.</p> <p><a href="#">Click Here to Download Data</a></p>                                                                                                                                                                                                                                                                                                                                                                              |
| <div data-bbox="262 697 1249 1172"><h3>N-BK7 with MgF<sub>2</sub> Coating Typical Transmission</h3></div> | <p>Typical transmission of a 3mm thick N-BK7 window with MgF<sub>2</sub> (400-700nm) 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 1.75\% @ 400 - 700\text{nm}</math> (N-BK7)</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 data-bbox="262 1216 1249 1795"><h3>N-BK7 with VIS-EXT Coating Typical Transmission</h3></div>       | <p>Typical transmission of a 3mm thick N-BK7 window with VIS-EXT (350-700nm) 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\% @ 350 - 700\text{nm}</math></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 data-bbox="262 1855 1249 2418"><h3>N-BK7 with VIS-NIR Coating Typical Transmission</h3></div>       | <p>Typical transmission of a 3mm thick N-BK7 window with VIS-NIR (400-1000nm) 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\% @ 880\text{nm}</math><br/><math>R_{avg} \leq 1.25\% @ 400 - 870\text{nm}</math><br/><math>R_{avg} \leq 1.25\% @ 890 - 1000\text{nm}</math></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 data-bbox="262 2478 1249 2878"><h3>N-BK7 with VIS 0° Coating Typical Transmission</h3></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\% @ 425 - 675\text{nm}</math></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>                                                                                                                   |

|                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <p data-bbox="569 246 1037 338"><b>N-BK7 with YAG-BBAR Coating</b><br/><b>Typical Transmission</b></p>    | <p data-bbox="1339 373 1839 421">Typical transmission of a 3mm thick N-BK7 window with YAG-BBAR (500-1100nm) coating at 0° AOI.</p> <p data-bbox="1339 439 1850 486">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <div data-bbox="1472 498 1713 572"><p><math>R_{\text{abs}} \leq 0.25\% \text{ @ } 532\text{nm}</math></p><p><math>R_{\text{abs}} \leq 0.25\% \text{ @ } 1064\text{nm}</math></p><p><math>R_{\text{avg}} \leq 1.0\% \text{ @ } 500 - 1100\text{nm}</math></p></div> <p data-bbox="1339 587 1839 635">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1472 647 1709 670"><a href="#">Click Here to Download Data</a></p>                     |
| <p data-bbox="617 872 1008 964"><b>N-BK7 with NIR I Coating</b><br/><b>Typical Transmission</b></p>      | <p data-bbox="1339 1035 1839 1083">Typical transmission of a 3mm thick N-BK7 window with NIR I (600 - 1050nm) coating at 0° AOI.</p> <p data-bbox="1339 1101 1850 1148">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <div data-bbox="1472 1160 1709 1184"><p><math>R_{\text{avg}} \leq 0.5\% \text{ @ } 600 - 1050\text{nm}</math></p></div> <p data-bbox="1339 1199 1839 1246">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1472 1258 1709 1282"><a href="#">Click Here to Download Data</a></p>                                                                                                                                                         |
| <p data-bbox="606 1516 1016 1608"><b>N-BK7 with NIR II Coating</b><br/><b>Typical Transmission</b></p>  | <p data-bbox="1339 1644 1839 1691">Typical transmission of a 3mm thick N-BK7 window with NIR II (750 - 1550nm) coating at 0° AOI.</p> <p data-bbox="1339 1709 1850 1757">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <div data-bbox="1472 1768 1713 1843"><p><math>R_{\text{abs}} \leq 1.5\% \text{ @ } 750 - 800\text{nm}</math></p><p><math>R_{\text{abs}} \leq 1.0\% \text{ @ } 800 - 1550\text{nm}</math></p><p><math>R_{\text{avg}} \leq 0.7\% \text{ @ } 750 - 1550\text{nm}</math></p></div> <p data-bbox="1339 1875 1839 1923">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1472 1935 1709 1958"><a href="#">Click Here to Download Data</a></p> |

## 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

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## Compatible Mounts