

TECHSPEC<sup>®</sup> 6.0mm Diameter x -9 FL, NIR I, Inked, Plano-Concave Lens



Stock **#49-517-INK** [CONTACT US](#)

[Other Coating Options](#)

-

1

+

S\$77<sup>.70</sup>

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| Volume Pricing |                               |
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| Qty 1-9        | S\$77.70 each                 |
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General

Type:  
Plano-Concave Lens

Physical & Mechanical Properties

Diameter (mm):  
6.00 ±0.025

|                                       |                                                   |
|---------------------------------------|---------------------------------------------------|
| Protective as needed                  | Bevel:                                            |
| 1.50                                  | Center Thickness CT (mm):                         |
| ±0.05                                 | Center Thickness Tolerance (mm):                  |
| <3                                    | Centering (arcmin):                               |
| 5.4                                   | Clear Aperture CA (mm):                           |
| 2.04                                  | Edge Thickness ET (mm):                           |
| Optical Properties                    |                                                   |
| -9.00                                 | Effective Focal Length EFL (mm):                  |
| N-SF11                                | Substrate: <input type="text"/>                   |
| 1.5                                   | f/#:                                              |
| 0.33                                  | Numerical Aperture NA:                            |
| NIR I (600-1050nm)                    | Coating:                                          |
| 600 - 1050                            | Wavelength Range (nm):                            |
| -9.84                                 | Back Focal Length BFL (mm):                       |
| R <sub>avg</sub> ≤0.5% @ 600 - 1050nm | Coating Specification:                            |
| 587.6                                 | Focal Length Specification Wavelength (nm):       |
| ±1                                    | Focal Length Tolerance (%):                       |
| -7.06                                 | Radius R <sub>1</sub> (mm):                       |
| 40-20                                 | Surface Quality:                                  |
| 7 J/cm <sup>2</sup> @ 1064nm, 10ns    | Damage Threshold, By Design: <input type="text"/> |
| 1.5λ                                  | Power (P-V) @ 632.8nm:                            |
| λ/4                                   | Irregularity (P-V) @ 632.8nm:                     |
| Regulatory Compliance                 |                                                   |
| View                                  | Certificate of Conformance:                       |

## Need different specs or modifications?

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](#).

## Product Details

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

TECHSPEC® NIR I Coated Plano-Concave (PCV) Lenses are designed to bend parallel input rays to diverge from one another on the output side of the lens 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 I Coated Plano-Concave (PCV) Lenses offer optimal performance in the 600nm to 1050nm range. These lenses are also available [Uncoated](#), [VIS-EXT](#), [MgF<sub>2</sub>](#), [VIS 0°](#), [VIS-NIR](#), [YAG-BBAR](#), or with [NIR II](#) AR coating options.

## Technical Information



| N-BK7                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <div>Uncoated N-BK7 Typical Transmission</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>N-BK7 with MgF<sub>2</sub> Coating Typical Transmission</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>N-BK7 with VIS-EXT Coating Typical Transmission</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>N-BK7 with VIS-NIR Coating Typical Transmission</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> |

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| <p data-bbox="596 261 974 350"><b>N-BK7 with VIS 0° Coating</b><br/><b>Typical Transmission</b></p>       | <p data-bbox="1339 394 1843 445">Typical transmission of a 3mm thick N-BK7 window with VIS 0° (425-675nm) coating at 0° AOI.</p> <p data-bbox="1339 457 1850 507">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p data-bbox="1478 519 1711 543"><math>R_{avg} \leq 0.4\% @ 425 - 675\text{nm}</math></p> <p data-bbox="1339 555 1839 605">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1474 617 1711 641"><a href="#">Click Here to Download Data</a></p>                                                                                                                                                                                                        |
| <p data-bbox="569 857 1037 946"><b>N-BK7 with YAG-BBAR Coating</b><br/><b>Typical Transmission</b></p>   | <p data-bbox="1339 985 1843 1035">Typical transmission of a 3mm thick N-BK7 window with YAG-BBAR (500-1100nm) coating at 0° AOI.</p> <p data-bbox="1339 1047 1850 1098">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p data-bbox="1493 1110 1688 1133"><math>R_{abs} \leq 0.25\% @ 532\text{nm}</math></p> <p data-bbox="1493 1136 1692 1160"><math>R_{abs} \leq 0.25\% @ 1064\text{nm}</math></p> <p data-bbox="1472 1163 1713 1187"><math>R_{avg} \leq 1.0\% @ 500 - 1100\text{nm}</math></p> <p data-bbox="1339 1199 1839 1249">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1474 1261 1711 1285"><a href="#">Click Here to Download Data</a></p>            |
| <p data-bbox="617 1484 1008 1573"><b>N-BK7 with NIR I Coating</b><br/><b>Typical Transmission</b></p>   | <p data-bbox="1339 1647 1843 1697">Typical transmission of a 3mm thick N-BK7 window with NIR I (600 - 1050nm) coating at 0° AOI.</p> <p data-bbox="1339 1709 1850 1760">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p data-bbox="1472 1771 1713 1795"><math>R_{avg} \leq 0.5\% @ 600 - 1050\text{nm}</math></p> <p data-bbox="1339 1807 1839 1857">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1474 1869 1711 1893"><a href="#">Click Here to Download Data</a></p>                                                                                                                                                                                           |
| <p data-bbox="606 2133 1016 2223"><b>N-BK7 with NIR II Coating</b><br/><b>Typical Transmission</b></p>  | <p data-bbox="1339 2255 1843 2306">Typical transmission of a 3mm thick N-BK7 window with NIR II (750 - 1550nm) coating at 0° AOI.</p> <p data-bbox="1339 2318 1850 2368">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p data-bbox="1474 2380 1703 2404"><math>R_{abs} \leq 1.5\% @ 750 - 800\text{nm}</math></p> <p data-bbox="1474 2407 1709 2430"><math>R_{abs} \leq 1.0\% @ 800 - 1550\text{nm}</math></p> <p data-bbox="1474 2433 1709 2457"><math>R_{avg} \leq 0.7\% @ 750 - 1550\text{nm}</math></p> <p data-bbox="1339 2490 1839 2540">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1474 2552 1711 2576"><a href="#">Click Here to Download Data</a></p> |

Compatible Mounts

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