

TECHSPEC[®] 50.8mm Dia. x 50.8mm FL, NIR II Coated, Plano-Convex Lens



Stock **#71-338** **3 In Stock**

☐ [Other Coating Options](#)

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+

S\$105^{.00}

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Volume Pricing	
Qty 1-10	S\$105.00 each
Qty 11-24	S\$94.50 each
Qty 25-49	S\$84.00 each
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Product Downloads

General

Type:
Plano-Convex Lens

Physical & Mechanical Properties

Diameter (mm):
50.80 +0.0/-0.025

<1	Centering (arcmin):
12.00 ±0.10	Center Thickness CT (mm):
2.86	Edge Thickness ET (mm):
49.30	Clear Aperture CA (mm):
Protective as needed	Bevel:

Optical Properties

50.81 @ 587.6nm	Effective Focal Length EFL (mm):
44.08	Back Focal Length BFL (mm):
NIR II (750-1550nm)	Coating:
R _{abs} ≤1.5% @ 750 - 800nm R _{abs} ≤1.0% @ 800 - 1550nm R _{avg} ≤0.7% @ 750 - 1550nm	Coating Specification:
N-SF11	Substrate: ☐
40-20	Surface Quality:
1.5λ	Power (P-V) @ 632.8nm:
λ/4	Irregularity (P-V) @ 632.8nm:
±1	Focal Length Tolerance (%):
39.87	Radius R ₁ (mm):
1.00	f/#:
0.50	Numerical Aperture NA:
750 - 1550	Wavelength Range (nm):
8 J/cm ² @ 1064nm, 10ns	Damage Threshold, By Design: ☐

Regulatory Compliance

View	Certificate of Conformance:
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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](#).

Product Details

- AR Coated to Provide <0.7% Reflectance per Surface for 750 - 1550nm
- Designed for 0° Angle of Incidence
- Various PCX Coating Options: [Uncoated](#), [MgF₂](#), [VIS 0°](#), [VIS-NIR](#), [NIR I](#), [VIS-EXT](#), and [YAG-BBAR](#)

TECHSPEC® NIR II Coated Plano-Convex 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 II Coated Plano-Convex 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 [MgF₂](#), [VIS 0°](#), [VIS-NIR](#), [NIR I](#), [VIS-EXT](#), and [YAG-BBAR](#).

Technical Information



N-BK7

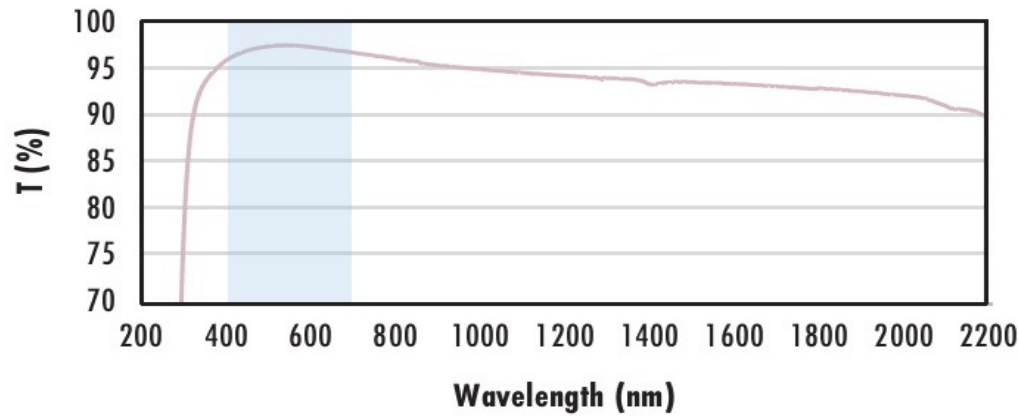
Uncoated N-BK7 Typical Transmission



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

[Click Here to Download Data](#)

N-BK7 with MgF_2 Coating Typical Transmission



Typical transmission of a 3mm thick N-BK7 window with MgF_2 (400-700nm) coating at 0° AOI.

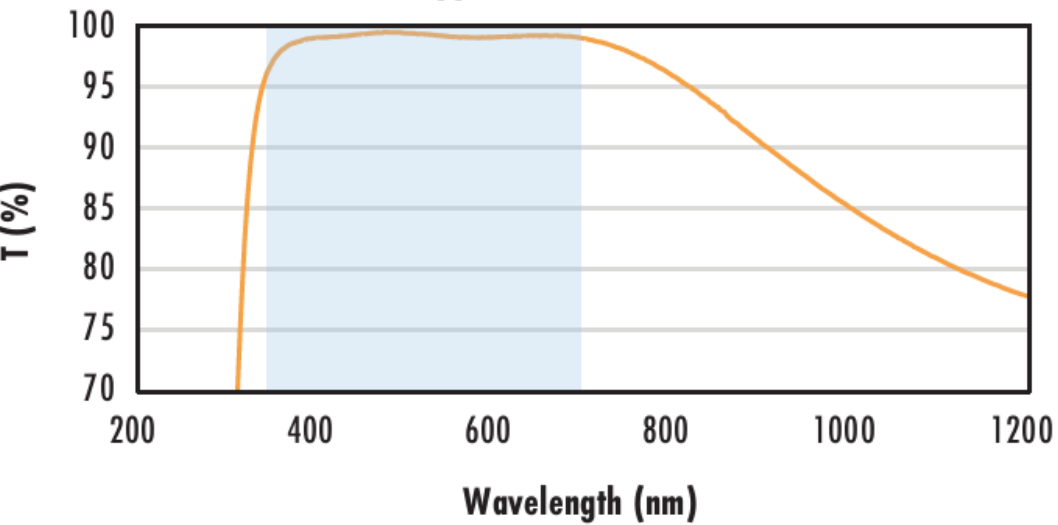
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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

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: $R_{abs} \leq 0.25\%$ @ 880nm $R_{avg} \leq 1.25\%$ @ 400 - 870nm $R_{avg} \leq 1.25\%$ @ 890 - 1000nm Data outside this range is not guaranteed and is for reference only. Click Here to Download Data
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 - 675nm 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: $R_{abs} \leq 0.25\%$ @ 532nm $R_{abs} \leq 0.25\%$ @ 1064nm $R_{avg} \leq 1.0\%$ @ 500 - 1100nm 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 - 1050nm 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 - 800nm $R_{abs} \leq 1.0\%$ @ 800 - 1550nm $R_{avg} \leq 0.7\%$ @ 750 - 1550nm Data outside this range is not guaranteed and is for reference only. Click Here to Download Data

200	400	600	800	1000	1200	1400	1600	1800	2000	
Wavelength (nm)										

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