

[See all 413 Products in Family](#)

TECHSPEC[®] 50.0mm Dia. x 50.0mm FL, VIS-EXT, Inked, Plano-Convex Lens



Stock **#88-760-INK** [CONTACT US](#)

[Other Coating Options](#)

-

1

+

£75^{.20}

ADD TO CART

Volume Pricing	
Qty 1-9	£75.20 each
Qty 10-24	£67.60 each
Qty 25-49	£60.00 each
Need More?	Request Quote

 Prices shown are exclusive of VAT/local taxes

Product Downloads

General	
Plano-Convex Lens	Type:
Physical & Mechanical Properties	

50.00 ±0.025	Diameter (mm):
<1	Centering (arcmin):
12.00 ±0.10	Center Thickness CT (mm):
3.00	Edge Thickness ET (mm):
49	Clear Aperture CA (mm):
Protective as needed	Bevel:

Optical Properties	
50.00 @ 587.6nm	Effective Focal Length EFL (mm):
43.28	Back Focal Length BFL (mm):
VIS-EXT (350-700nm)	Coating:
R _{avg} <0.5% @ 350 - 700nm	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 (%):
39.24	Radius R ₁ (mm):
1	f/#:
0.50	Numerical Aperture NA:
350 - 700	Wavelength Range (nm):
5 J/cm ² @ 532nm, 10ns	Damage Threshold, By Design: □

Regulatory Compliance	
View	Certificate of Conformance:

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

- Visible Broadband Anti-Reflection Coating with Extended UV Performance
- AR Coated to Provide <0.5% Reflectance per Surface for 350 - 700nm
- Designed for 0° Angle of Incidence
- Various PCX Coating Options: [Uncoated](#), [MgF₂](#), [VIS 0°](#), [VIS-NIR](#), [NIR I](#), [NIR II](#), and [YAG-BBAR](#)

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

Technical Information



N-BK7																											
Uncoated N-BK7 Typical Transmission <table border="1"><thead><tr><th>Wavelength (nm)</th><th>T (%)</th></tr></thead><tbody><tr><td>200</td><td>70</td></tr><tr><td>300</td><td>70</td></tr><tr><td>400</td><td>92</td></tr><tr><td>600</td><td>92</td></tr><tr><td>800</td><td>92</td></tr><tr><td>1000</td><td>92</td></tr><tr><td>1200</td><td>92</td></tr><tr><td>1400</td><td>92</td></tr><tr><td>1600</td><td>92</td></tr><tr><td>1800</td><td>92</td></tr><tr><td>2000</td><td>92</td></tr><tr><td>2200</td><td>88</td></tr></tbody></table> Typical transmission of a 3mm thick, uncoated N-BK7 window across the UV - NIR spectra. Click Here to Download Data	Wavelength (nm)	T (%)	200	70	300	70	400	92	600	92	800	92	1000	92	1200	92	1400	92	1600	92	1800	92	2000	92	2200	88	
Wavelength (nm)	T (%)																										
200	70																										
300	70																										
400	92																										
600	92																										
800	92																										
1000	92																										
1200	92																										
1400	92																										
1600	92																										
1800	92																										
2000	92																										
2200	88																										
N-BK7 with MgF₂ Coating Typical Transmission <table border="1"><thead><tr><th>Wavelength (nm)</th><th>T (%)</th></tr></thead><tbody><tr><td>200</td><td>70</td></tr><tr><td>300</td><td>70</td></tr><tr><td>400</td><td>98</td></tr><tr><td>600</td><td>98</td></tr><tr><td>800</td><td>98</td></tr><tr><td>1000</td><td>98</td></tr><tr><td>1200</td><td>98</td></tr><tr><td>1400</td><td>98</td></tr><tr><td>1600</td><td>98</td></tr><tr><td>1800</td><td>98</td></tr><tr><td>2000</td><td>98</td></tr><tr><td>2200</td><td>90</td></tr></tbody></table> Typical transmission of a 3mm thick N-BK7 window with MgF2 (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. Click Here to Download Data	Wavelength (nm)	T (%)	200	70	300	70	400	98	600	98	800	98	1000	98	1200	98	1400	98	1600	98	1800	98	2000	98	2200	90	
Wavelength (nm)	T (%)																										
200	70																										
300	70																										
400	98																										
600	98																										
800	98																										
1000	98																										
1200	98																										
1400	98																										
1600	98																										
1800	98																										
2000	98																										
2200	90																										
N-BK7 with VIS-EXT Coating Typical Transmission <table border="1"><thead><tr><th>Wavelength (nm)</th><th>T (%)</th></tr></thead><tbody><tr><td>200</td><td>70</td></tr><tr><td>300</td><td>70</td></tr><tr><td>400</td><td>98</td></tr><tr><td>600</td><td>98</td></tr><tr><td>800</td><td>98</td></tr><tr><td>1000</td><td>98</td></tr><tr><td>1200</td><td>78</td></tr></tbody></table> 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. Click Here to Download Data	Wavelength (nm)	T (%)	200	70	300	70	400	98	600	98	800	98	1000	98	1200	78											
Wavelength (nm)	T (%)																										
200	70																										
300	70																										
400	98																										
600	98																										
800	98																										
1000	98																										
1200	78																										
N-BK7 with VIS-NIR Coating Typical Transmission <table border="1"><thead><tr><th>Wavelength (nm)</th><th>T (%)</th></tr></thead><tbody><tr><td>200</td><td>70</td></tr><tr><td>300</td><td>70</td></tr><tr><td>400</td><td>98</td></tr><tr><td>600</td><td>98</td></tr><tr><td>800</td><td>98</td></tr><tr><td>1000</td><td>98</td></tr><tr><td>1200</td><td>98</td></tr><tr><td>1400</td><td>98</td></tr><tr><td>1600</td><td>76</td></tr></tbody></table> 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. Click Here to Download Data	Wavelength (nm)	T (%)	200	70	300	70	400	98	600	98	800	98	1000	98	1200	98	1400	98	1600	76							
Wavelength (nm)	T (%)																										
200	70																										
300	70																										
400	98																										
600	98																										
800	98																										
1000	98																										
1200	98																										
1400	98																										
1600	76																										



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:

$$R_{\text{avg}} \leq 0.4\% \text{ @ } 425 - 675\text{nm}$$

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

[Click Here to Download Data](#)



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:

$$R_{\text{abs}} \leq 0.25\% \text{ @ } 532\text{nm}$$
$$R_{\text{abs}} \leq 0.25\% \text{ @ } 1064\text{nm}$$
$$R_{\text{avg}} \leq 1.0\% \text{ @ } 500 - 1100\text{nm}$$

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

[Click Here to Download Data](#)



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:

$$R_{\text{avg}} \leq 0.5\% \text{ @ } 600 - 1050\text{nm}$$

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

[Click Here to Download Data](#)



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:

$$R_{\text{abs}} \leq 1.5\% \text{ @ } 750 - 800\text{nm}$$
$$R_{\text{abs}} \leq 1.0\% \text{ @ } 800 - 1550\text{nm}$$
$$R_{\text{avg}} \leq 0.7\% \text{ @ } 750 - 1550\text{nm}$$

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

[Click Here to Download Data](#)

Compatible Mounts