

TECHSPEC[®] 20mm Diameter x -30 FL, VIS 0° Coated, Plano-Concave Lens



Stock **#47-908** 20+ In Stock

☐ [Other Coating Options](#)

-

1

+

₹3,503

ADD TO CART

Volume Pricing	
Qty 1-9	₹3,503 each
Qty 10-25	₹3,153 each
Qty 26-49	₹2,803 each
Need More?	Request Quote

Product Downloads

General

Type:

Plano-Concave Lens

Physical & Mechanical Properties

Diameter (mm):

20.00 +0.0/-0.025

Protective as needed	Bevel:
3.50	Center Thickness CT (mm):
±0.10	Center Thickness Tolerance (mm):
<1	Centering (arcmin):
19.00	Clear Aperture CA (mm):
5.39	Edge Thickness ET (mm):
Optical Properties	
-30.00	Effective Focal Length EFL (mm):
N-SF11	Substrate: □
1.5	f/#:
0.33	Numerical Aperture NA:
VIS 0° (425-675nm)	Coating:
425 - 675	Wavelength Range (nm):
-31.96	Back Focal Length BFL (mm):
R _{avg} ≤0.4% @ 425 - 675nm	Coating Specification:
587.6	Focal Length Specification Wavelength (nm):
±1	Focal Length Tolerance (%):
-23.54	Radius R ₁ (mm):
40-20	Surface Quality:
5 J/cm ² @ 532nm, 10ns	Damage Threshold, By Design: □
1.5λ	Power (P-V) @ 632.8nm:
λ/4	Irregularity (P-V) @ 632.8nm:
Regulatory Compliance	
Compliant	RoHS 2015:
View	Certificate of Conformance:
Compliant	Reach 235:
Japan	Country of Origin:
Edmund Optics India Private Limited	Imported By:

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](#).

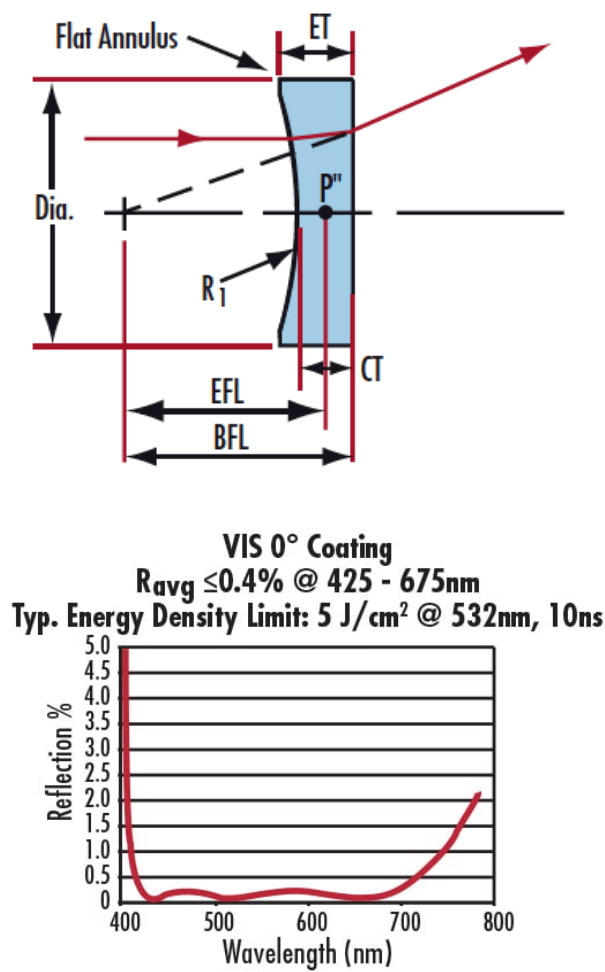
Product Details

- AR Coated to Provide <0.4% Reflectance per Surface for 425 - 675nm
- Designed for 0° Angle of Incidence

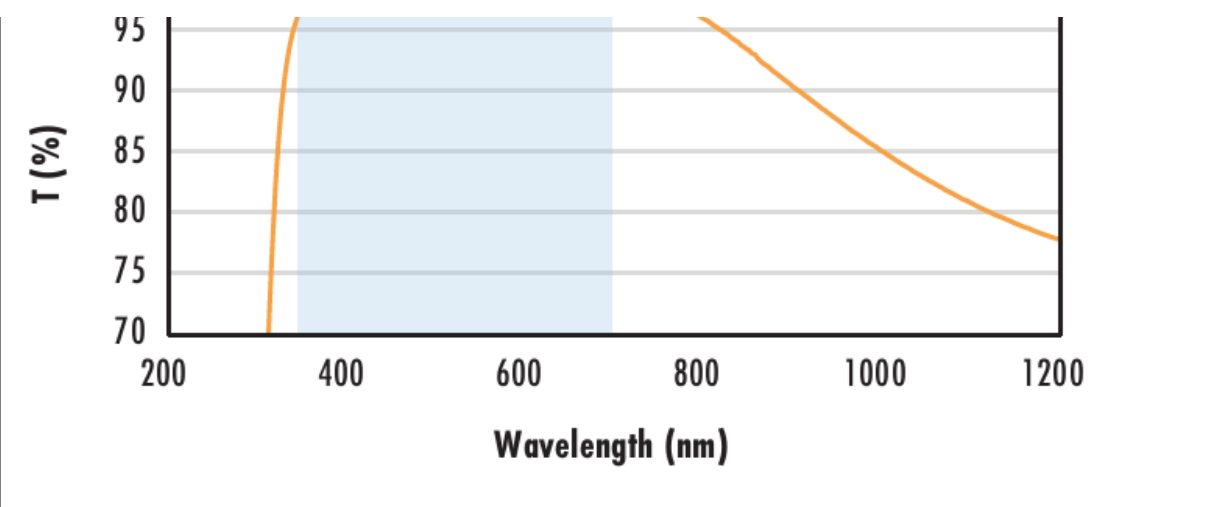
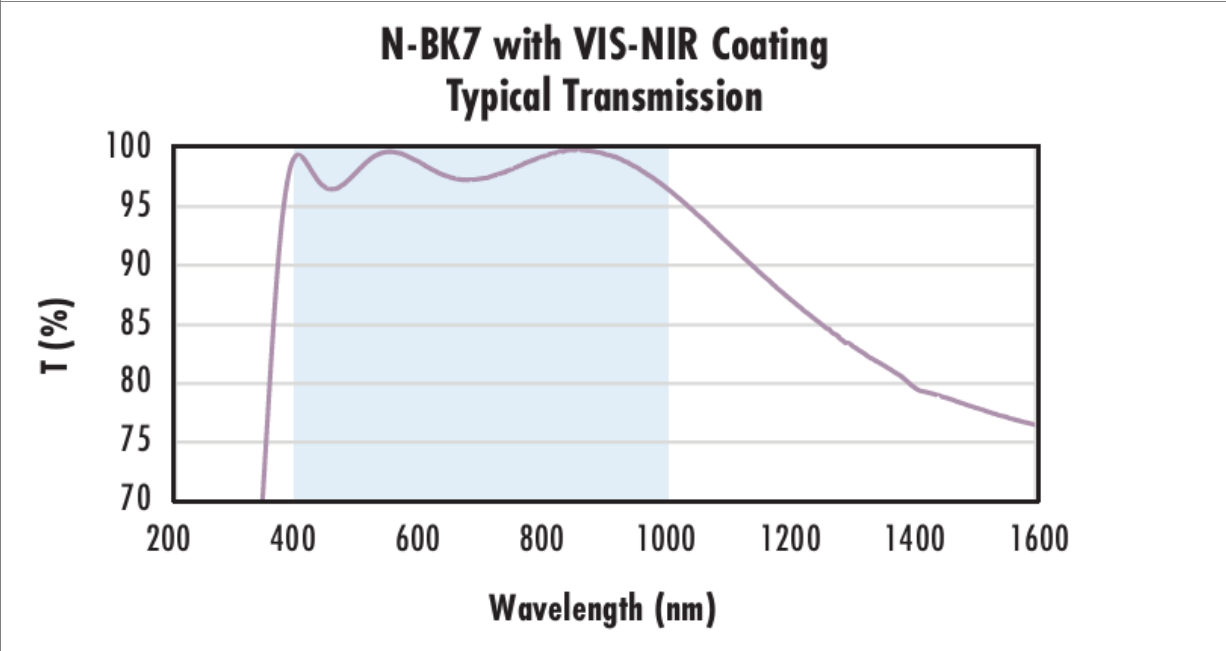
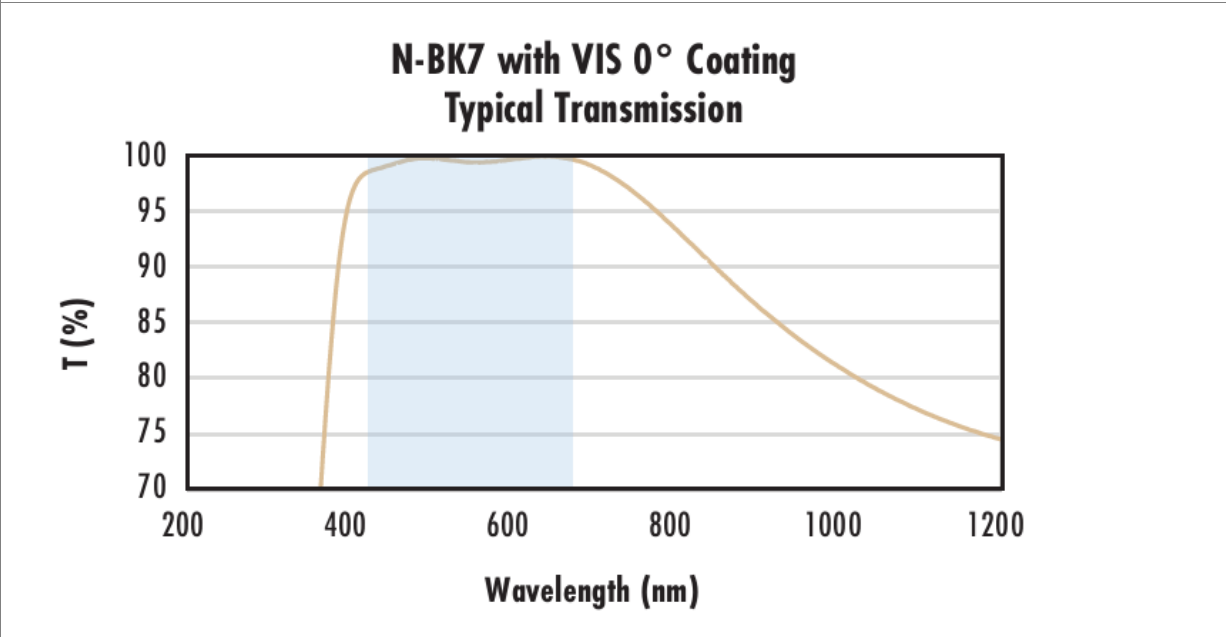
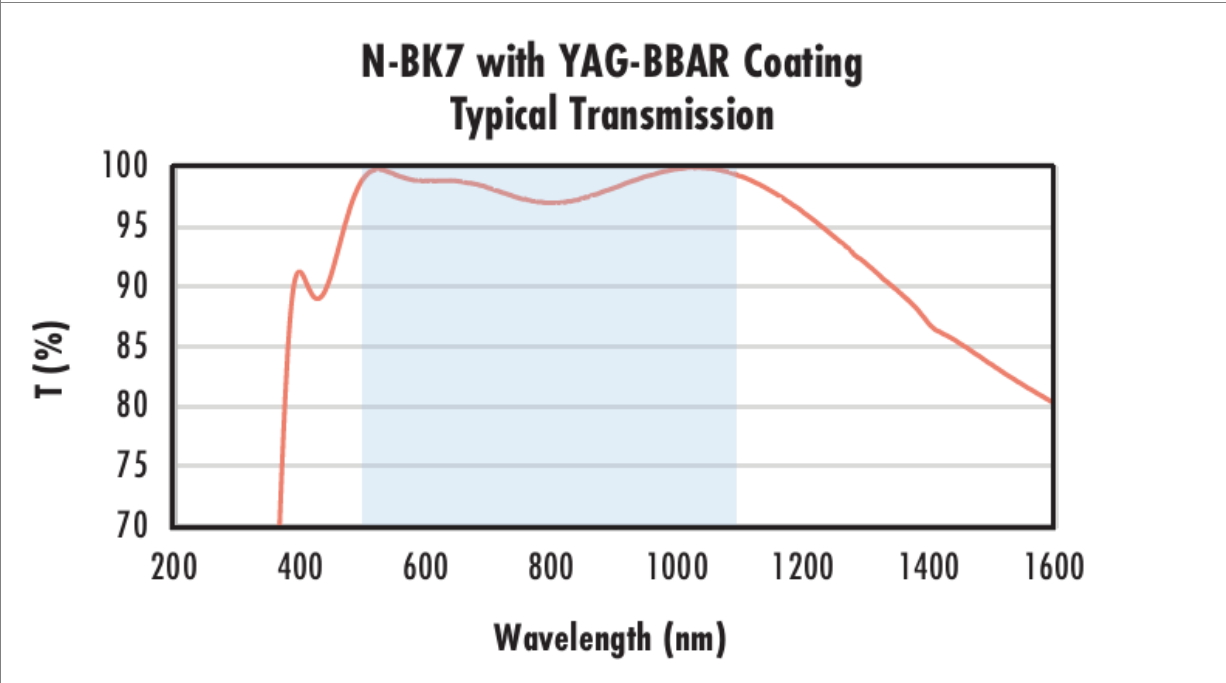
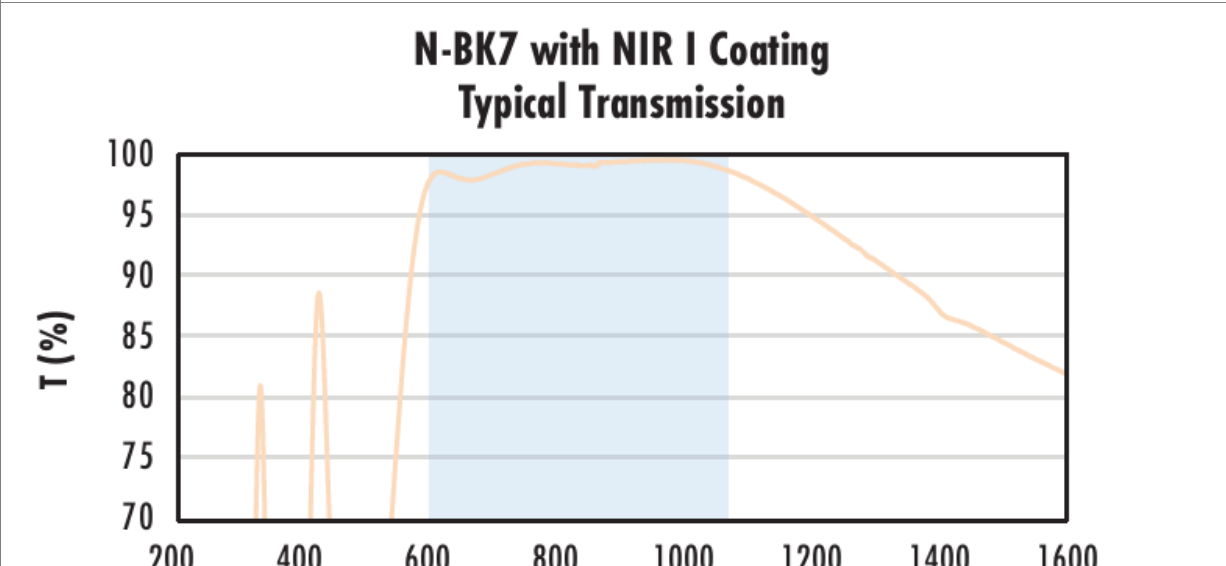
• Various Coating Options: [Uncoated](#), [VIS-EXT](#), [MgF₂](#), [VIS-NIR](#), [YAG-BBAR](#), [NIR I](#), and [NIR II](#)

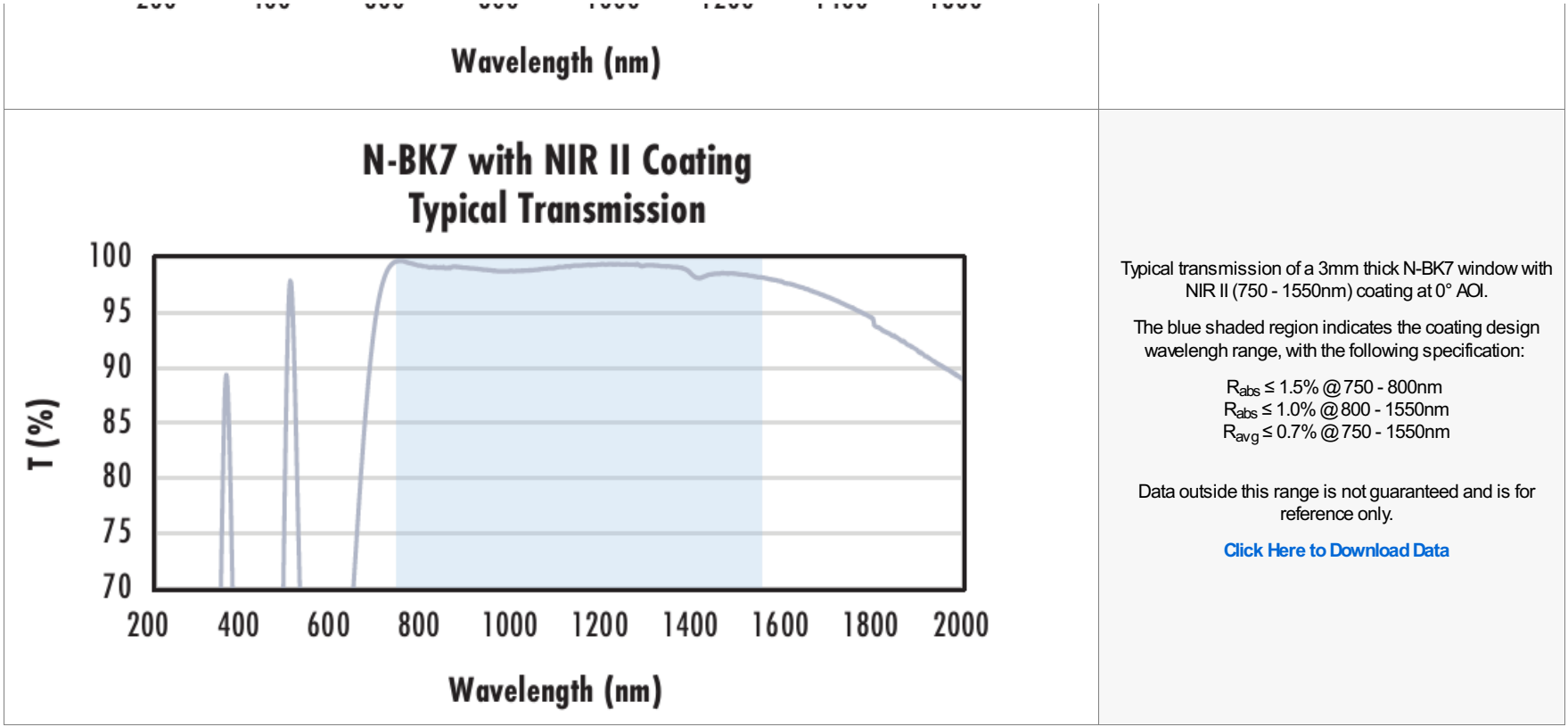
TECHSPEC® VIS 0° Coated Plano-Concave (PCV) Lenses are designed to bend parallel input rays to diverge from one another on the output side of the lens causing this lens to have a negative focal length. These lenses can be used for balancing aberrations created by other lenses within a system due to their negative spherical aberration. Plano-Concave (PCV) lenses are commonly used in a variety of applications including image reduction, beam expansion, and telescopes. TECHSPEC VIS 0° Coated Plano-Concave (PCV) Lenses are best used in 0° angle of incidence situations and provide optimized transmission in the 425nm – 675nm range. These lenses are also available [Uncoated](#), [VIS-EXT](#), [MgF₂](#), [VIS-NIR](#), [YAG-BBAR](#), [NIR I](#), or with [NIR II](#) AR coating options.

Technical Information



N-BK7																															
Uncoated N-BK7 Typical Transmission <table border="1"><caption>Approximate data for Uncoated N-BK7 Typical Transmission</caption><thead><tr><th>Wavelength (nm)</th><th>Transmission T (%)</th></tr></thead><tbody><tr><td>200</td><td>70</td></tr><tr><td>300</td><td>85</td></tr><tr><td>400</td><td>91</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>91</td></tr><tr><td>1600</td><td>92</td></tr><tr><td>1800</td><td>91</td></tr><tr><td>2000</td><td>90</td></tr><tr><td>2200</td><td>88</td></tr></tbody></table>	Wavelength (nm)	Transmission T (%)	200	70	300	85	400	91	600	92	800	92	1000	92	1200	92	1400	91	1600	92	1800	91	2000	90	2200	88	Typical transmission of a 3mm thick, uncoated N-BK7 window across the UV - NIR spectra. Click Here to Download Data				
Wavelength (nm)	Transmission T (%)																														
200	70																														
300	85																														
400	91																														
600	92																														
800	92																														
1000	92																														
1200	92																														
1400	91																														
1600	92																														
1800	91																														
2000	90																														
2200	88																														
N-BK7 with MgF₂ Coating Typical Transmission <table border="1"><caption>Approximate data for N-BK7 with MgF2 Coating Typical Transmission</caption><thead><tr><th>Wavelength (nm)</th><th>Transmission T (%)</th></tr></thead><tbody><tr><td>200</td><td>70</td></tr><tr><td>300</td><td>85</td></tr><tr><td>400</td><td>95</td></tr><tr><td>500</td><td>97</td></tr><tr><td>600</td><td>97</td></tr><tr><td>700</td><td>96</td></tr><tr><td>800</td><td>95</td></tr><tr><td>1000</td><td>94</td></tr><tr><td>1200</td><td>93</td></tr><tr><td>1400</td><td>93</td></tr><tr><td>1600</td><td>93</td></tr><tr><td>1800</td><td>92</td></tr><tr><td>2000</td><td>91</td></tr><tr><td>2200</td><td>90</td></tr></tbody></table>	Wavelength (nm)	Transmission T (%)	200	70	300	85	400	95	500	97	600	97	700	96	800	95	1000	94	1200	93	1400	93	1600	93	1800	92	2000	91	2200	90	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 - 700nm (N-BK7) Data outside this range is not guaranteed and is for reference only. Click Here to Download Data
Wavelength (nm)	Transmission T (%)																														
200	70																														
300	85																														
400	95																														
500	97																														
600	97																														
700	96																														
800	95																														
1000	94																														
1200	93																														
1400	93																														
1600	93																														
1800	92																														
2000	91																														
2200	90																														
N-BK7 with VIS-EXT Coating Typical Transmission <table border="1"><caption>Approximate data for N-BK7 with VIS-EXT Coating Typical Transmission</caption><thead><tr><th>Wavelength (nm)</th><th>Transmission T (%)</th></tr></thead><tbody><tr><td>200</td><td>70</td></tr><tr><td>300</td><td>85</td></tr><tr><td>400</td><td>95</td></tr><tr><td>500</td><td>97</td></tr><tr><td>600</td><td>97</td></tr><tr><td>700</td><td>96</td></tr><tr><td>800</td><td>95</td></tr><tr><td>1000</td><td>94</td></tr><tr><td>1200</td><td>93</td></tr><tr><td>1400</td><td>93</td></tr><tr><td>1600</td><td>93</td></tr><tr><td>1800</td><td>92</td></tr><tr><td>2000</td><td>91</td></tr><tr><td>2200</td><td>90</td></tr></tbody></table>	Wavelength (nm)	Transmission T (%)	200	70	300	85	400	95	500	97	600	97	700	96	800	95	1000	94	1200	93	1400	93	1600	93	1800	92	2000	91	2200	90	
Wavelength (nm)	Transmission T (%)																														
200	70																														
300	85																														
400	95																														
500	97																														
600	97																														
700	96																														
800	95																														
1000	94																														
1200	93																														
1400	93																														
1600	93																														
1800	92																														
2000	91																														
2200	90																														

	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
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. 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: $R_{avg} \leq 0.4\% @ 425 - 675\text{nm}$ 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: $R_{abs} \leq 0.25\% @ 532\text{nm}$ $R_{abs} \leq 0.25\% @ 1064\text{nm}$ $R_{avg} \leq 1.0\% @ 500 - 1100\text{nm}$ 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: $R_{avg} \leq 0.5\% @ 600 - 1050\text{nm}$ Data outside this range is not guaranteed and is for reference only. Click Here to Download Data



Coating Curves

Compatible Mounts