Edmund optics | worldwide
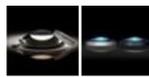
TECHSPEC® 8.0mm Dia. x 12.0mm FL, VIS-EXT Coated, Plano-Convex Lens

Stock **#71-332**   **2 In Stock**

☐ **Other Coating Options**

⊖ 1 ⊕   **S$64**.⁰⁵

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Volume Pricing	
Qty 1-10	**S$64.05** each
Qty 11-24	**S$57.40** each
Qty 25-49	**S$51.45** each
Need More?	**Request Quote**

Product Downloads

General

Type:

Plano-Convex Lens

Physical & Mechanical Properties

Diameter (mm):

8.00 +0.0/-0.025

Centering (arcmin):	
<1	

Center Thickness CT (mm):	
3.00 ±0.05	

Edge Thickness ET (mm):	
1.54	

Clear Aperture CA (mm):	
7.20	

Bevel:	
Protective as needed	

Optical Properties

Effective Focal Length EFL (mm):	
12.00 @ 587.6nm	

Back Focal Length BFL (mm):	
10.00	

Coating:	
VIS-EXT (350-700nm)	

Coating Specification:	
R_{avg} <0.5% @ 350 - 700nm	

Substrate:	
N-BK7	

Surface Quality:	
40-20	

Power (P-V) @ 632.8nm:	
1.5λ	

Irregularity (P-V) @ 632.8nm:	
λ/4	

Focal Length Tolerance (%):	
±1	

Radius R_1 (mm):	
6.20	

f/#:	
1.50	

Numerical Aperture NA:	
0.33	

Wavelength Range (nm):	
350 - 700	

Damage Threshold, By Design:	
5 J/cm^2 @ 532nm, 10ns	

Regulatory Compliance

Certificate of Conformance:	
View	

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
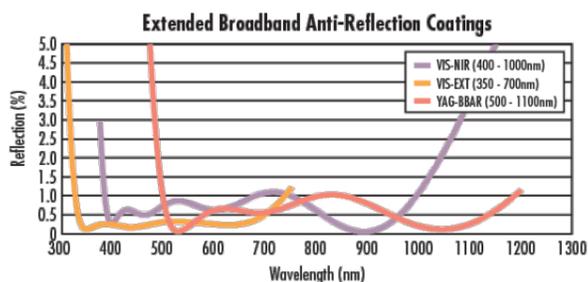- Scalable production—from prototype to volume

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, MgF$_2$, VIS 0°, VIS-NIR, NIR I, NIR II, and YAG-BBAR
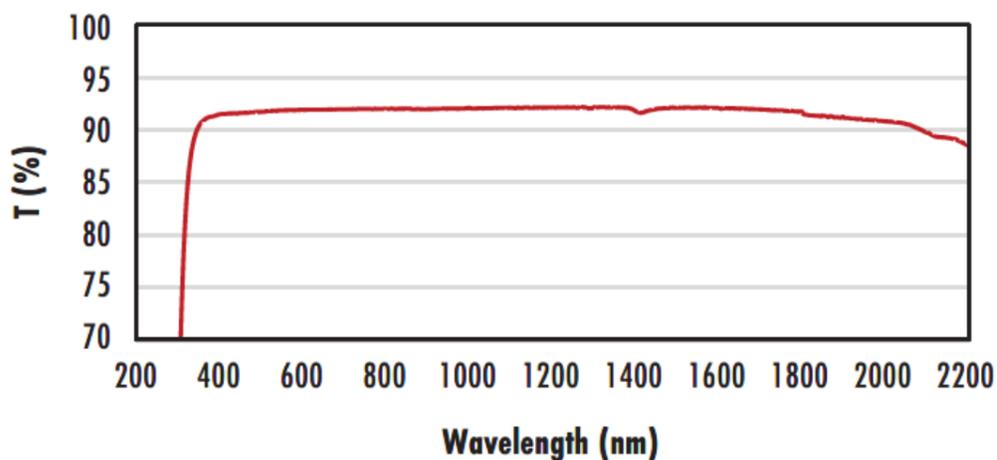
TECHSPEC® VIS-EXT Coated Plano-Convex (PCX) Lenses have a positive focal length, making them ideal for collecting and focusing light in imaging applications. They are also useful in a variety of applications involving emitters, detectors, lasers, and fiber optics. TECHSPEC® VIS-EXT Coated Plano-Convex (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

Extended Broadband Anti-Reflection Coatings

Legend:
- VIS-NIR (400 - 1000nm)
- VIS-EXT (350 - 700nm)
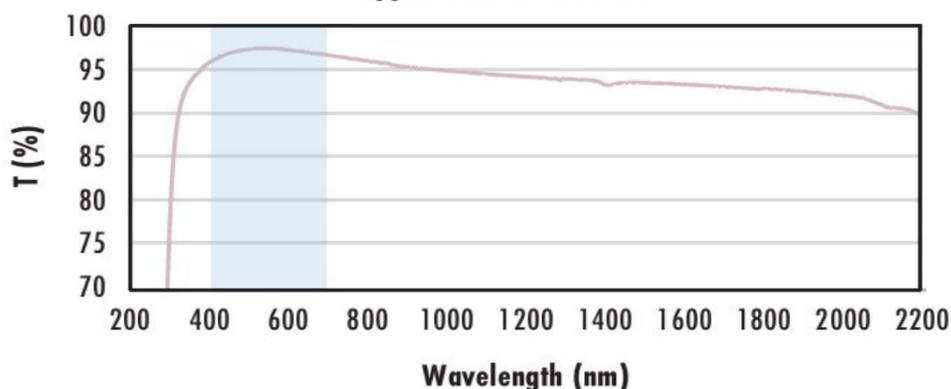- YAG-BBAR (500 - 1100nm)

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

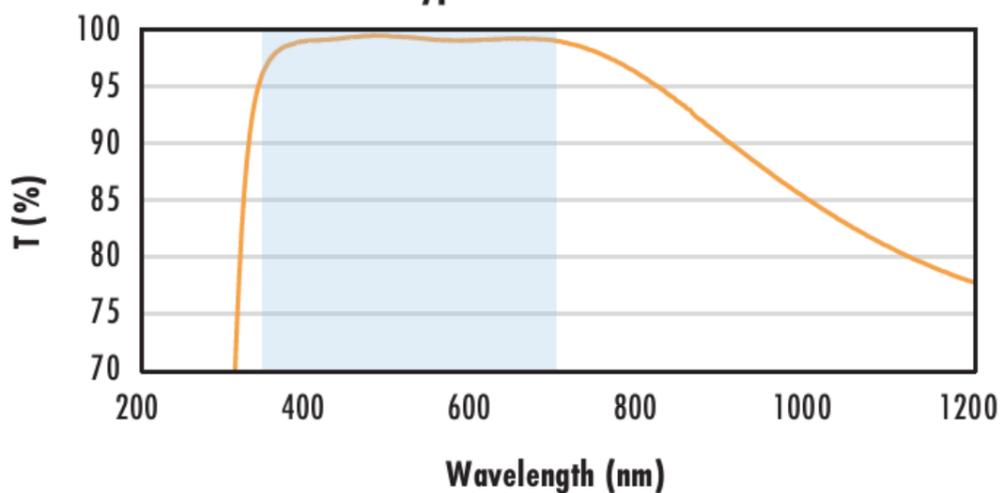Typical transmission of a 3mm thick N-BK7 window with MgF2 (400-700nm) coating at 0° AOI.

The blue shaded region indicates the coating design wavelengh 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.

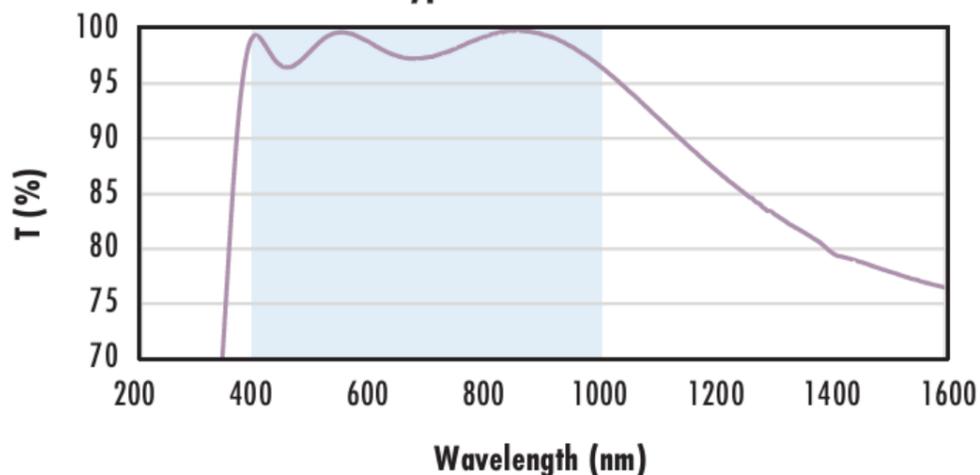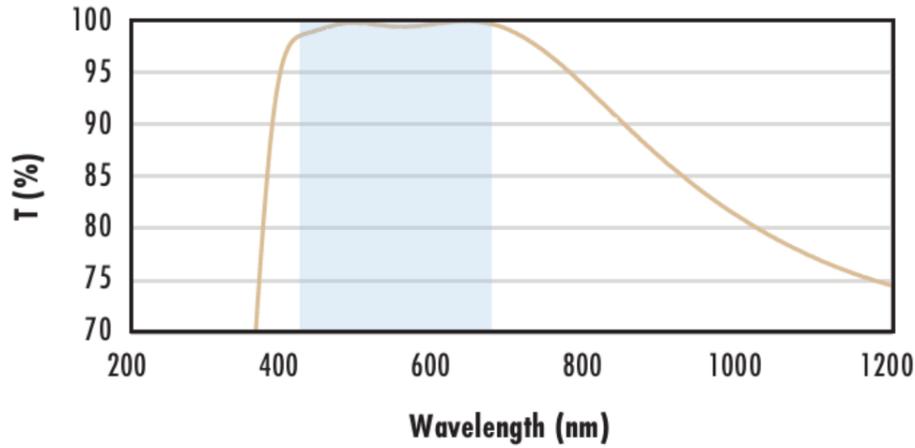The blue shaded region indicates the coating design wavelengh range, with the following specification:

$R_{avg} \leq 0.5\%$ @ 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

Legend:
- VIS-NIR (400 - 1000nm)

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 wavelengh 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.

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N-BK7 with VIS 0° Coating
Typical Transmission

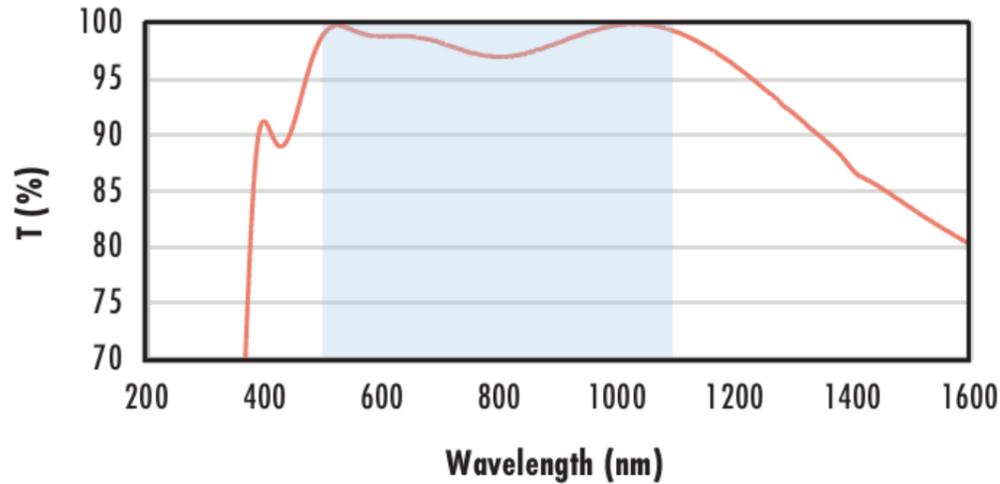Typical transmission of a 3mm thick N-BK7 window with VIS 0° (425-675nm) coating at 0° AOI.

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

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

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

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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 wavelengh range, with the following specification:
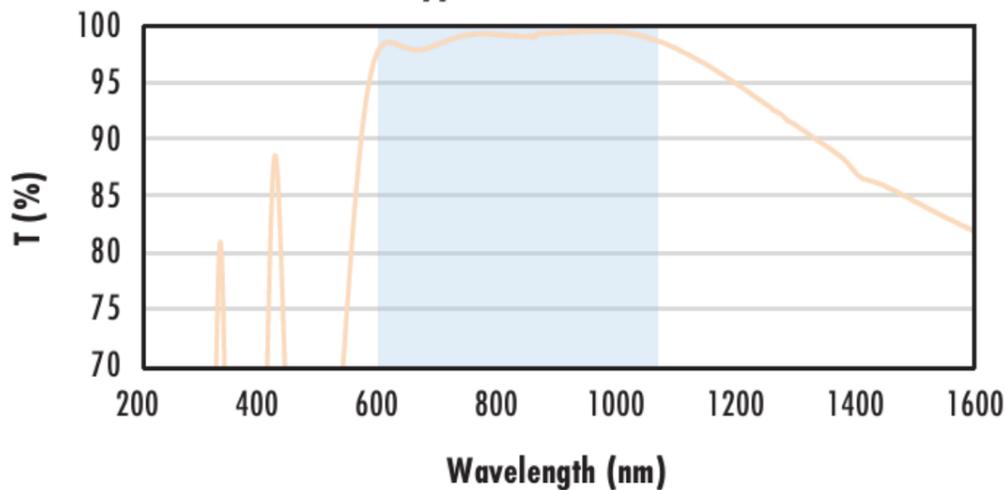
$R_{abs} \leq 0.25\%$ @ 532nm
$R_{abs} \leq 0.25\%$ @ 1064nm
$R_{avg} \leq 1.0\%$ @ 500 - 1100nm

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

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N-BK7 with NIR I Coating
Typical Transmission

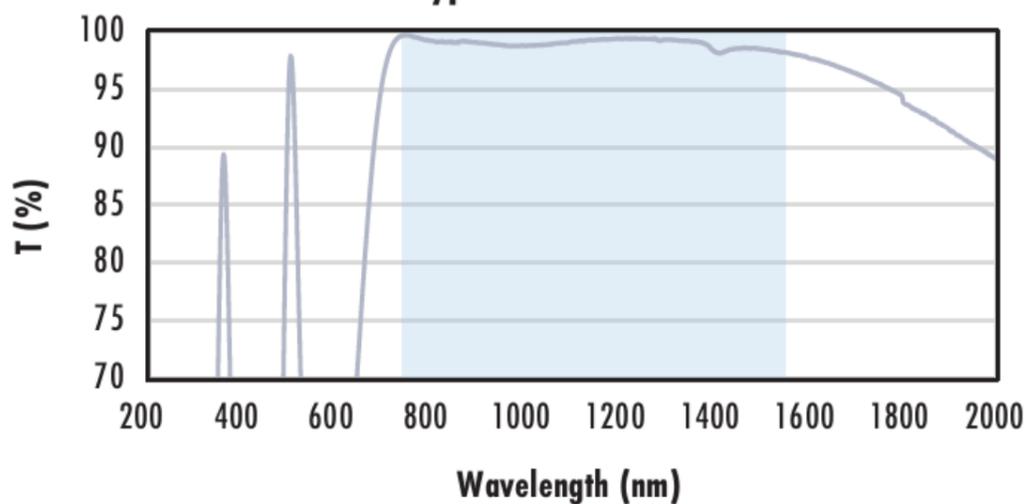Typical transmission of a 3mm thick N-BK7 window with NIR I (600 - 1050nm) coating at 0° AOI.

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

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

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

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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 wavelengh 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.

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