

TECHSPEC[®] 25mm Dia. x 200mm FL, NIR II Coated, Double-Convex Lens



Stock **#33-399** **6 In Stock**

☐ [Other Coating Options](#)

-

1

+

S\$68^{.33}

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Volume Pricing	
Qty 1-9	S\$68.33 each
Qty 10-24	S\$61.23 each
Qty 25-99	S\$54.89 each
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SPECIFICATIONS

General

Type:

Double-Convex Lens	
Physical & Mechanical Properties	
25.00 +0.0/-0.025	Diameter (mm):
<1	Centering (arcmin):
5.00	Center Thickness CT (mm):
±0.10	Center Thickness Tolerance (mm):
4.24	Edge Thickness ET (mm):
24.00	Clear Aperture CA (mm):
Optical Properties	
198.35	Back Focal Length BFL (mm):
200.00	Effective Focal Length EFL (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-BK7	Substrate: ☐
40-20	Surface Quality:
1.5λ	Power (P-V) @ 632.8nm:
λ/4	Irregularity (P-V) @ 632.8nm:
205.865	Radius R ₁ =R ₂ (mm):
8.00	f/#:
587.6	Focal Length Specification Wavelength (nm):
±1.00	Focal Length Tolerance (%):
0.06	Numerical Aperture NA:
750 - 1550	Wavelength Range (nm):
8 J/cm ² @ 1064nm, 10ns	Damage Threshold, Reference: ☐
Regulatory Compliance	
Compliant	RoHS 2015:
View	Certificate of Conformance:
Compliant	Reach 235:

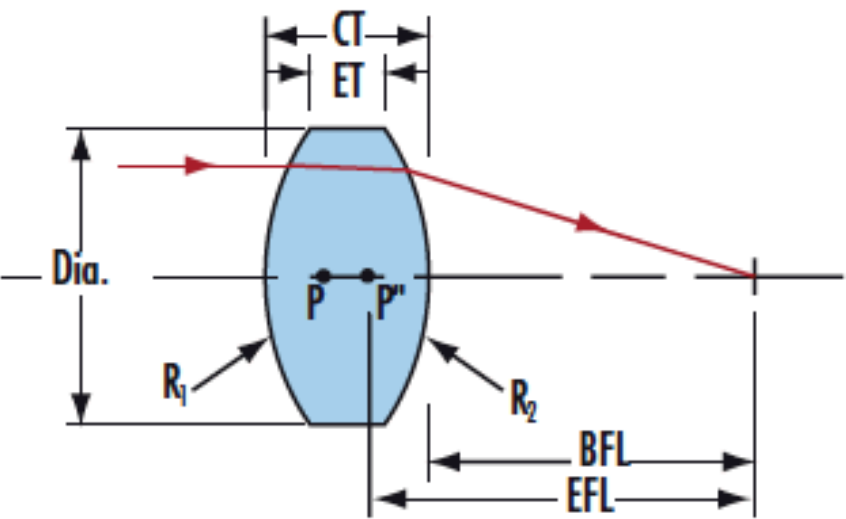
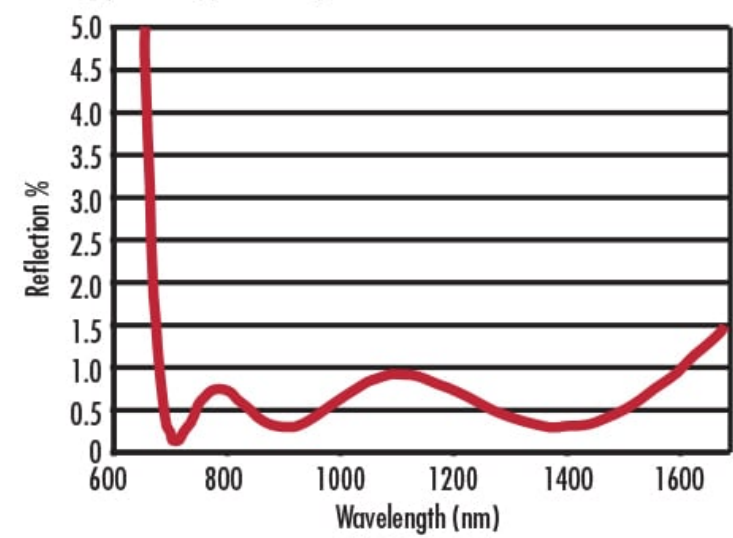
PRODUCT DETAILS

- AR Coated to Provide <0.7% Reflectance per Surface for 750 - 1550nm
- Minimize Aberrations Including Spherical and Coma
- [UV Fused Silica DCX Lenses](#) Available
- Other Coating Options Available: [Uncoated](#), [MgF₂](#), [VIS 0°](#), [NIR I](#), [VIS-EXT](#), [VIS-NIR](#), and [YAG-BBAR](#)

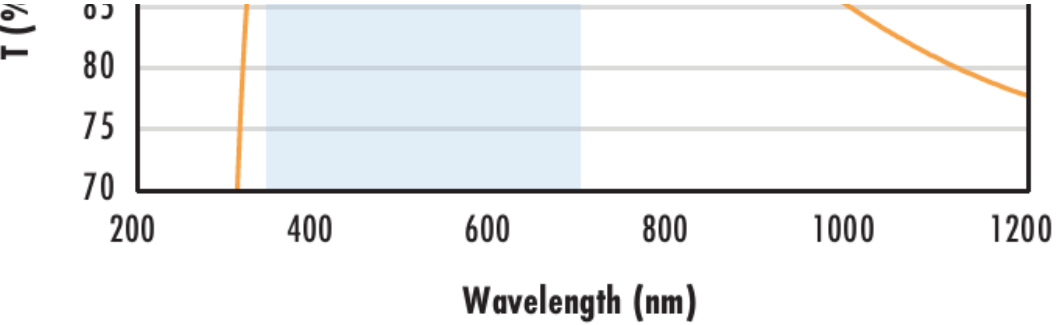
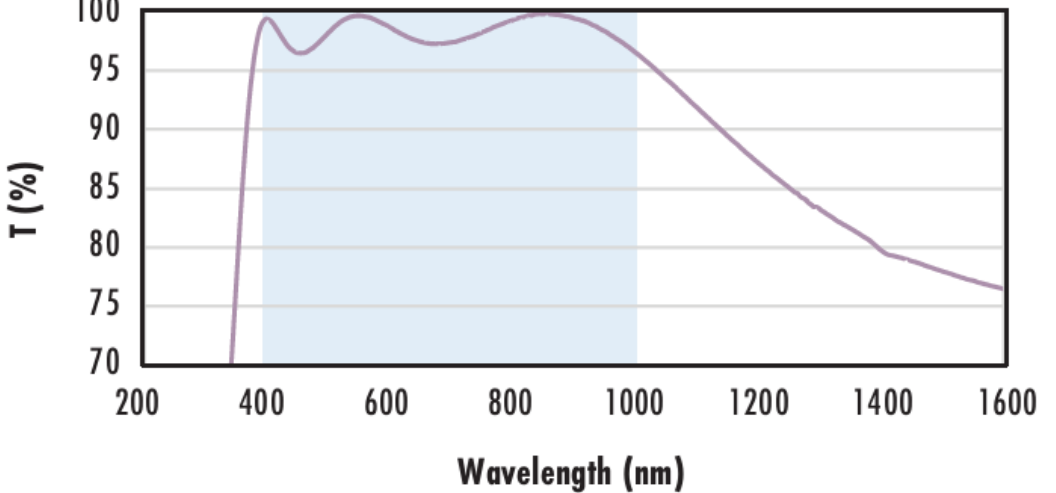
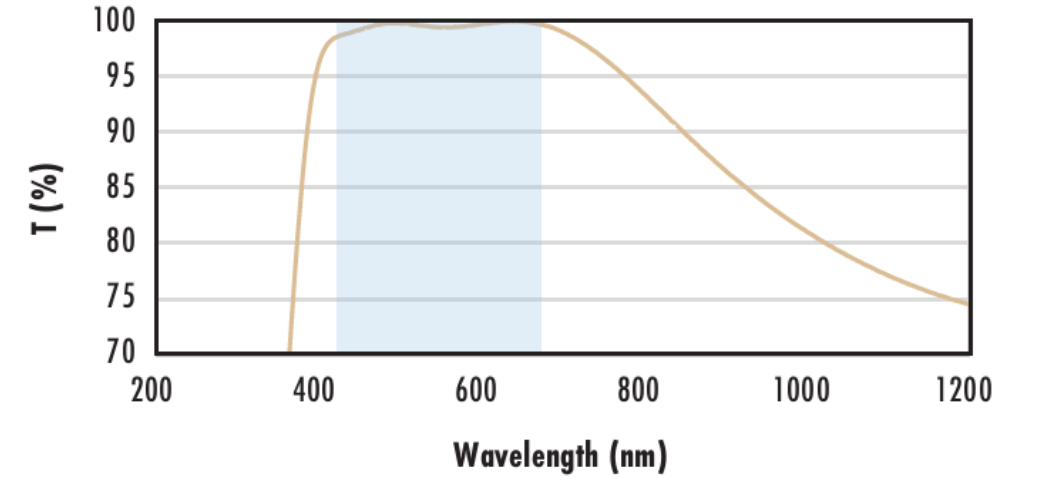
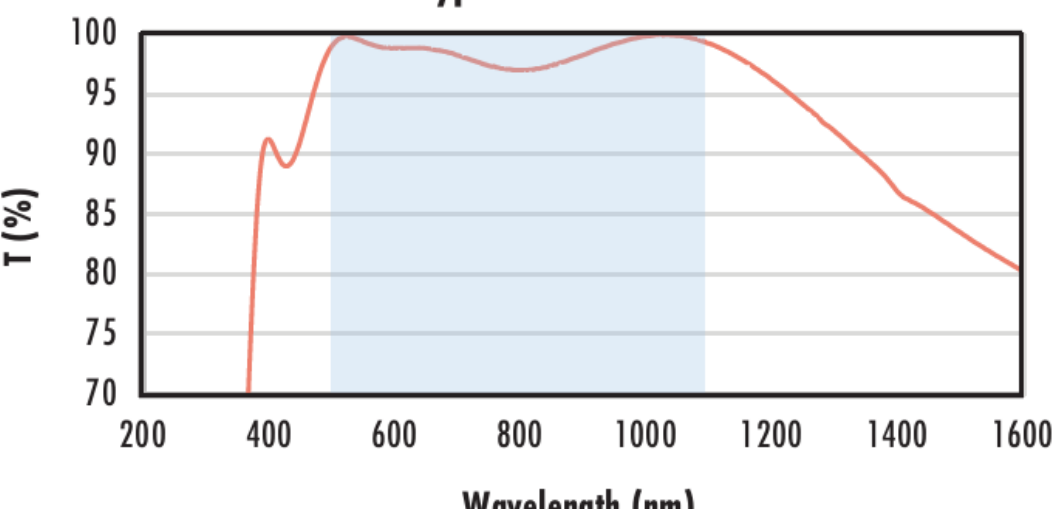
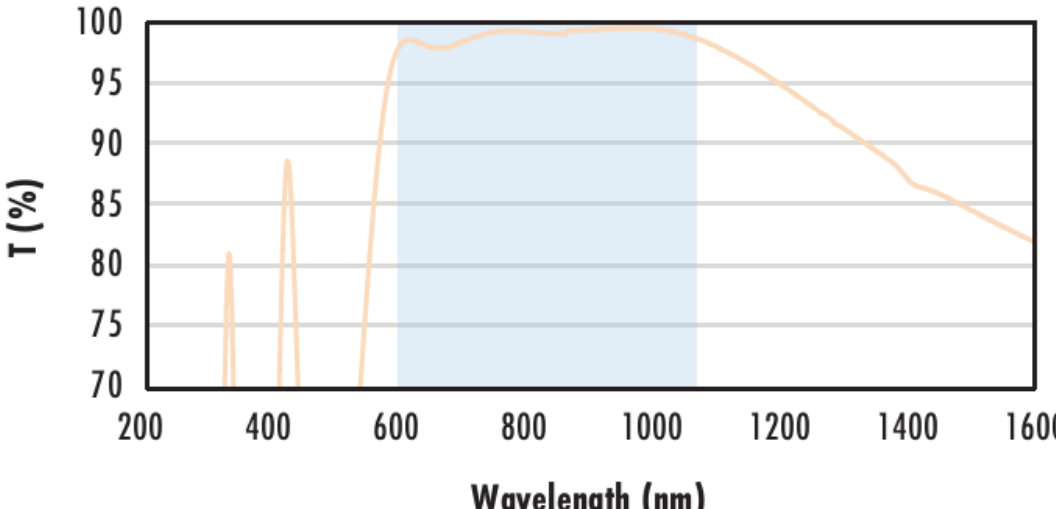
TECHSPEC® NIR II Coated Double-Convex (DCX) Lenses, also referred to as bi-convex lenses, have two positive, symmetrical faces with equal radii on both sides. These lenses are generally recommended for finite imaging applications with a conjugate ratio (ratio between object distance and image distance) between 0.2 and 5. At a conjugate ratio of 1, aberrations such as spherical aberration, chromatic aberration, coma, and distortion are minimized or cancelled due to the symmetric lens design. TECHSPEC® NIR II Coated Double-Convex Lenses are available in a variety of substrates and coating options for the visible and NIR spectra.

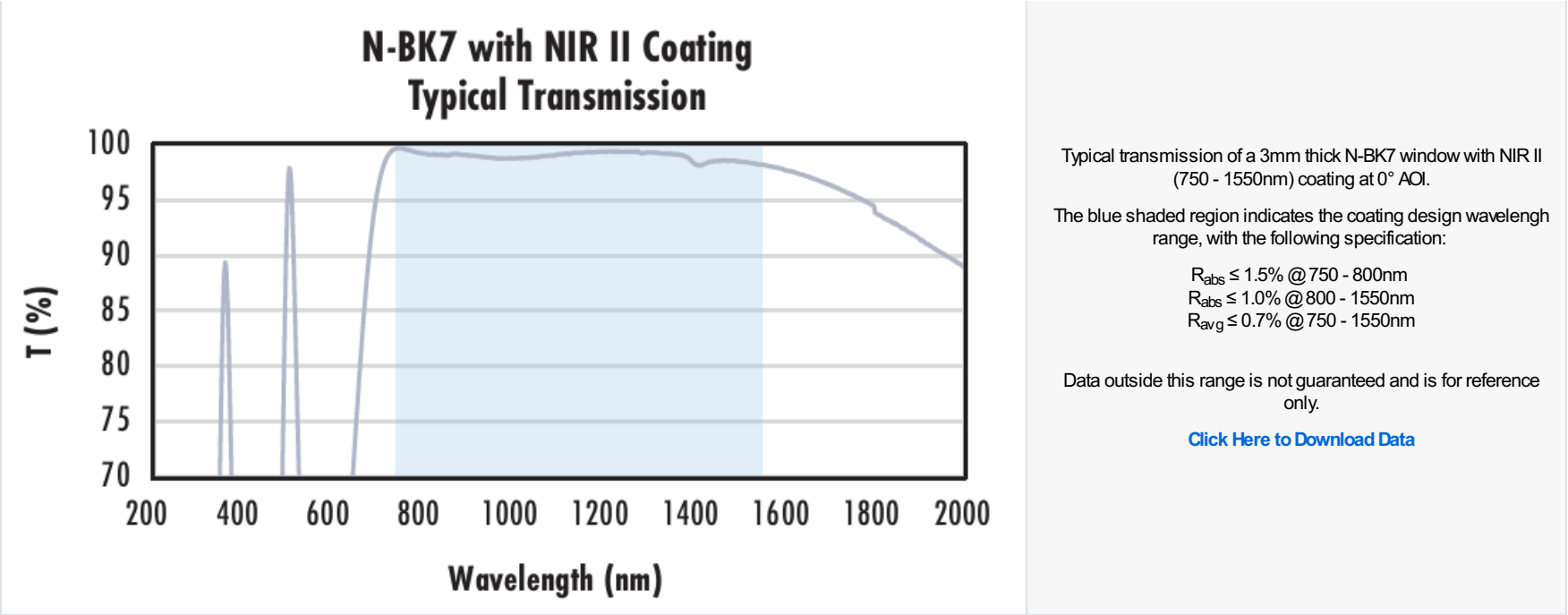
TECHNICAL INFORMATION

NIR II Coating
 $R_{avg} \leq 0.7\% @ 750 - 1550\text{nm}$, $R_{abs} \leq 1.0\% @ 800 - 1550\text{nm}$
Typ. Energy Density Limit: $8 \text{ J/cm}^2 @ 1064\text{nm}$, 10ns



N-BK7	
Uncoated N-BK7 Typical Transmission A line graph showing the typical transmission of an uncoated N-BK7 window. The y-axis is labeled 'T (%)' and ranges from 70 to 100 in increments of 5. The x-axis is labeled 'Wavelength (nm)' and ranges from 200 to 2200 in increments of 200. The red curve shows high transmission, starting at ~70% at 200 nm, rising to ~92% by 400 nm, and remaining relatively flat until 2000 nm, where it begins to drop slightly.	Typical transmission of a 3mm thick, uncoated N-BK7 window across the UV - NIR spectra. Click Here to Download Data
N-BK7 with MgF₂ Coating Typical Transmission A line graph showing the typical transmission of an N-BK7 window with a MgF₂ coating. The axes are the same as the uncoated graph. The purple curve shows transmission starting at ~70% at 200 nm, rising to ~95% by 400 nm, and then gradually decreasing to ~90% at 2200 nm. A blue shaded region highlights the design wavelength range from approximately 400 nm to 700 nm.	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
N-BK7 with VIS-EXT Coating Typical Transmission A line graph showing the typical transmission of an N-BK7 window with a VIS-EXT coating. The axes are the same as the uncoated graph. The orange curve shows transmission starting at ~70% at 200 nm, rising to ~95% by 400 nm, and then gradually decreasing to ~90% at 2200 nm. A blue shaded region highlights the design wavelength range from approximately 350 nm to 700 nm.	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



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:

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- High-precision surface quality and flatness
- Tight tolerances and complex geometries
- Scalable production—from prototype to volume

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COMPATIBLE MOUNTS