

TECHSPEC[®] 40mm Dia. x 120mm FL, YAG-BBAR Coated, Inked, Double-Convex Lens



YAG-BBAR Coated Double-Convex (DCX) Lenses



Stock **#89-286-INK** [CONTACT US](#)

-

1

+

₹7,380

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Volume Pricing	
Qty 1-9	₹7,380 each
Qty 10-24	₹6,660 each
Qty 25-99	₹5,895 each
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SPECIFICATIONS

General

Type:

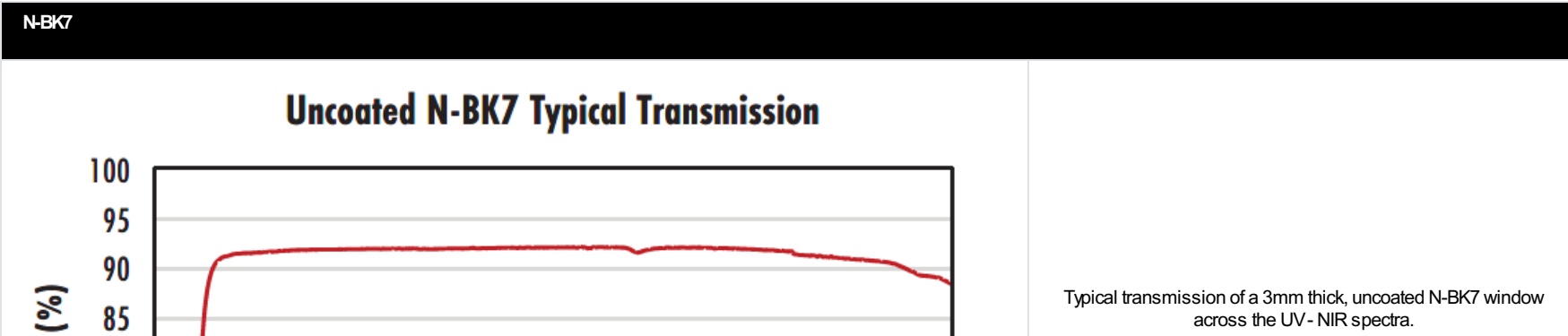
Double-Convex Lens	
Physical & Mechanical Properties	
40.00 ±0.025	Diameter (mm):
<1	Centering (arcmin):
Protective as needed	Bevel:
7.00	Center Thickness CT (mm):
±0.10	Center Thickness Tolerance (mm):
3.72	Edge Thickness ET (mm):
39.00	Clear Aperture CA (mm):
Optical Properties	
117.67	Back Focal Length BFL (mm):
120.00	Effective Focal Length EFL (mm):
YAG-BBAR (500-1100nm)	Coating:
R _{abs} <0.25% @ 532nm R _{abs} <0.25% @ 1064nm R _{avg} <1.0% @ 500 - 1100nm	Coating Specification:
N-BK7	Substrate: ☐
40-20	Surface Quality:
122.83	Radius R ₁ =R ₂ (mm):
3.00	f/#:
587.6	Focal Length Specification Wavelength (nm):
±1	Focal Length Tolerance (%):
0.17	Numerical Aperture NA:
350 - 2200	Wavelength Range (nm):
Regulatory Compliance	
View	Certificate of Conformance:

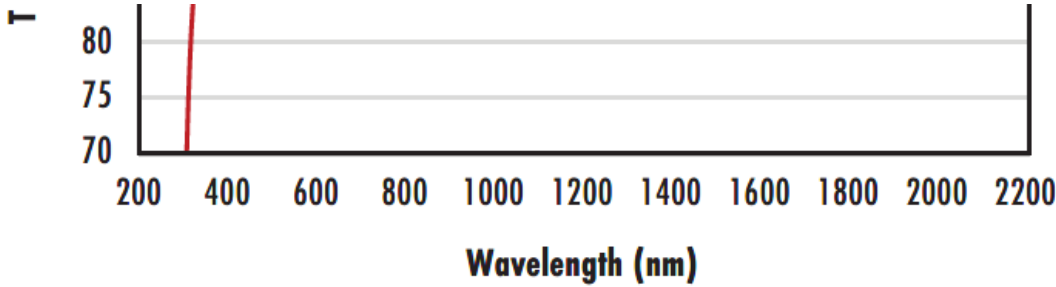
PRODUCT DETAILS

- Optimized for R<0.25% @ 532nm and 1064nm
- Minimize Aberrations Including Spherical and Coma
- [UV Fused Silica DCX Lenses](#) Available
- Other Coating Options Available: [Uncoated](#), [MgF₂](#), [VIS 0°](#), [NIR I](#), [NIR II](#), [VIS-EXT](#), and [VIS-NIR](#)

TECHSPEC® YAG-BBAR 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 YAG-BBAR Coated Double-Convex Lenses are available in a variety of substrates and coating options for the visible and NIR spectra.

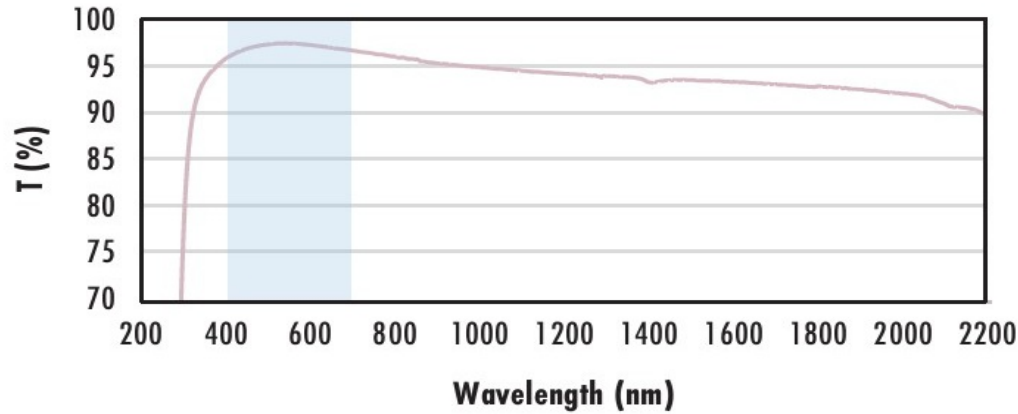
TECHNICAL INFORMATION





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N-BK7 with MgF₂ Coating
Typical Transmission



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

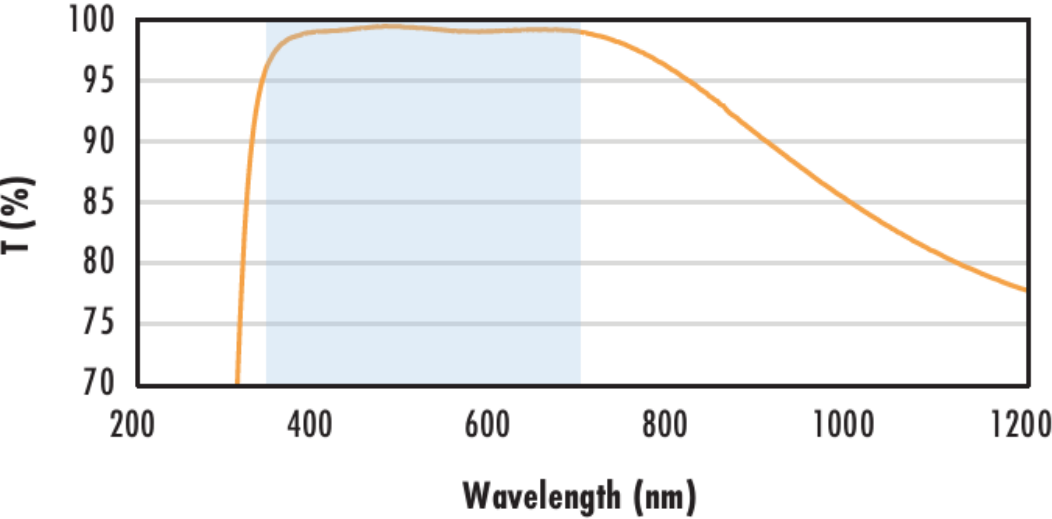
The blue shaded region indicates the coating design wavelength range, with the following specification:

$$R_{avg} \leq 1.75\% \text{ @ } 400 - 700\text{nm (N-BK7)}$$

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

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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.

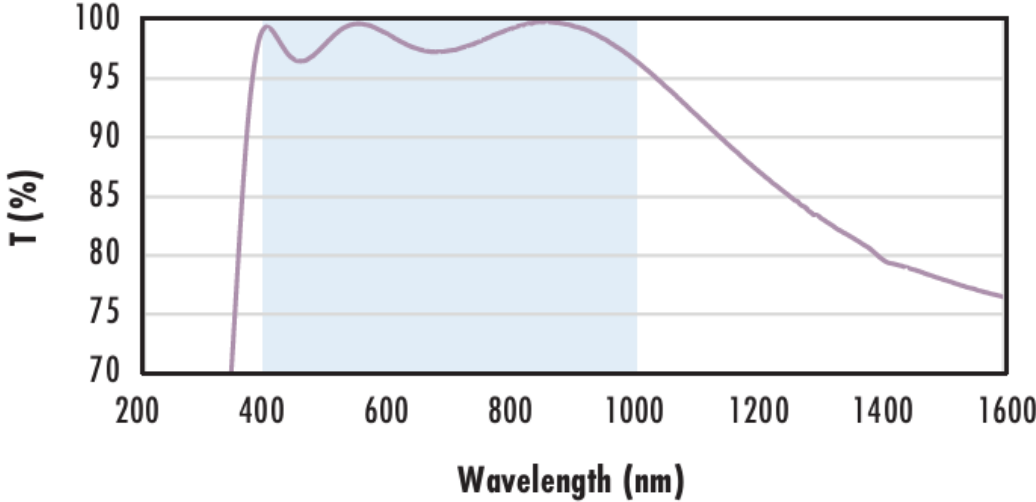
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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

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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:

$$R_{abs} \leq 0.25\% \text{ @ } 880\text{nm}$$

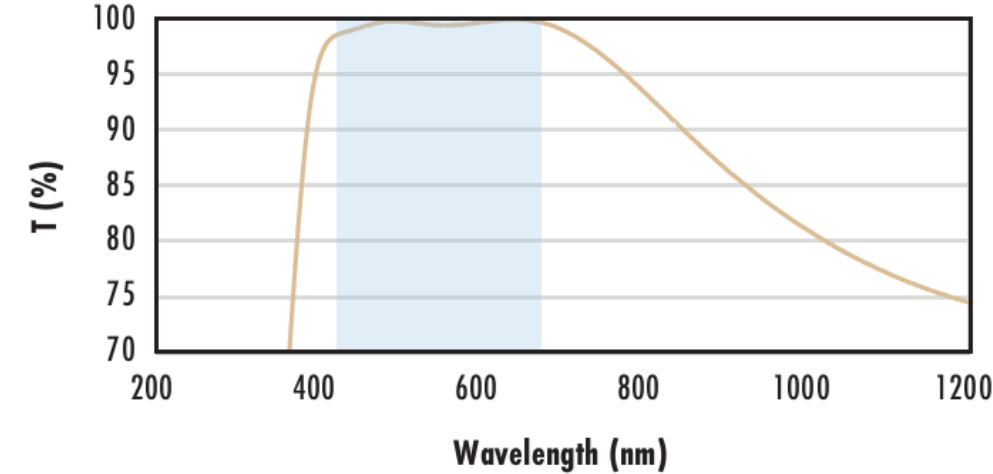
$$R_{avg} \leq 1.25\% \text{ @ } 400 - 870\text{nm}$$

$$R_{avg} \leq 1.25\% \text{ @ } 890 - 1000\text{nm}$$

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.

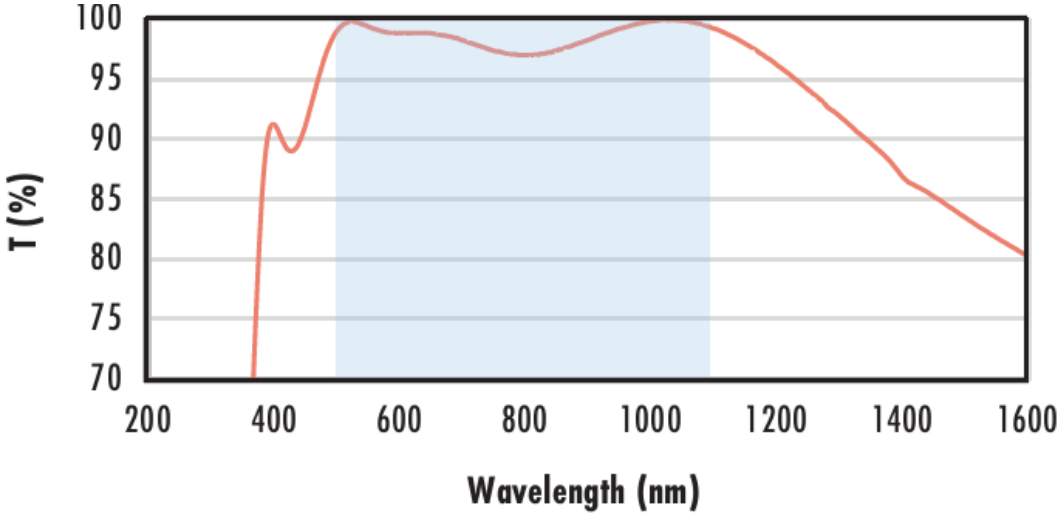
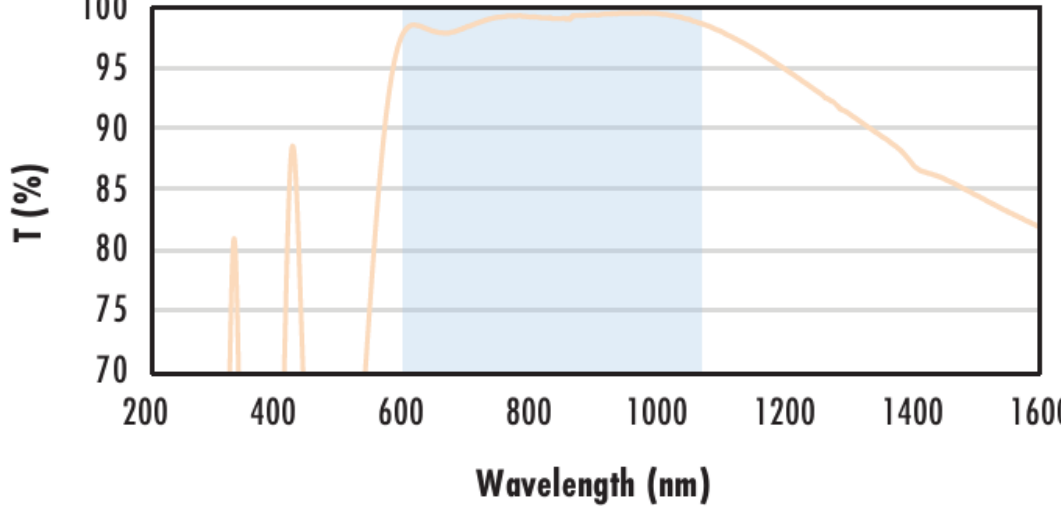
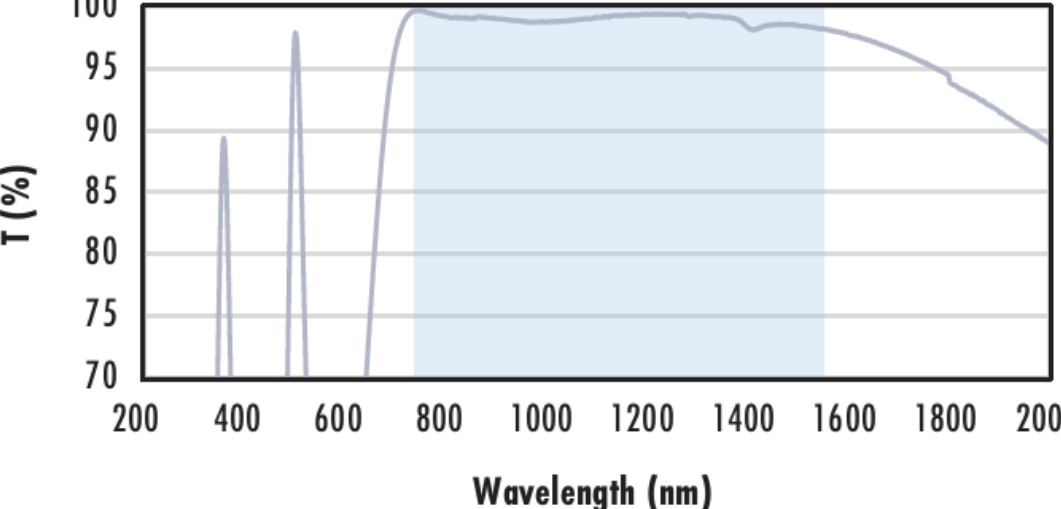
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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 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

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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- Tight tolerances and complex geometries
- Scalable production—from prototype to volume

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COMPATIBLE MOUNTS