

TECHSPEC[®] 40mm Dia. x 200mm FL YAG-BBAR Coated, Inked, Double-Convex Lens



YAG-BBAR Coated Double-Convex (DCX) Lenses



Stock **#34-198-INK** [CONTACT US](#)

-

1

+

£72⁰⁰

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Volume Pricing	
Qty 1-9	£72.00 each
Qty 10-24	£64.80 each
Qty 25-99	£57.60 each
Need More?	Request Quote

i Prices shown are exclusive of VAT/local taxes

Product Downloads

General	
Double-Convex Lens	Type:
Physical & Mechanical Properties	

40.00 ±0.025	Diameter (mm):
<1	Centering (arcmin):
Protective as needed	Bevel:
8.00	Center Thickness CT (mm):
±0.10	Center Thickness Tolerance (mm):
6.05	Edge Thickness ET (mm):
39.00	Clear Aperture CA (mm):
Optical Properties	
197.35	Back Focal Length BFL (mm):
200.00	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:
205.35	Radius R ₁ =R ₂ (mm):
5.00	f/#:
587.6	Focal Length Specification Wavelength (nm):
±1	Focal Length Tolerance (%):
0.10	Numerical Aperture NA:
330 - 2500	Wavelength Range (nm):
Regulatory Compliance	
View	Certificate of Conformance:

Need different specs or modifications?

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

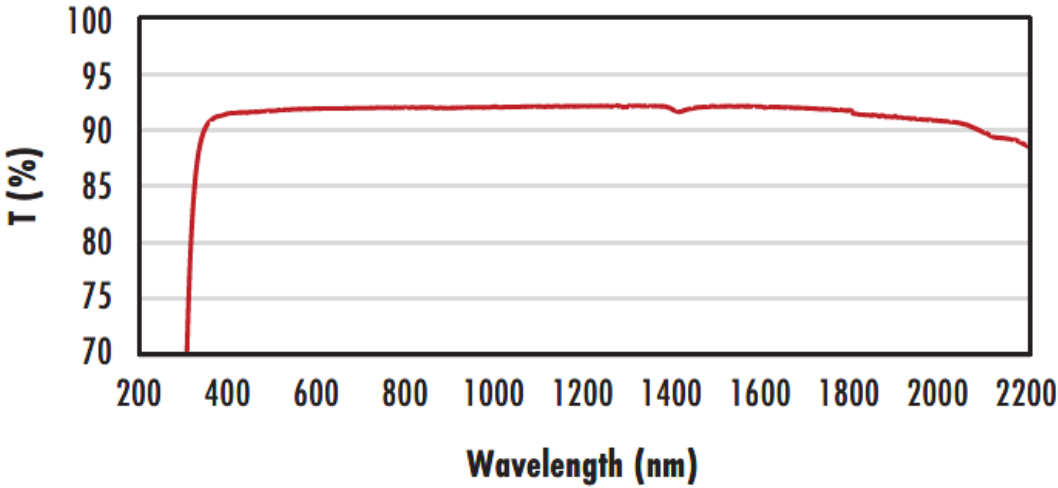
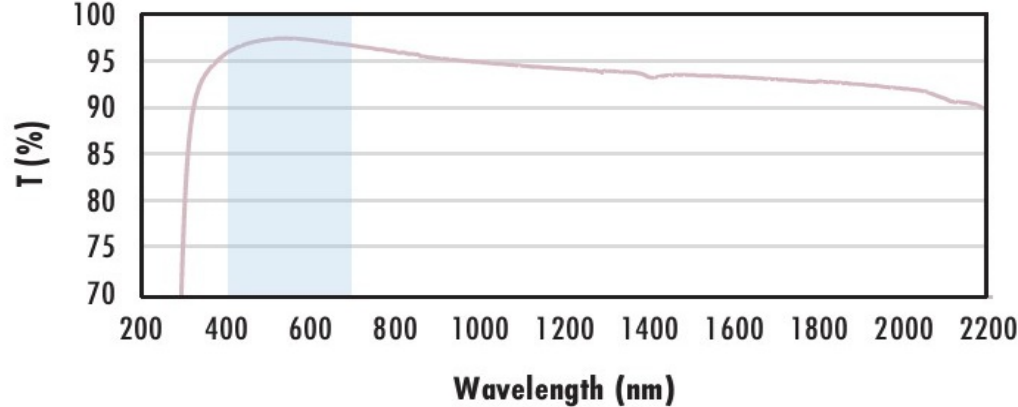
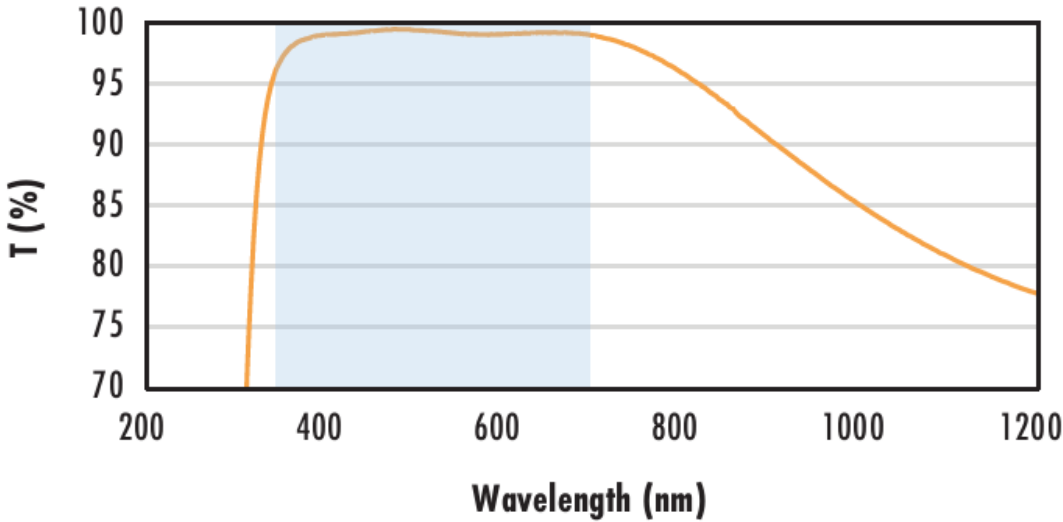
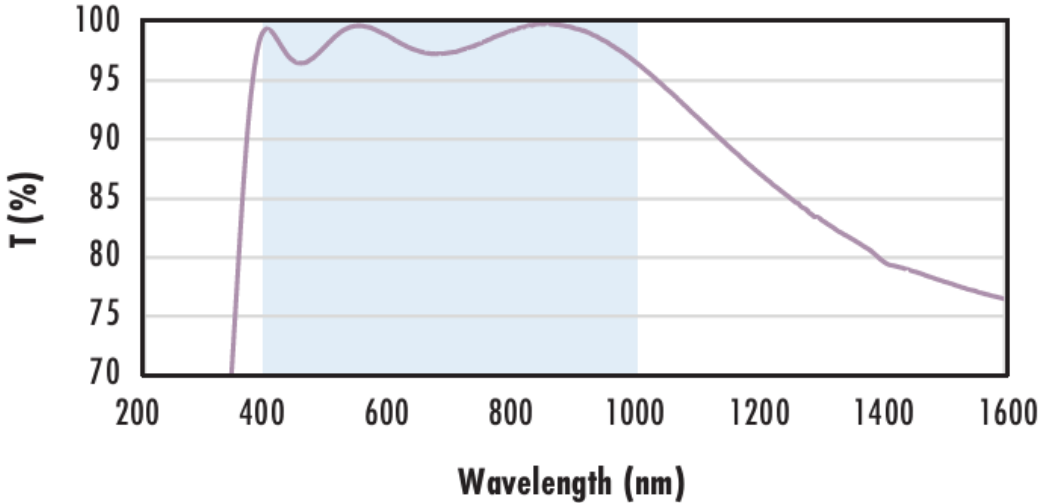
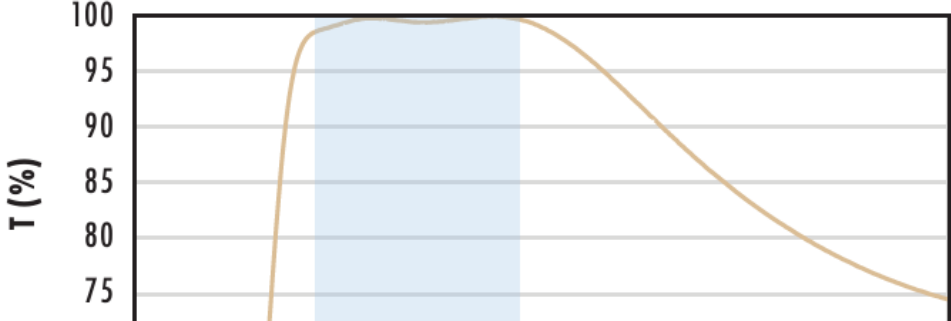
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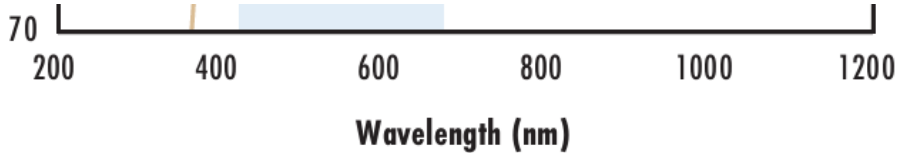
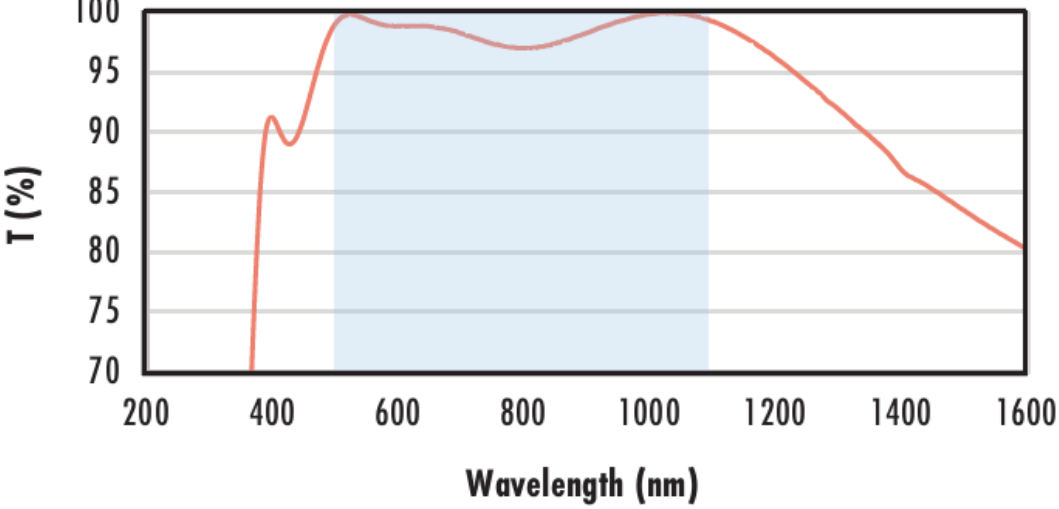
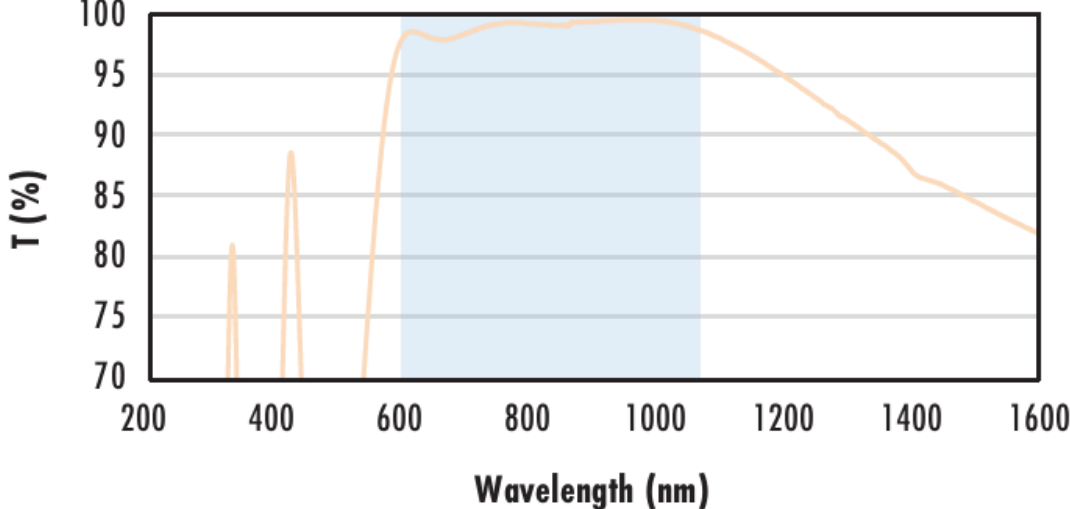
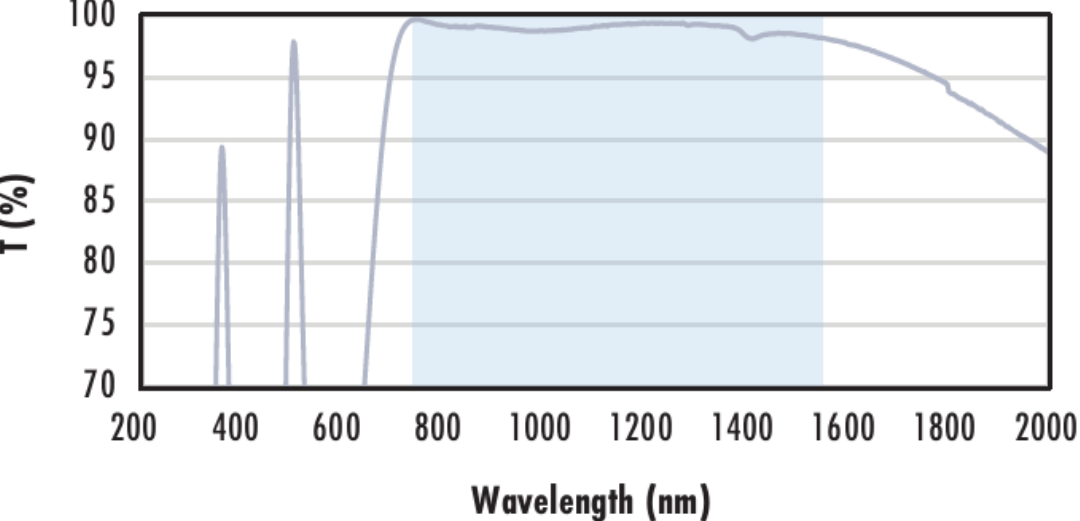
Product Details

- 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

Uncoated N-BK7 Typical Transmission  A line graph showing the typical transmission of a 3mm thick, 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 transmission curve starts at approximately 70% at 300 nm, rises sharply to about 92% by 400 nm, and then remains relatively flat, ending at approximately 88% at 2200 nm.	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 a 3mm thick N-BK7 window with MgF₂ (400-700nm) coating at 0° AOI. 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 transmission curve starts at approximately 70% at 300 nm, rises to about 98% at 500 nm, and then gradually decreases to about 90% at 2200 nm. A blue shaded region highlights the coating design wavelength range from 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 a 3mm thick N-BK7 window with VIS-EXT (350-700nm) coating at 0° AOI. 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 1200 in increments of 200. The transmission curve starts at approximately 70% at 300 nm, rises to about 98% at 400 nm, and then gradually decreases to about 78% at 1200 nm. A blue shaded region highlights the coating design wavelength range from 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: $R_{avg} \leq 0.5\% @ 350 - 700\text{nm}$ 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  A line graph showing the typical transmission of a 3mm thick N-BK7 window with VIS-NIR (400-1000nm) coating at 0° AOI. 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 1600 in increments of 200. The transmission curve starts at approximately 70% at 300 nm, rises to about 98% at 400 nm, and then gradually decreases to about 75% at 1600 nm. A blue shaded region highlights the coating design wavelength range from 400 nm to 1000 nm.	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  A line graph showing the typical transmission of a 3mm thick N-BK7 window with VIS 0° (425-675nm) coating at 0° AOI. The y-axis is labeled 'T (%)' and ranges from 75 to 100 in increments of 5. The x-axis is labeled 'Wavelength (nm)' and ranges from 200 to 1600 in increments of 200. The transmission curve starts at approximately 75% at 300 nm, rises to about 98% at 400 nm, and then gradually decreases to about 75% at 1600 nm. A blue shaded region highlights the coating design wavelength range from 425 nm to 675 nm.	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: $R_{abs} \leq 0.25\%$ @ 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

Compatible Mounts