

**TECHSPEC® 5.0mm Dia. x 12.0mm FL, YAG-BBAR, Inked, Plano-Convex Lens**



YAG-BBAR Coated Plano-Convex (PCX) Lenses



Stock **#88-791-INK** [CONTACT US](#)

[Other Coating Options](#)

1 **A\$105<sup>00</sup>**

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Volume Pricing	
Qty 1-9	<b>A\$105.60</b> each
Qty 10-24	<b>A\$95.20</b> each
Qty 25-49	<b>A\$84.80</b> each
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**SPECIFICATIONS**

**General**

Plano-Convex Lens

Type:

## Physical & Mechanical Properties

5.00 ±0.025 Diameter (mm):

<1 Centering (arcmin):

1.77 ±0.05 Center Thickness CT (mm):

1.25 Edge Thickness ET (mm):

4.5 Clear Aperture CA (mm):

Protective as needed Bevel:

## Optical Properties

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

10.83 Back Focal Length BFL (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:

1.5λ Power (P-V) @ 632.8nm:

λ/4 Irregularity (P-V) @ 632.8nm:

±1 Focal Length Tolerance (%):

6.22 Radius  $R_1$  (mm):

2.4 f#:

0.21 Numerical Aperture NA:

500 - 1100 Wavelength Range (nm):

$5 \text{ J/cm}^2$  @ 532nm, 10ns Damage Threshold, By Design:

## Regulatory Compliance

[View](#) Certificate of Conformance:

## PRODUCT DETAILS

- Optimized for  $R < 0.25\%$  @ Both 532nm and 1064nm
- AR Coated to Provide  $< 1.0\%$  Reflectance per Surface for 500 - 1100nm
- Designed for  $0^\circ$  Angle of Incidence
- Various PCX Coating Options: [Uncoated](#), [MgF<sub>2</sub>](#), [VIS 0°](#), [VIS-NIR](#), [NIR I](#), [NIR II](#), and [VIS-EXT](#)

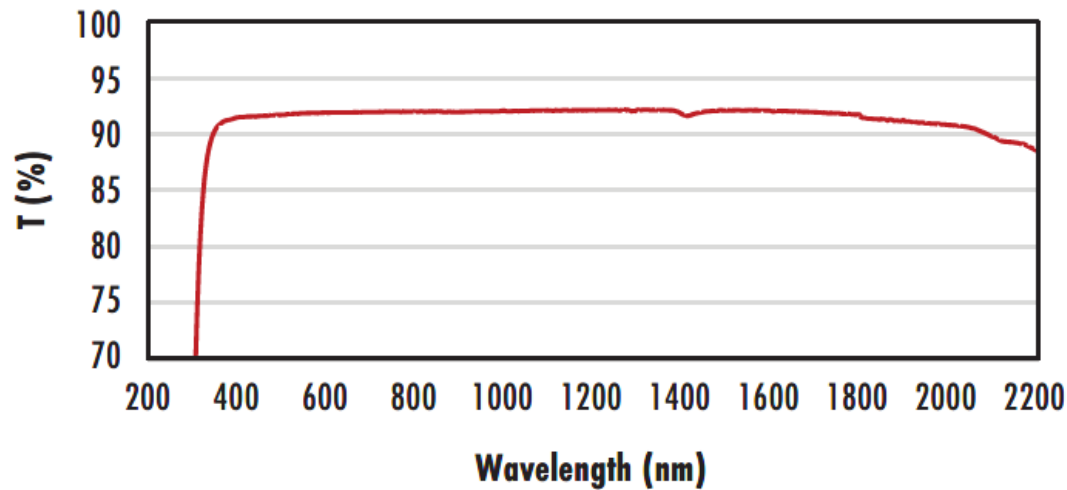
TECHSPEC® YAG-BBAR Coated Plano-Convex (PCX) Lenses have a positive focal length, making them ideal for collecting and focusing light in imaging applications. They are also useful in a variety of applications involving emitters, detectors, lasers, and fiber optics. TECHSPEC® YAG-BBAR Coated Plano-Convex (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 [MgF<sub>2</sub>](#), [VIS 0°](#), [VIS-NIR](#), [NIR I](#), [NIR II](#), and [VIS-EXT](#).

## TECHNICAL INFORMATION



N-BK7

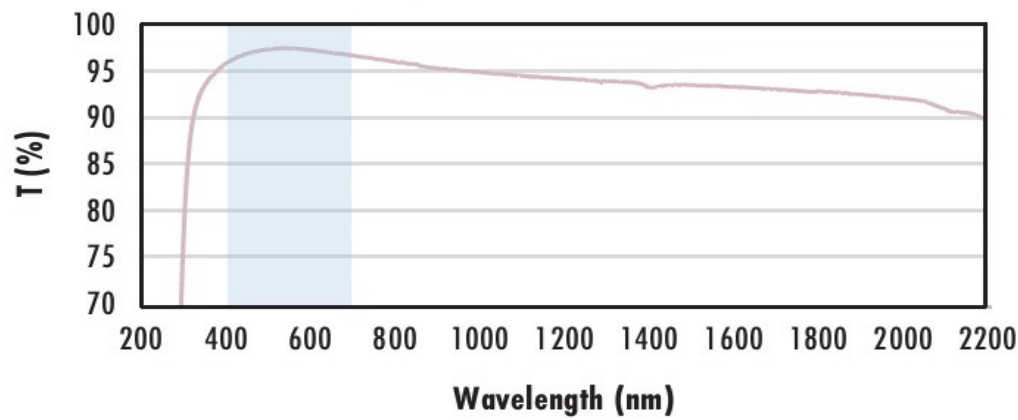
### Uncoated N-BK7 Typical Transmission



Typical transmission of a 3mm thick, uncoated N-BK7 window across the UV - NIR spectra.

[Click Here to Download Data](#)

### N-BK7 with MgF<sub>2</sub> Coating Typical Transmission



Typical transmission of a 3mm thick N-BK7 window with MgF<sub>2</sub> (400-700nm) coating at 0° AOI.

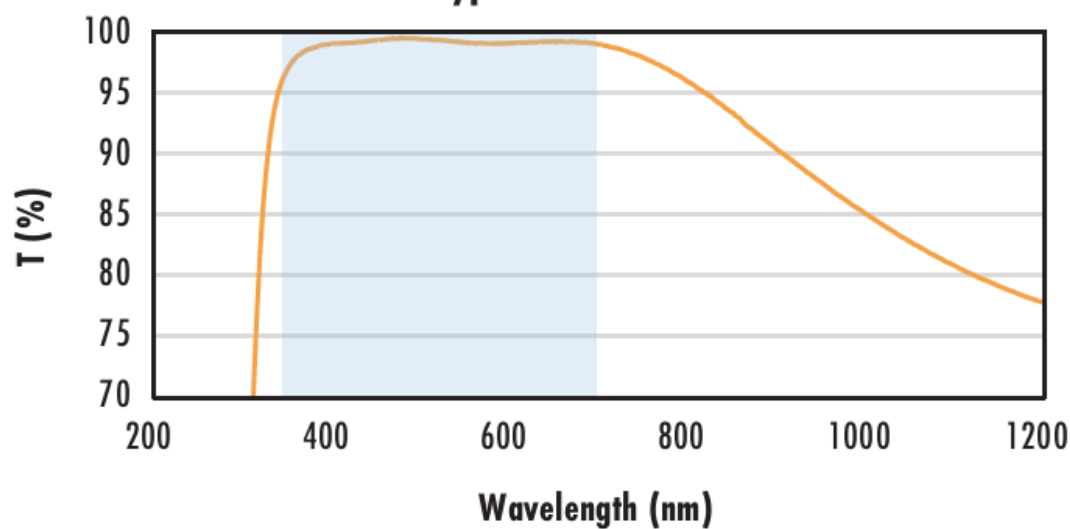
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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

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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.

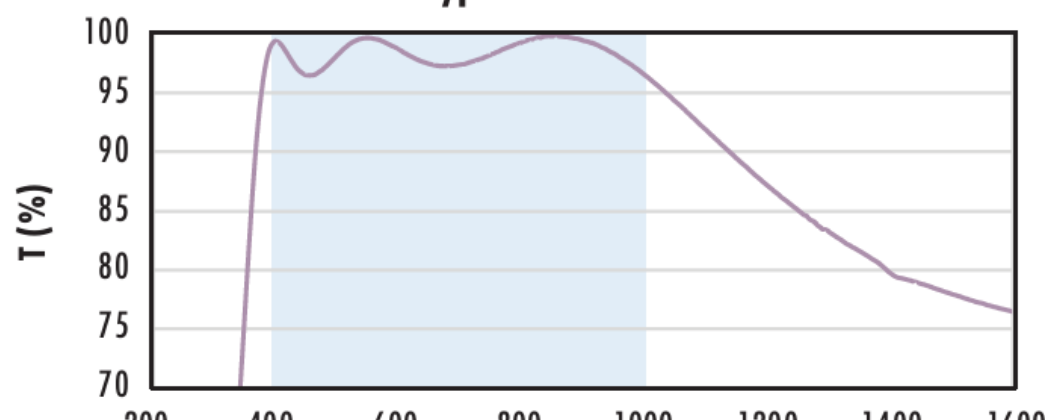
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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:

$$\begin{aligned} R_{abs} &\leq 0.25\% @ 880\text{nm} \\ R_{avg} &\leq 1.25\% @ 400 - 870\text{nm} \\ R_{avg} &\leq 1.25\% @ 890 - 1000\text{nm} \end{aligned}$$

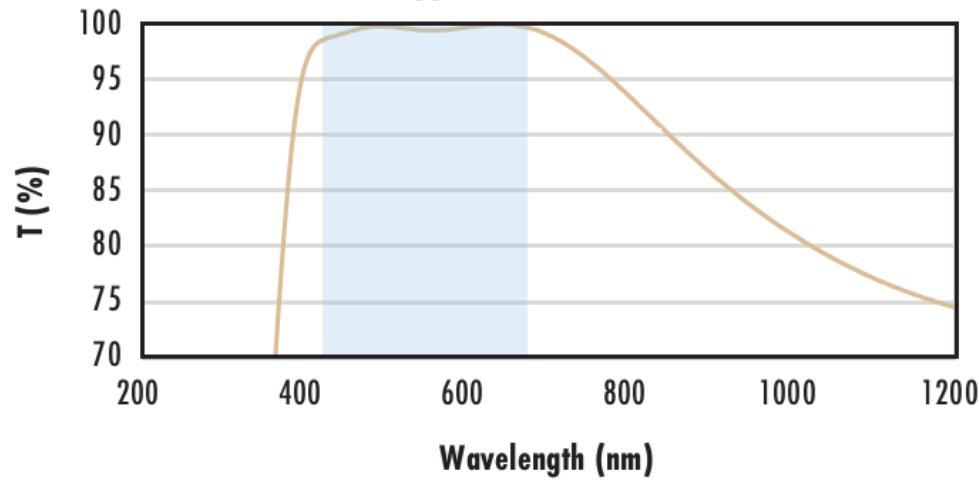
Data outside this range is not guaranteed and is for reference only.

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200 400 600 800 1000 1200 1400 1600

Wavelength (nm)

### 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.

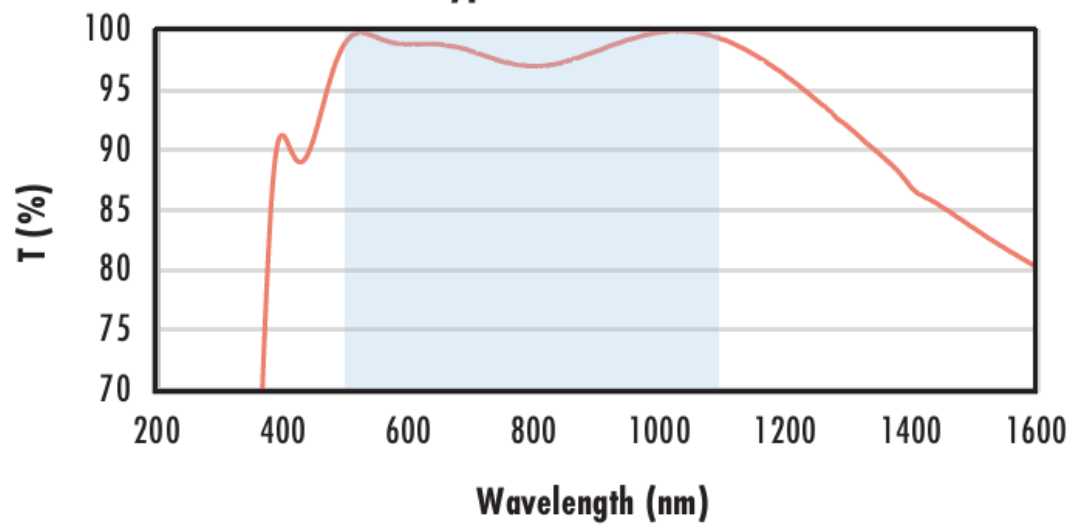
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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

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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:

$$R_{abs} \leq 0.25\% @ 532\text{nm}$$

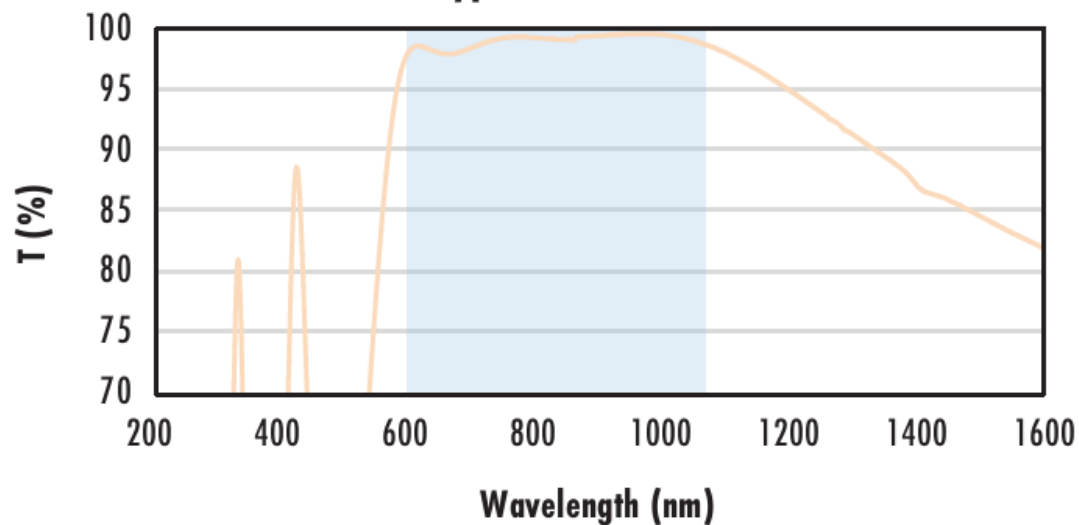
$$R_{abs} \leq 0.25\% @ 1064\text{nm}$$

$$R_{avg} \leq 1.0\% @ 500 - 1100\text{nm}$$

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.

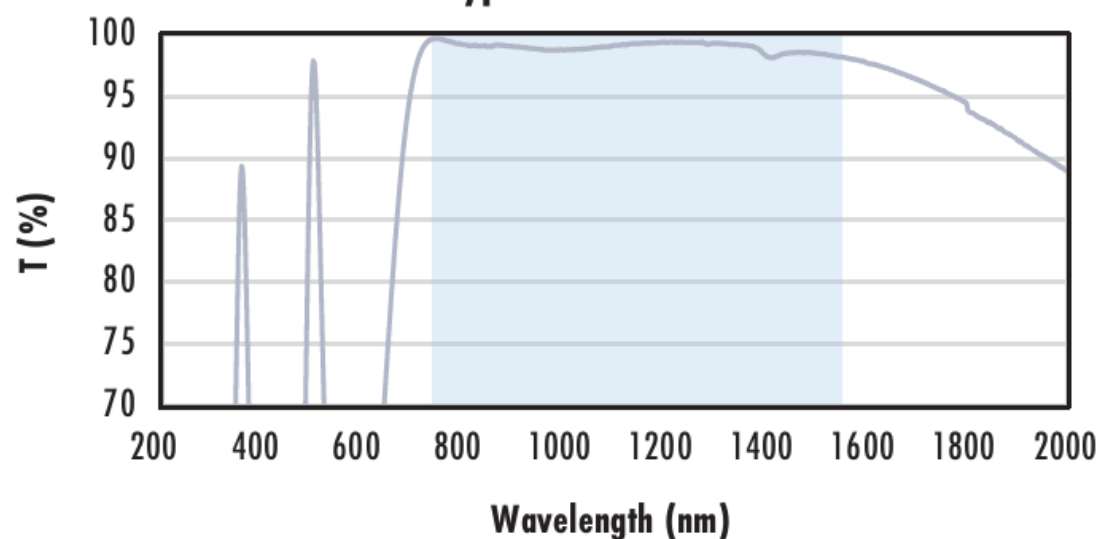
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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

[Click Here to Download Data](#)

### 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:

$$R_{abs} \leq 1.5\% @ 750 - 800\text{nm}$$

$$R_{abs} \leq 1.0\% @ 800 - 1550\text{nm}$$

$$R_{avg} \leq 0.7\% @ 750 - 1550\text{nm}$$

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

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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.

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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

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