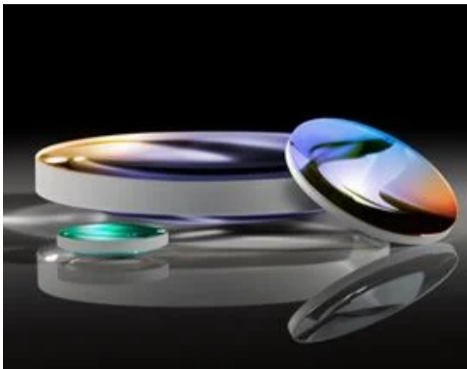


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/ [Standard Plano-Convex \(PCX\) Lenses](#) / [YAG-BBAR Coated Plano-Convex \(PCX\) Lenses](#)

**TECHSPEC®**

# 12.0mm Dia. x 60.0mm FL, YAG-BBAR Coated Plano-Convex Lens

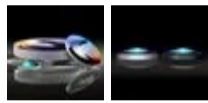


Stock #88-840 [CONTACT US](#) [Other Coating Options](#)

- 1 + £40<sup>.00</sup>

**ADD TO CART**

YAG-BBAR Coated Plano-Convex (PCX) Lenses



Volume Pricing	
Qty 1-9	£40.00 each
Qty 10-24	£35.80 each
Qty 25-49	£32.00 each
Need More?	<a href="#">Request Quote</a>

Prices shown are exclusive of VAT/local taxes

Product Downloads	
STEP:stp	Curve:pdf
PDF Drawing:pdf	
ISO 10110 Drawing	
IGES:igs	Curve (xlsx):xlsx
Zemax:zar	Zemax:zmx
eDrawing:eprt	Code V:seq
EO Spec Sheet	<a href="#">Download All</a>

General	
<b>Type:</b>	Plano-Convex Lens
Physical & Mechanical Properties	
<b>Diameter (mm):</b>	12.00 +0.0/-0.025
<b>Centering (arcmin):</b>	<1
<b>Center Thickness CT (mm):</b>	2.50 ±0.05
<b>Edge Thickness ET (mm):</b>	1.91
<b>Clear Aperture CA (mm):</b>	11
<b>Bevel:</b>	Protective as needed
Optical Properties	
<b>Effective Focal Length EFL (mm):</b>	60.00 @ 587.6nm
<b>Back Focal Length BFL (mm):</b>	58.37
<b>Coating:</b>	YAG-BBAR (500-1100nm)
<b>Coating Specification:</b>	R <sub>abs</sub> <0.25% @ 532nm R <sub>abs</sub> <0.25% @ 1064nm R <sub>avg</sub> <1.0% @ 500 - 1100nm
<b>Substrate:</b>	<a href="#">N-BK7</a>
<b>Surface Quality:</b>	40-20
<b>Power (P-V) @ 632.8nm:</b>	1.5λ
<b>Irregularity (P-V) @ 632.8nm:</b>	λ/4
<b>Focal Length Tolerance (%):</b>	±1
<b>Radius R<sub>1</sub> (mm):</b>	31.02

<b>f/#:</b> 5	<b>Numerical Aperture NA:</b> 0.10
<b>Wavelength Range (nm):</b> 500 - 1100	<b>Damage Threshold, By Design:</b> ① 5 J/cm <sup>2</sup> @ 532nm, 10ns

## Regulatory Compliance

<b>RoHS 2015:</b> <b>Compliant</b>	<b>Certificate of Conformance:</b> <b>View</b>
<b>Reach 235:</b> <b>Compliant</b>	

## 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

Learn more about our [custom manufacturing capabilities](#) or submit an inquiry [here](#).

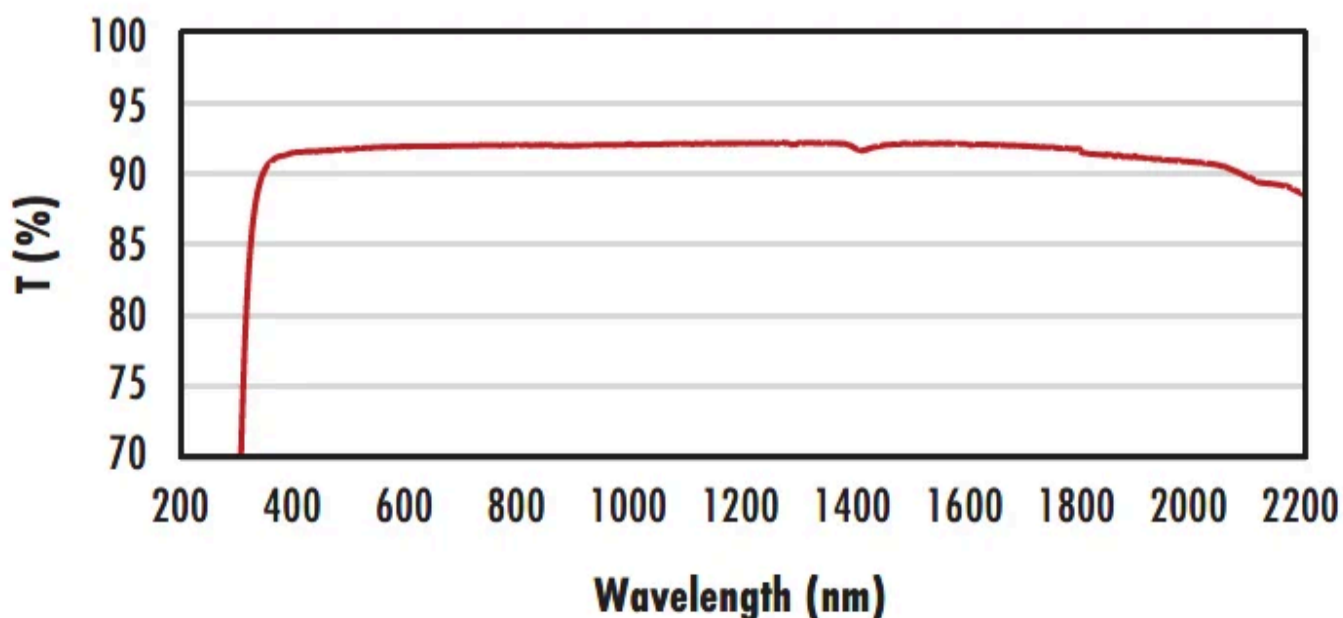
## Product Details

- Optimized for R<0.25% @ Both 532nm and 1064nm
- AR Coated to Provide <1.0% Reflectance per Surface for 500 - 1100nm
- Designed for 0° 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

### 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 w MgF<sub>2</sub> (400-700nm) coating at 0° AOI.

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

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

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



Typical transmission of a 3mm thick N-BK7 window w 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 w 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 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:

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

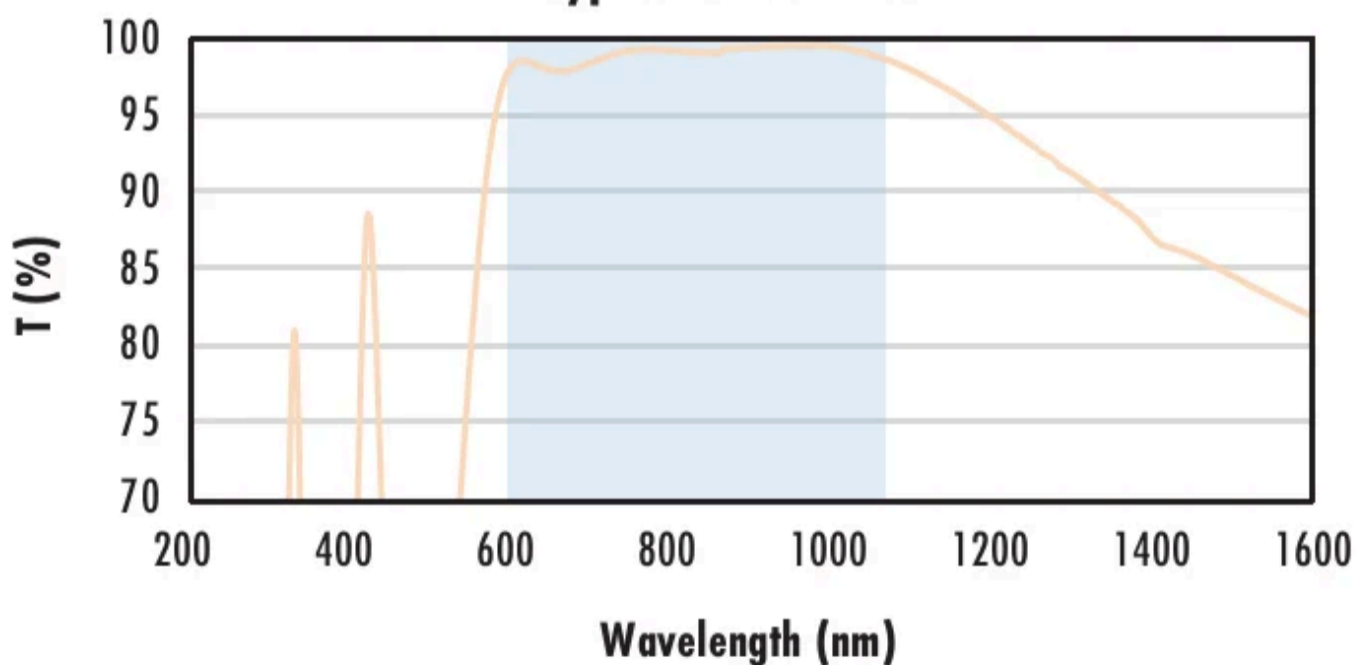
$$R_{abs} \leq 0.25\% \text{ @ } 1064\text{nm}$$

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

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 I (600 – 1050nm) coating at 0° AOI.

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

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

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 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

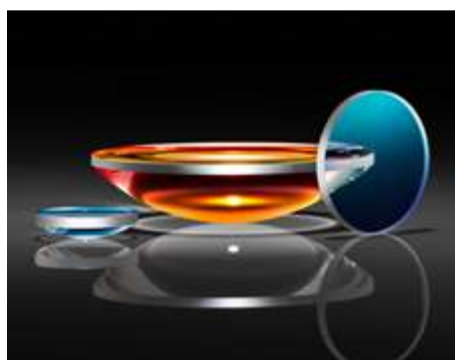
Data outside this range is not guaranteed and is for reference only.

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## Related Products



Optical Lenses



UV Fused Silica Plano-Convex (PCX) Lenses - YAG-BBAR Coated



Laser Lenses



YAG-BBAR Coated Double-Convex (DCX) Lenses

## Frequently Purchased Together



#34-183 - 12.0mm Dia. x 36.0mm FL, YAG-BBAR Coated, Plano-Convex Lens  
£40.00

Qty



#45-918 - 12mm Diameter x -48 FL, VIS-NIR Coated, Plano-Concave Lens  
£40.80

Qty



#48-537 - 25mm Dia 0.42 NA, Uncoated, UV Fused Silica Aspheric Lens  
£463.20

Qty









#67-995 - 12mm Diameter x -48 FL, NIR II Coated, Plano-Concave Lens  
£38.60

Qty

## Compatible Mounts

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	12.0mm Optic Dia., Optic Mount	Fixed		#64-555	£26.20 <a href="#">Request Quote</a>	10 In Stock <input type="text" value="1"/>

	Title	Type	Compare	Stock Number	Price	Buy
<a href="#">MORE+</a> 	12mm Inner Single Optic Mount	Fixed		#38-749	£32.80 <a href="#">Request Quote</a>	9 In Stock <input type="text" value="1"/> 
<a href="#">MORE+</a> 	12mm Diameter, C-Mount Thin Optic Mount	Fixed		#54-615	£47.60 <a href="#">Request Quote</a>	5 In Stock <input type="text" value="1"/> 
<a href="#">MORE+</a> 	12mm Inner Pair Optic Mounts	Fixed		#11-405	£64.40 <a href="#">Request Quote</a>	2 In Stock <input type="text" value="1"/> 

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## Resources

### Media Type

- Application Note
- Technical Tool
- Trending in Optics
- FAQ
- Glossary
- Video

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Anti-Reflection (AR) Coatings

APPLICATION NOTE

An Introduction to Optical Coatings

APPLICATION NOTE

Understanding Optical Specifications

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Lens Geometry Performance Comparison

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