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TECHSPEC®

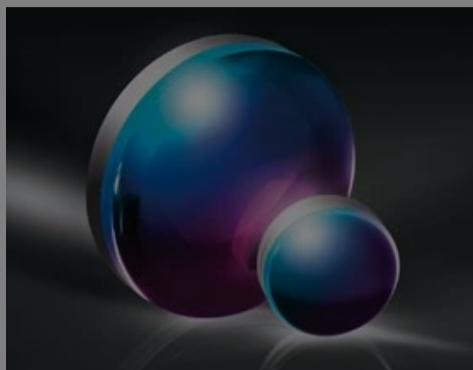
25mm Dia. x 40mm

Double-Convex Lens

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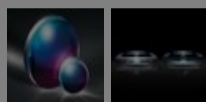
Stock #89-267 **6 In Stock** [Other Coating Options](#)

1

€56^{,50}

ADD TO CART

YAG-BBAR Coated Double-Convex (DC) Lenses



Volume Pricing

Qty 1-9	each	€56,50
Qty 10-24	each	€50,50
Qty 25-99	each	€45,25
Need More?	Request Quote	

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
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General

Type: Double-Convex Lens

Physical & Mechanical Properties

Diameter (mm): 25.00 +0.0/-0.025

Centering (arcmin): <1

Bevel: Protective as needed

Center Thickness CT (mm): 5.30

Center Thickness Tolerance (mm): ±0.10

Edge Thickness ET (mm): 1.34

Clear Aperture CA (mm): 24.00

Optical Properties

Back Focal Length BFL (mm): 38.21

Effective Focal Length EFL (mm): 40.00

Coating: YAG-BBAR (500-1100nm)

Coating Specification: R_{abs} <0.25% @ 532nm
R_{abs} <0.25% @ 1064nm
R_{avg} <1.0% @ 500 - 1100nm

Substrate: **N-BK7**

Surface Quality: 40-20

Power (P-V) @ 632.8nm: 1.5λ

Irregularity (P-V) @ 632.8nm: λ/4

Radius R₁=-R₂ (mm):	40.42	f/#:	1.6
Focal Length Specification Wavelength (nm):	587.6	Focal Length Tolerance:	±1
Numerical Aperture NA:	0.31		
Damage Threshold, By Design: ⓘ	5 J/cm ² @ 532nm, 10ns		

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Regulatory Compliance	
RoHS 2015: Compliant	Certificate of Conformance: View
Reach 235: Compliant	

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](#).

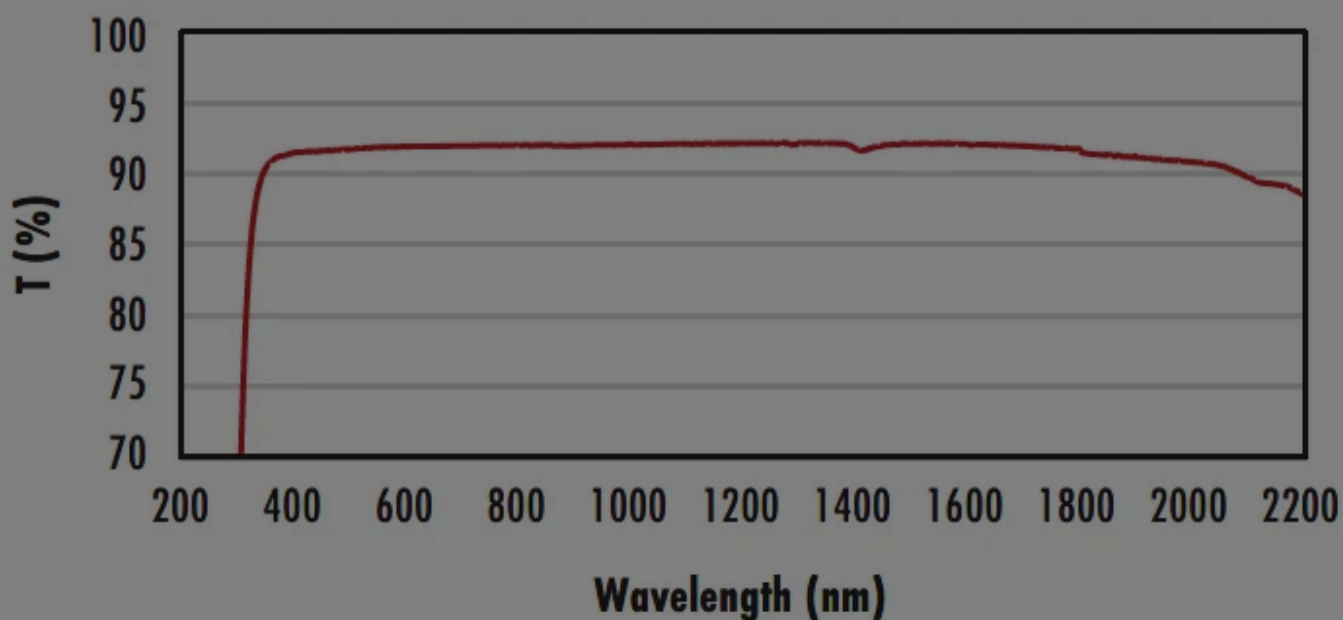
Product Details

- Optimized for R<0.25% @ 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



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



Please select your shipping country to view the most accurate inventory information, and to determine the correct Edmund Optics sales office for your order.

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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.

[Click Here to Download Data](#)

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:

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

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:

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

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

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

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 NIR I (600 - 1050nm) coating at 0° AOI.

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

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

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

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N-BK7 with NIR II Coating Typical Transmission



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Typical transmission of a 3mm thick N-BK7 window with NIR II (750 - 1550nm) coating at 0° AOI.

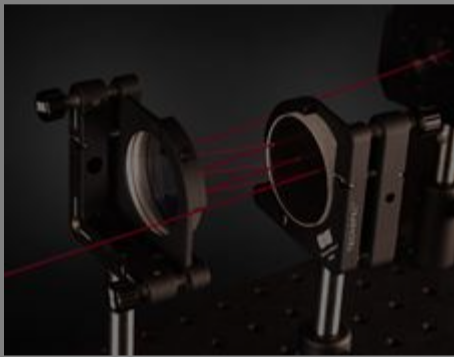
The blue shaded region indicates the coating design wavelength range, with the following specification:

- $R_{abs} \leq 1.5\%$ @ 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.

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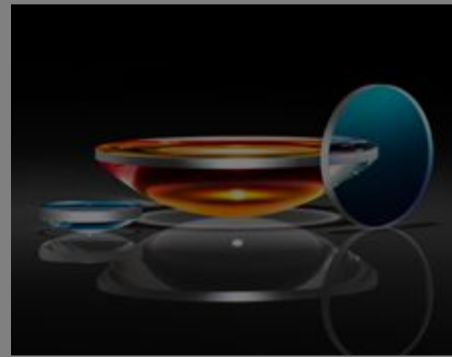
Related Products



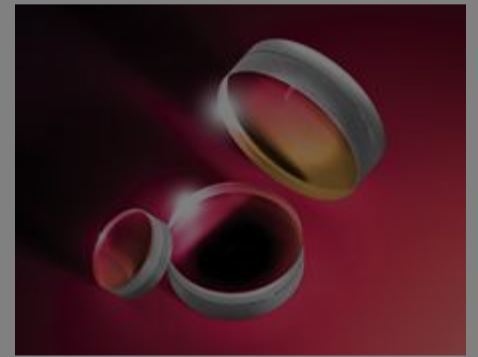
Laser Optics



YAG-BBAR Coated Plano-Convex (PCX) Lenses



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



YAG-BBAR Coated Achromatic Lenses

Frequently Purchased Together



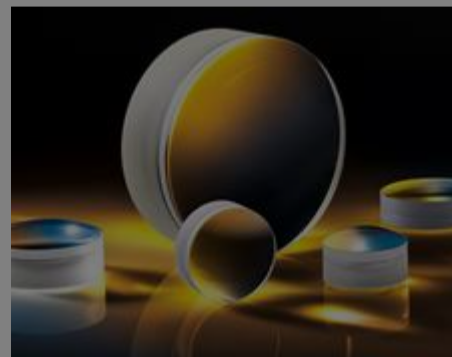
#45-889 - 25mm Dia. x 40mm FL, VIS-NIR Coated, Double-Convex Lens
€56,50

Qty



#49-194 - 25mm Dia. Protected Silver, $\lambda/4$ Mirror
€96,50

Qty



#49-364 - 25mm Dia. x 200mm FL, VIS-NIR Coated, Achromatic Lens
€136,00

Qty









#49-491 - 25mm Dia. x 40mm FL, NIR I Coated, Double-Convex Lens
€50,50

Qty

Compatible Mounts

	Title	Type	Compare	Stock Number	Price	Buy
	25.0mm Optic Dia., Optic Mount	Fixed		#64-560	€32,75 Request Quote	3 In Stock <input type="text" value="1"/>

	Title	Type	Compare	Stock Number	Price	Buy
MORE+ 	25.0/25.4mm Optic Dia., XYZ Translating Mount				€276,00	2 In Stock <input type="text" value="1"/> 
MORE+ 	25.0/25.4mm Optic Dia., XYZ Translating Mount					6 In Stock <input type="text" value="1"/> 
MORE+ 	25.0/25.4mm Optic Dia., 5 Axes Optical Mount	Adjustable - Linear (XYZ) & Tip-Tilt		#13-776	€755,00 Request Quote	2 In Stock <input type="text" value="1"/> 

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- Glossary
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APPLICATION NOTE

An Introduction to Optical Coatings

APPLICATION NOTE

Understanding Optical Specifications

APPLICATION NOTE

Lens Geometry Performance Comparison

TECHNICAL TOOL

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