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TECHSPEC® 9mm D

le-Convex Lens

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Options

1

€46^{,50}

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Volume Pricing	
Qty 1-9	€46,50 each
Qty 10-24	€41,75 each
Qty 25-99	€37,25 each
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Prices shown are exclusive of VAT/local taxes

Product Downloads

- STEP:stp
- Curve:pdf
- PDF Drawing:pdf
- ISO 10110 Drawing
- IGES:igs
- Curve (xlsx)
- Zemax:zar
- Zemax:zmx
- eDrawing:eprt
- Code V:seq
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General

Type: Double-Convex Lens

Physical & Mechanical Properties

Diameter (mm): 9.00 +0.0/-0.025

Centering (arcmin): <1

Bevel: Protective as needed

Center Thickness CT (mm): 2.74

Center Thickness Tolerance (mm): ±0.05

Edge Thickness ET (mm): 2.00

Clear Aperture CA (mm): 8.1

Optical Properties

Back Focal Length BFL (mm): 26.08

Effective Focal Length EFL (mm): 27.00

Coating: NIR I (600-1050nm)

Coating Specification: R_{avg} ≤0.5% @ 600 - 1050nm

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): 27.43

f/#: 3.00

Focal Length Specification Wavelength (nm):	587.6	Numerical Aperture NA:	0.17
Wavelength Range (nm):	600 - 1050	Please select your shipping country to view the most accurate inventory information, and to determine the correct Edmund Optics sales office for your order. Select Your Country/Region:	
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

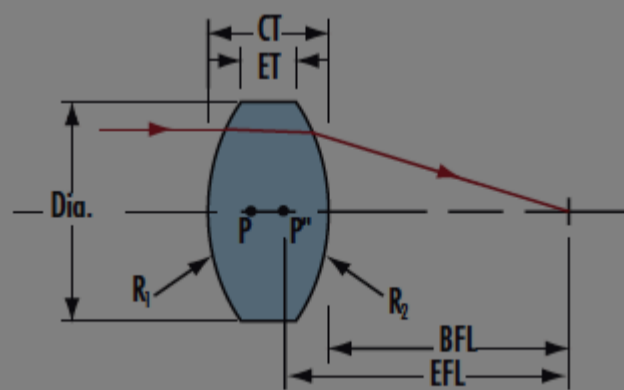
Learn more about our [custom manufacturing capabilities](#) or submit an inquiry [here](#).

Product Details

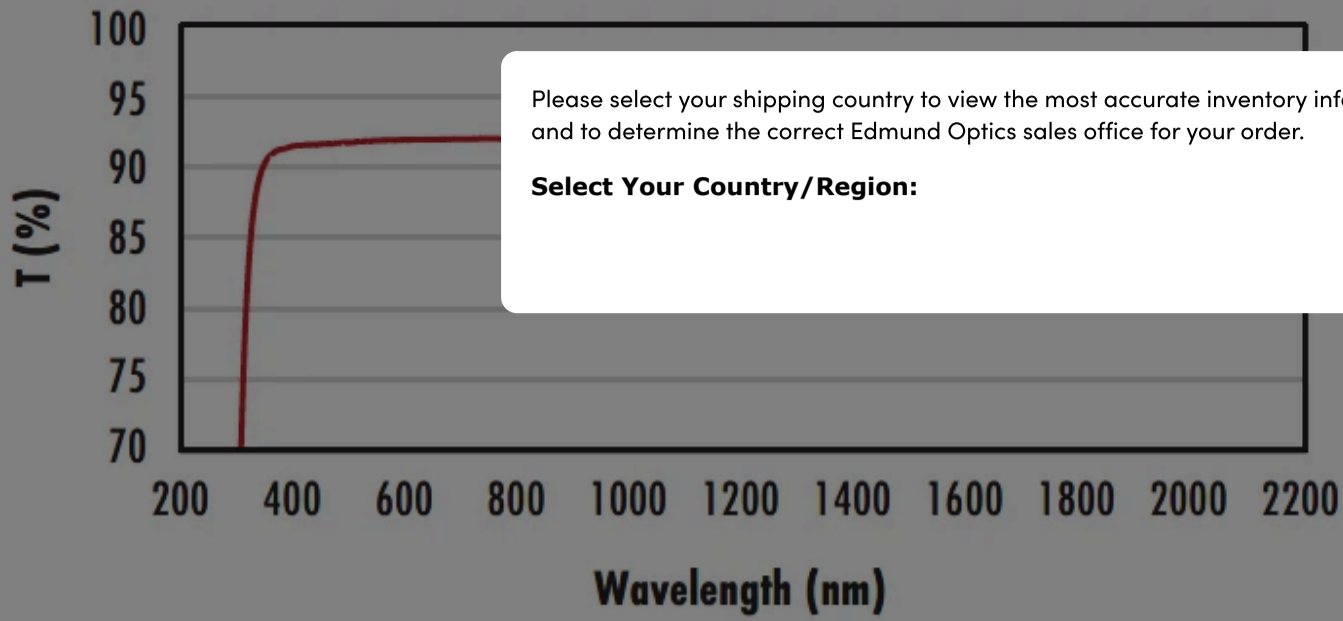
- AR Coated to Provide <0.5% Reflectance per Surface for 600 - 1050nm
- Minimize Aberrations Including Spherical and Coma
- **UV Fused Silica DCX Lenses** Available
- Other Coating Options Available: **Uncoated, MgF₂, VIS 0°, NIR II, VIS-EXT, VIS-NIR,** and **YAG-BBAR**

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

Technical Information



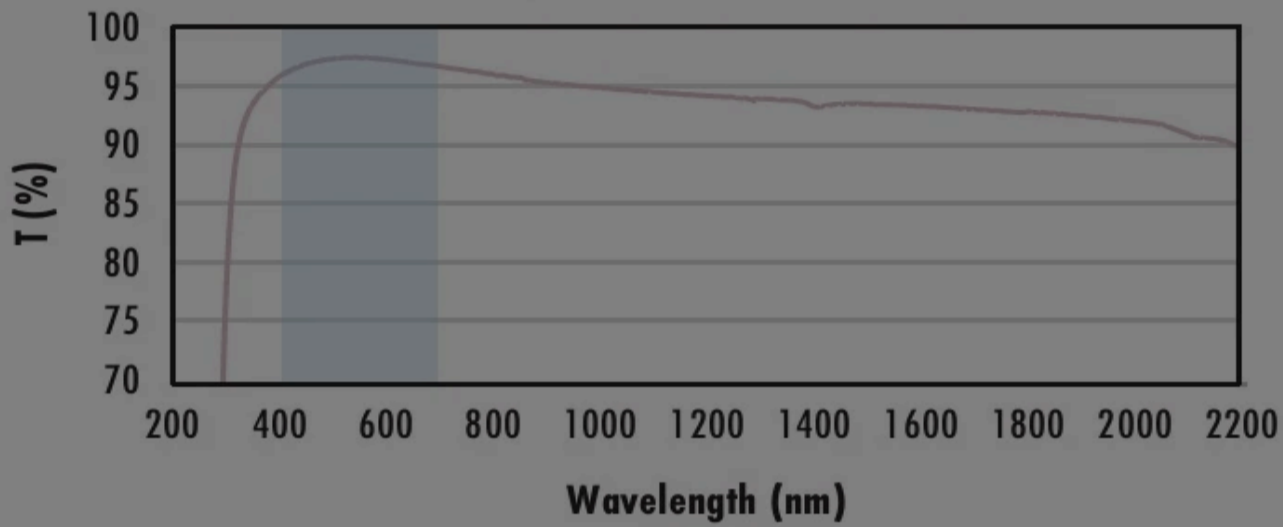
Uncoated N-BK7 Typical Transmission



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



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

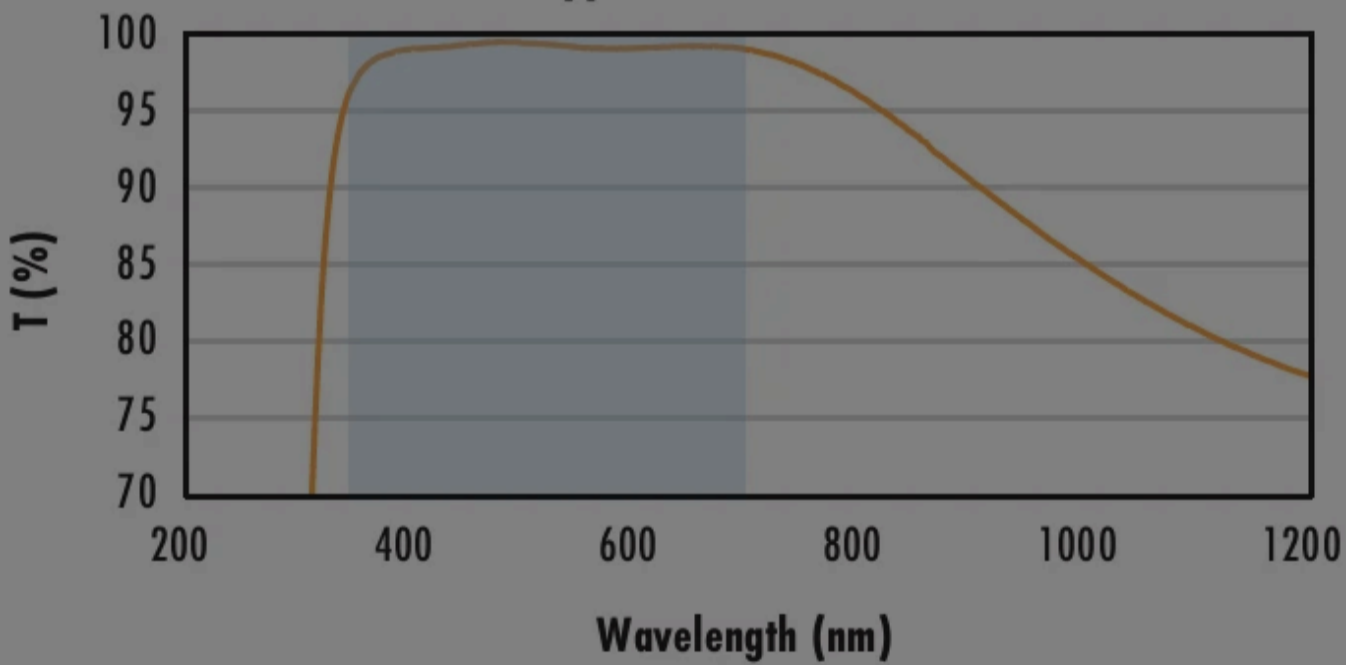
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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.

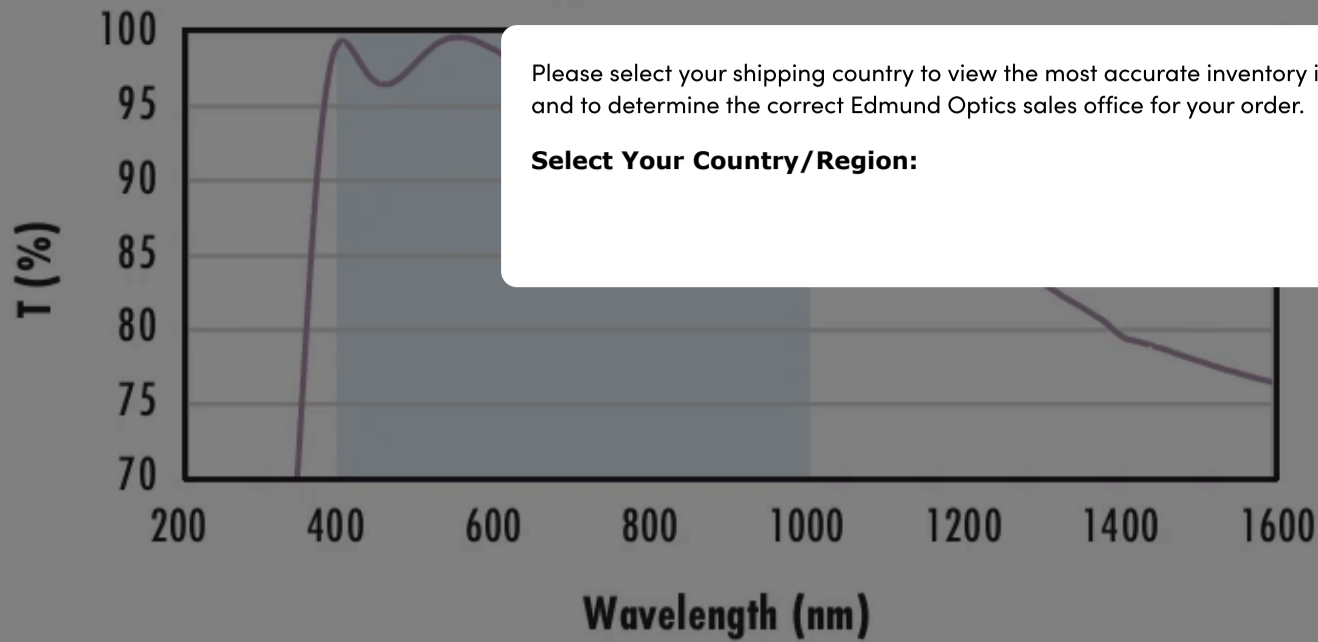
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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:

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

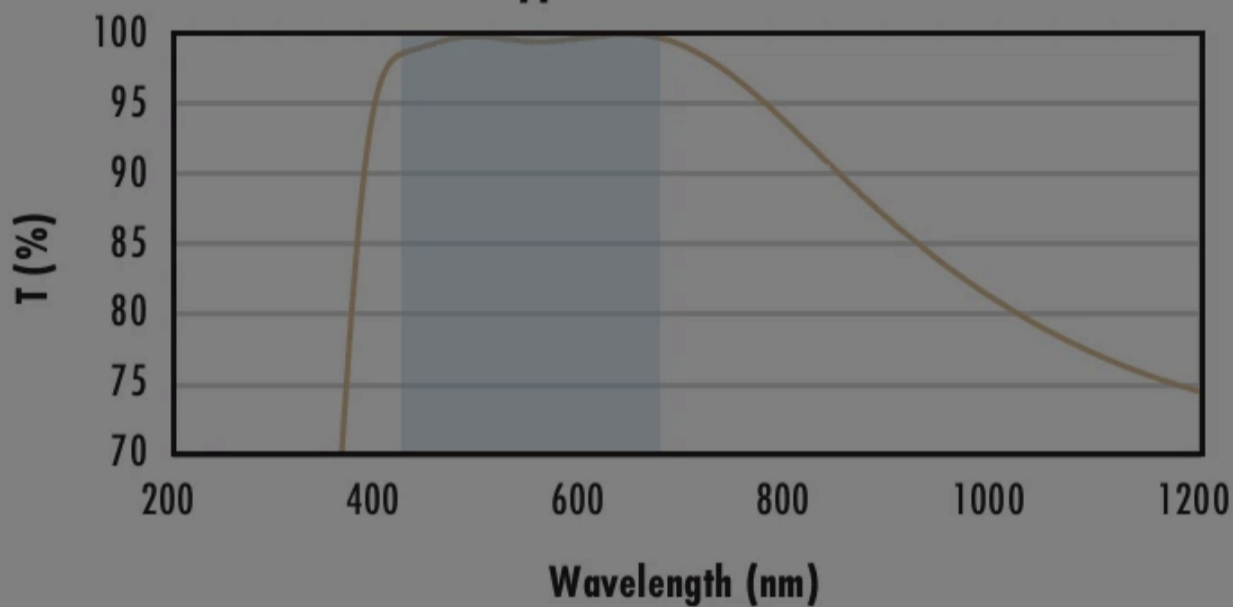
$$R_{avg} \leq 1.25\% @ 400 - 870nm$$

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

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.

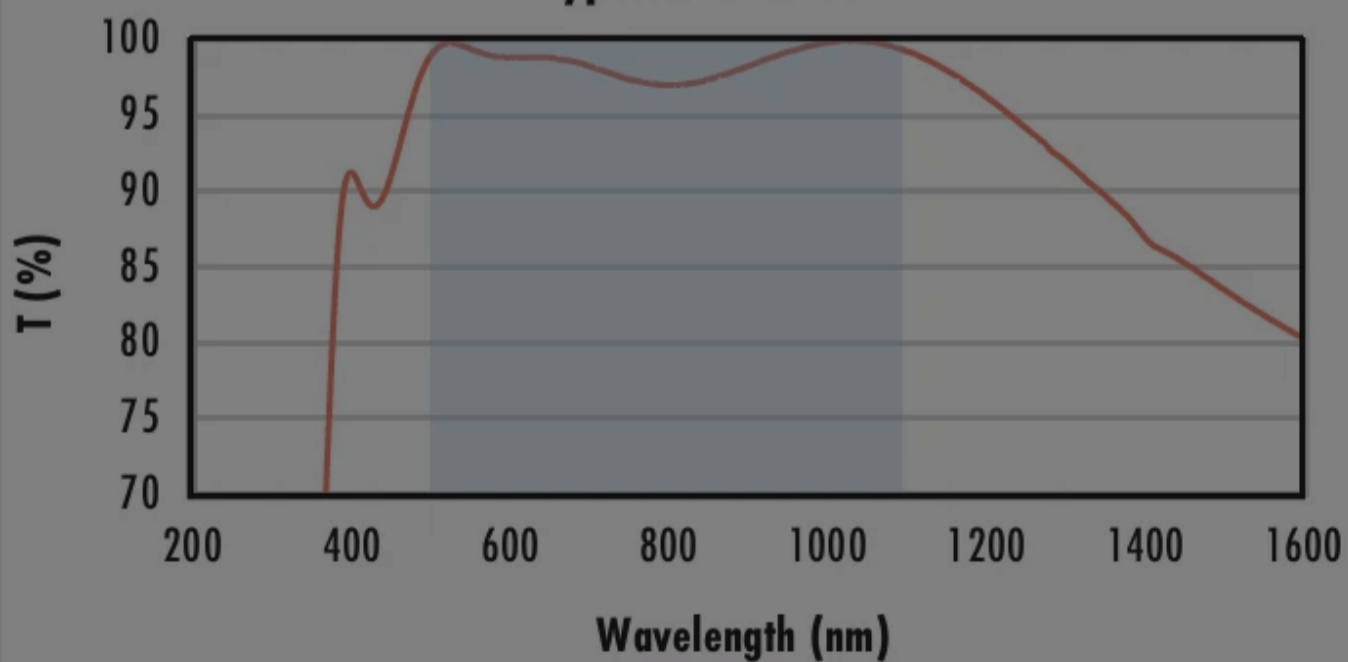
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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:

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

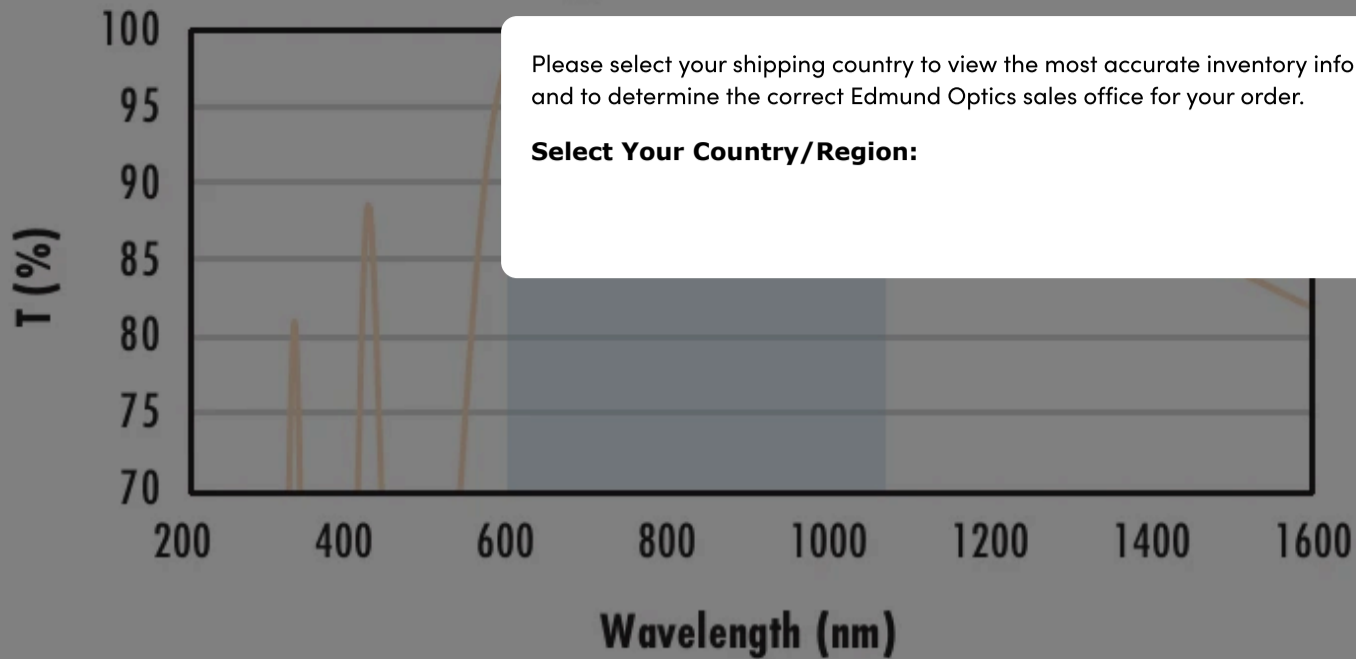
$$R_{abs} \leq 0.25\% @ 1064nm$$

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

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

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N-BK7 with NIR I Coating Typical Transmission



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Typical transmission of a 3mm thick N-BK7 window with I (600 - 1050nm) coating at 0° AOI.

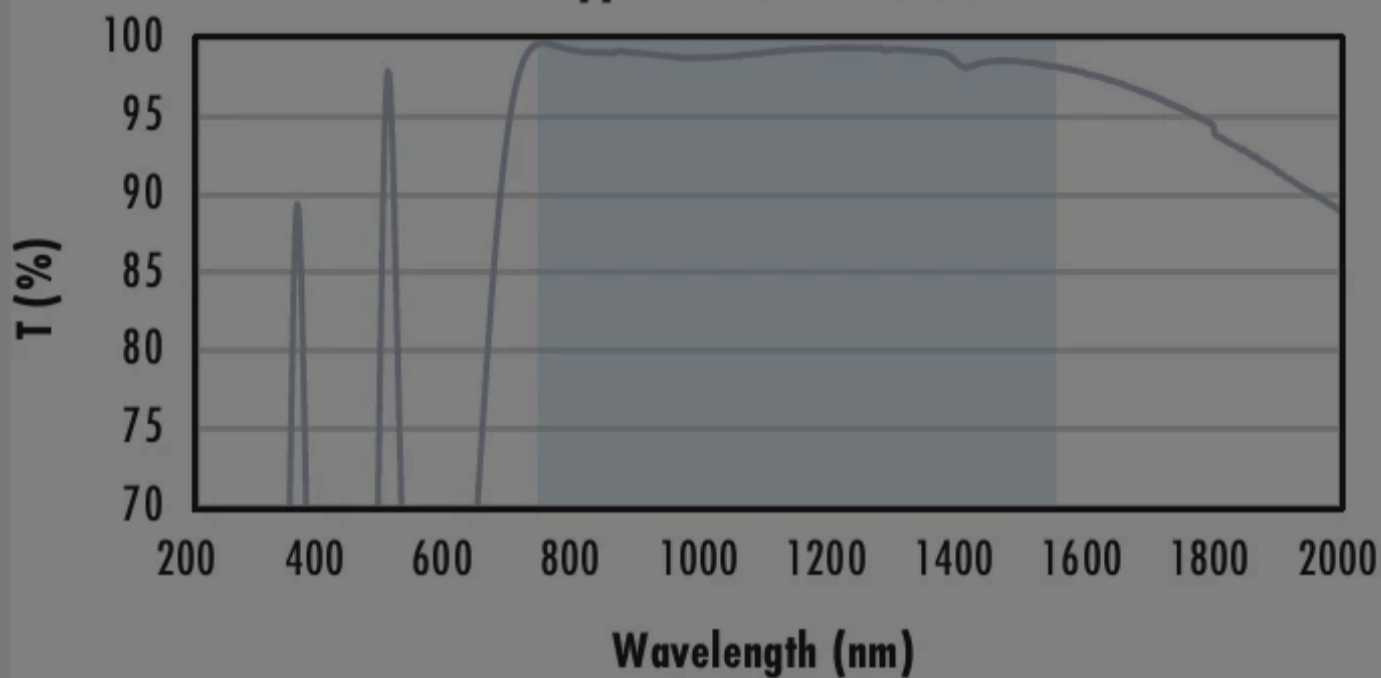
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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:

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

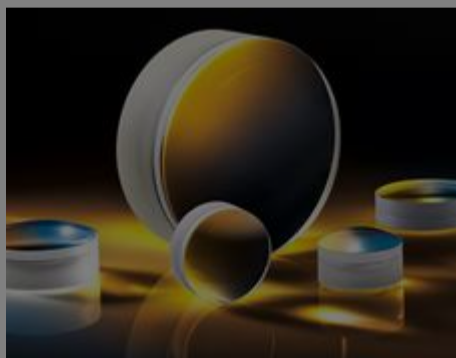
$$R_{abs} \leq 1.0\% @ 800 - 1550nm$$

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

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

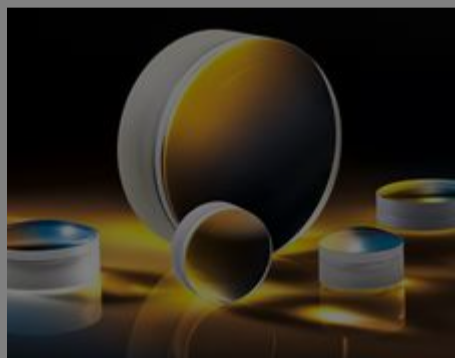
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Frequently Purchased Together



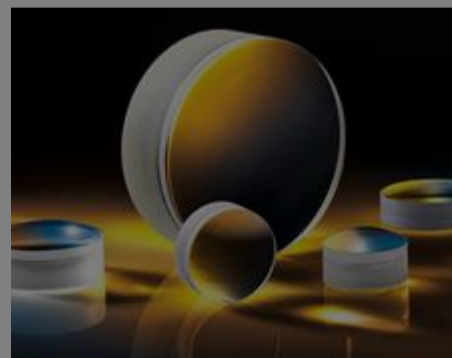
#49-306 - 6.25mm Dia. x 20mm FL, VIS-NIR Coated, Achromatic Lens
€81,00

Qty



#49-307 - 6.25mm Dia. x 25mm FL, VIS-NIR Coated, Achromatic Lens
€81,00

Qty



#49-308 - 6.25mm Dia. x 30mm FL, VIS-NIR Coated, Achromatic Lens
€81,00

Qty



#49-459 - 6mm Dia. x 12mm FL, NIR I Coated, Double-Convex Lens
€45,25

Qty



Compatible Mounts

	Title	Type	Compare	Stock Number	Price	Buy
MORE+	9.0mm Optic Dia., Optic Mount	Fixed		#64-553	€32,75 Request Quote	8 In Stock 1

	Title	Type	Compare	Stock Number	Price	Buy
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MORE+



9mm Inner
Single Optic
Mount

€41,00

5 In Stock

1



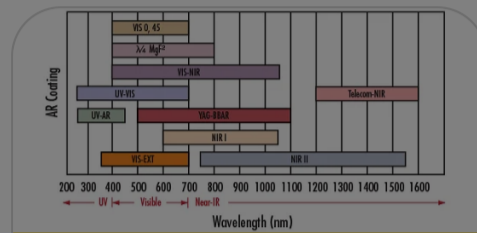
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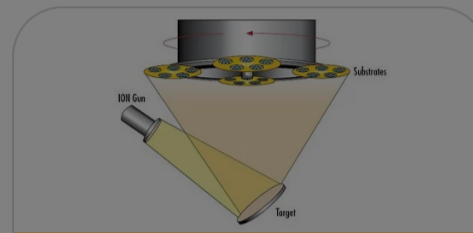
Resources

Media Type

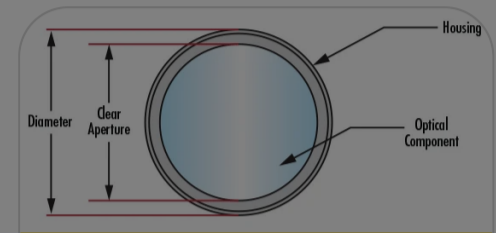
- Application Note
- Glossary
- Technical Tool
- Video
- FAQ
- Trending in Optics



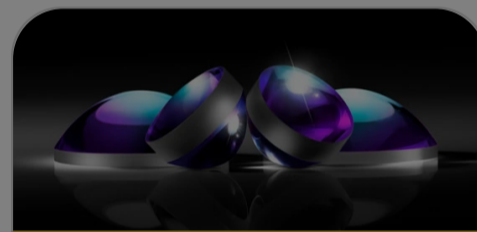
APPLICATION NOTE
Anti-Reflection (AR) Coatings



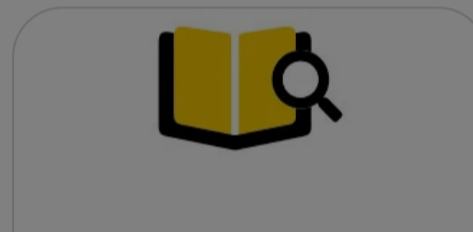
APPLICATION NOTE
An Introduction to Optical Coatings



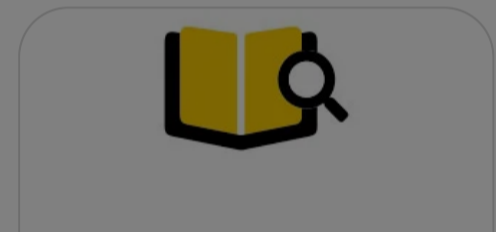
APPLICATION NOTE
Understanding Optical Specifications



APPLICATION NOTE
Lens Geometry Performance Comparison



GLOSSARY
NIR (Near Infrared)



GLOSSARY
VIS/NIR Coating

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