TECHSPEC®

6mm Dia. x 30m... ...vex Lens

Stock **#45-864-INK** **10 In Stock**

- 1 +

€59,00

ADD TO CART

Volume Pricing	
Qty 1-9	**€59,00** each
Qty 10-24	**€53,00** each
Qty 25-99	**€47,25** each
Need More?	**Request Quote**

Prices shown are exclusive of VAT/local taxes

Product Downloads

- STEP:stp
- PDF Drawing:pdf
- ISO 10110 Drawing
- IGES:igs
- Zemax:zar
- Zemax:zmx
- eDrawing:eprt
- Code V:seq
- EO Spec Sheet

General

Type:	Double-Convex Lens

Physical & Mechanical Properties

Diameter (mm):	6.00	**Centering (arcmin):**	<1
Bevel:	Protective as needed	**Center Thickness CT (mm):**	2.30
Center Thickness Tolerance (mm):	±0.05	**Edge Thickness ET (mm):**	2.00
Clear Aperture CA (mm):	5.4		

Optical Properties

Back Focal Length BFL (mm):	29.23	**Effective Focal Length EFL (mm):**	30.00
Coating:	VIS-NIR (400-1000nm)	**Coating Specification:**	R_{abs} ≤0.25% @ 880nm R_{avg} ≤1.25% @ 400 - 870 nm R_{avg} ≤1.25% @ 890 - 1000nm
Substrate: ⓘ	**N-BK7**	**Surface Quality:**	40-20
Radius R_1=-R_2 (mm):	30.61	**f/#:**	5.00
Focal Length Tolerance	±1	**Numerical Aperture NA:**	0.10

(%):		
Wavelength Range (nm):	400 - 1000	

Regulatory Compliance

Certificate of Conformance:	**View**

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:

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

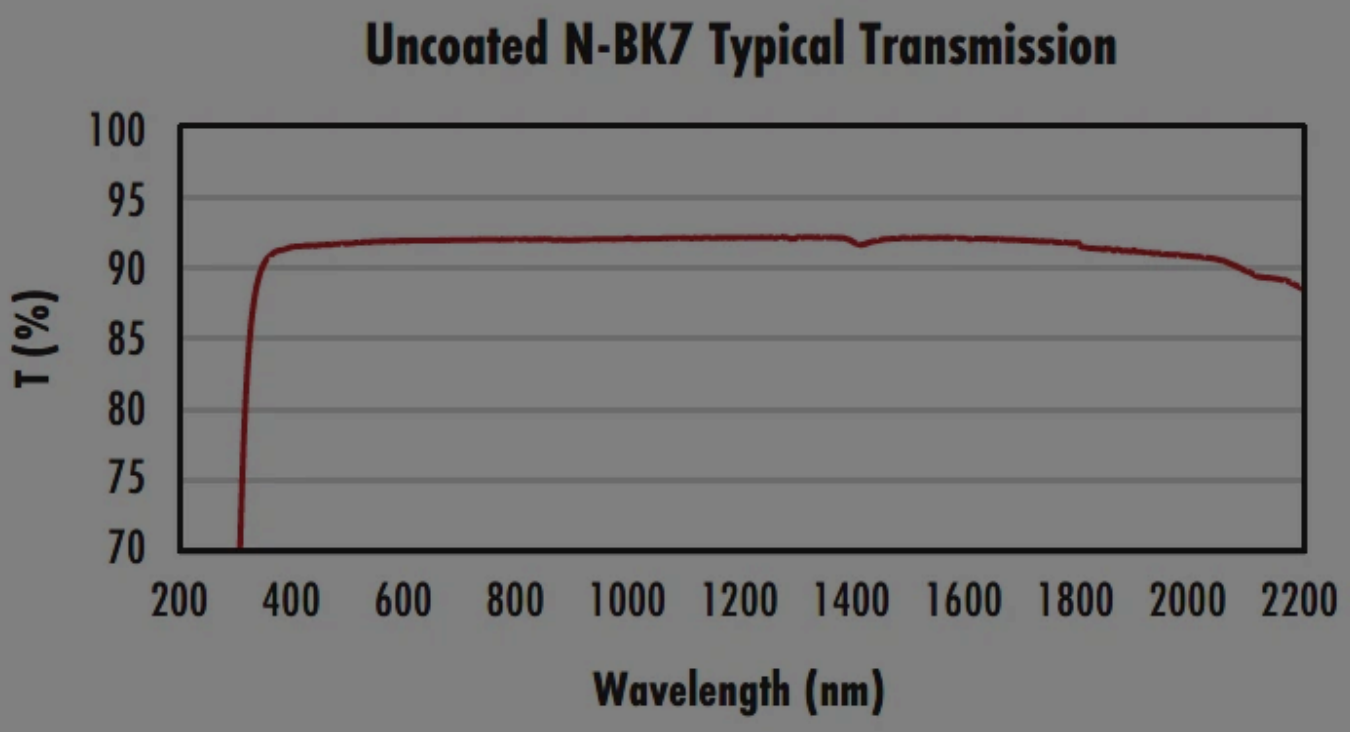
Learn more about our **custom manufacturing capabilities** or submit an inquiry **here.**

Product Details

- AR Coated to Provide <1.25% Reflectance per Surface for 400 - 1000nm
- Minimize Aberrations Including Spherical and Coma
- **UV Fused Silica DCX Lenses** Available
- Other Coating Options Available: **Uncoated**, **MgF_2**, **VIS 0°**, **NIR I**, **NIR II**, **VIS-EXT**, and **YAG-BBAR**

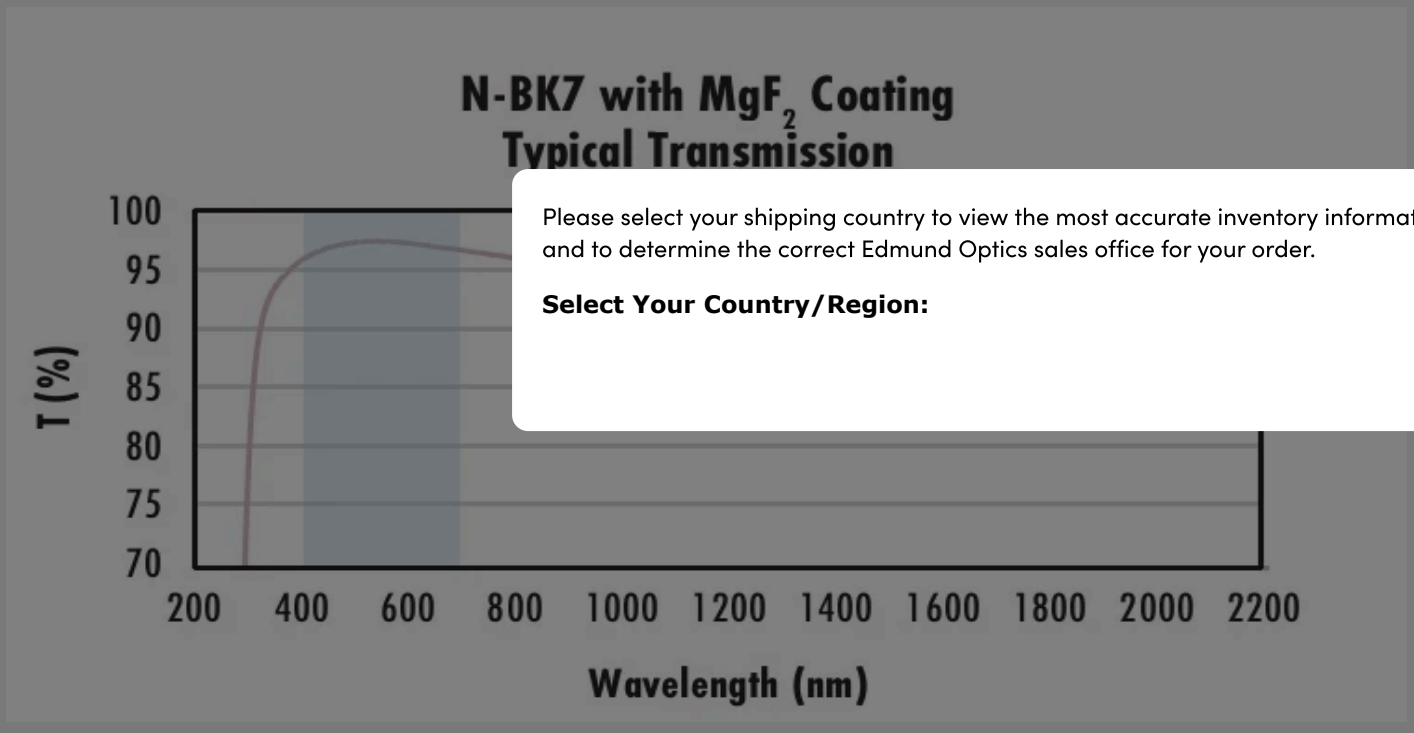
TECHSPEC® VIS-NIR Coated Double-Convex (DCX) Lenses, also referred to as bi-convex lenses, have two positive, symmetrical faces with equal radii on both sides. These lenses are generally recommended for finite imaging applications with a conjugate ratio (ratio between object distance and image distance) 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® VIS-NIR Coated Double-Convex Lenses are available in a variety of substrates and coating options for the visible and NIR spectra.

Technical Information



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

Click Here to Download Data



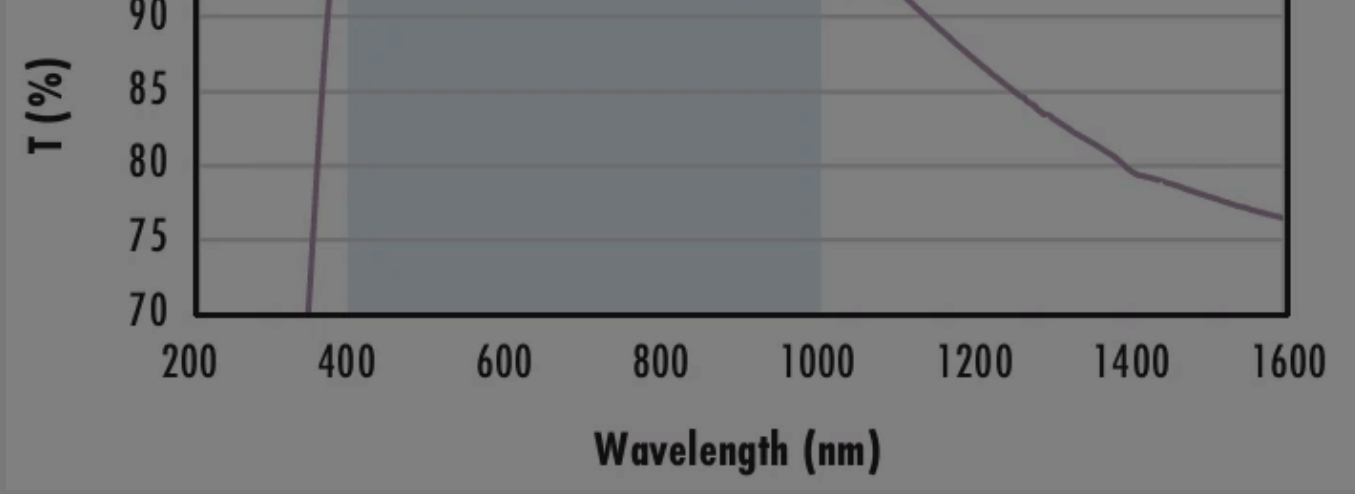
ical transmission of a 3mm thick N-BK7 window w
MgF2 (400-700nm) coating at 0° AOI.

he blue shaded region indicates the coating desig
wavelengh range, with the following specification:

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

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

Click Here to Download Data



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 desig
wavelengh range, with the following specification:

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

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

Click Here to Download Data

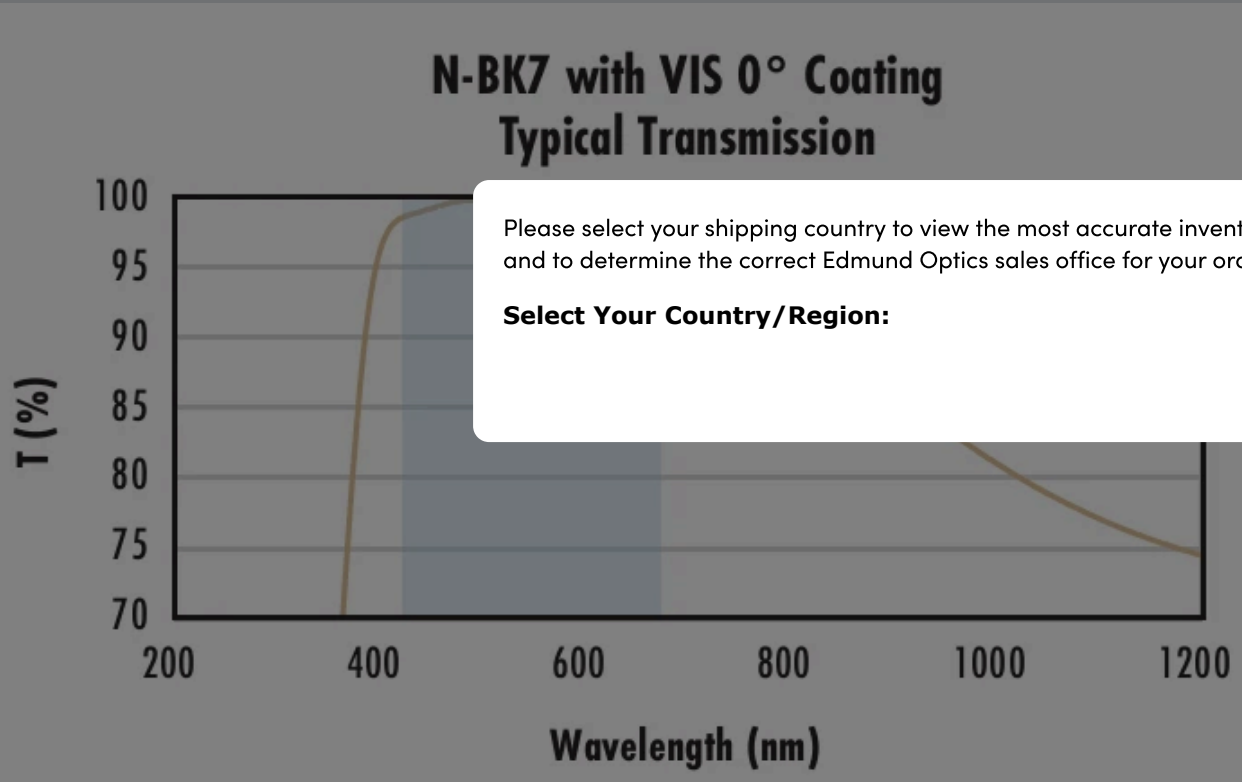
Typical transmission of a 3mm thick N-BK7 window w
VIS-NIR (400-1000nm) coating at 0° AOI.

The blue shaded region indicates the coating desig
wavelengh 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 fo
reference only.

Click Here to Download Data



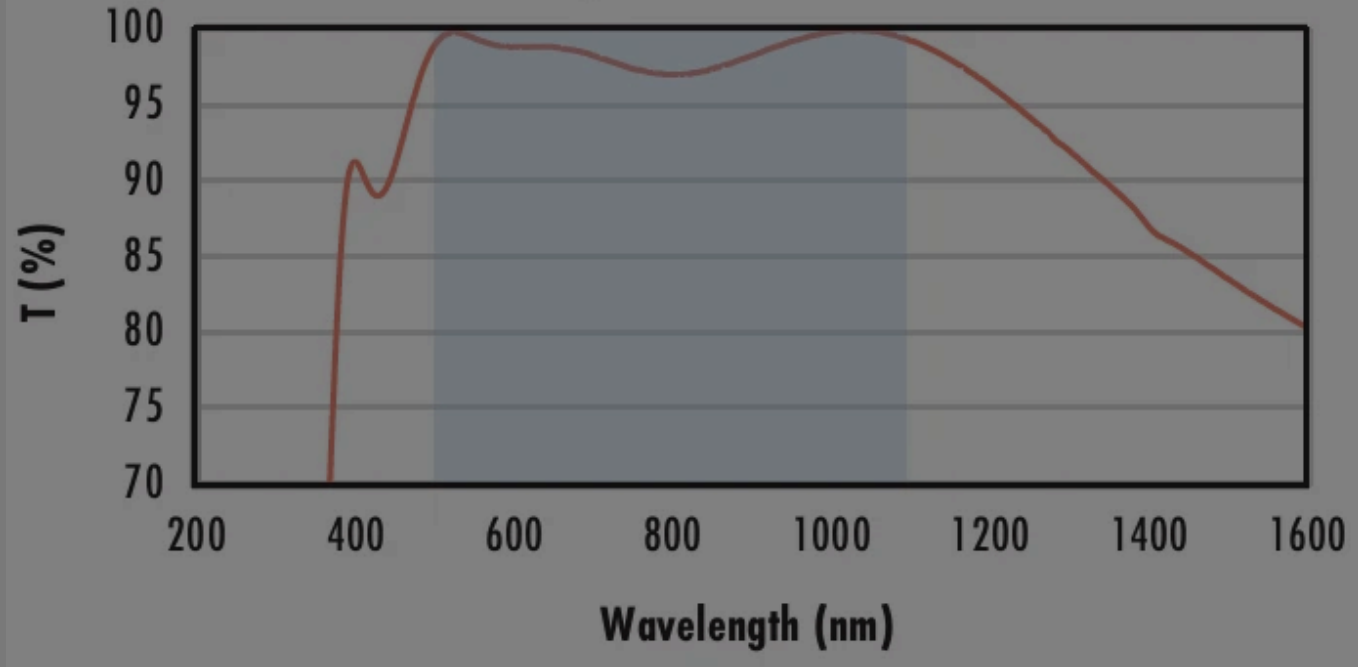
al transmission of a 3mm thick N-BK7 window wit
0° (425-675nm) coating at 0° AOI.

he blue shaded region indicates the coating desig
wavelengh range, with the following specification:

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

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

Click Here to Download Data



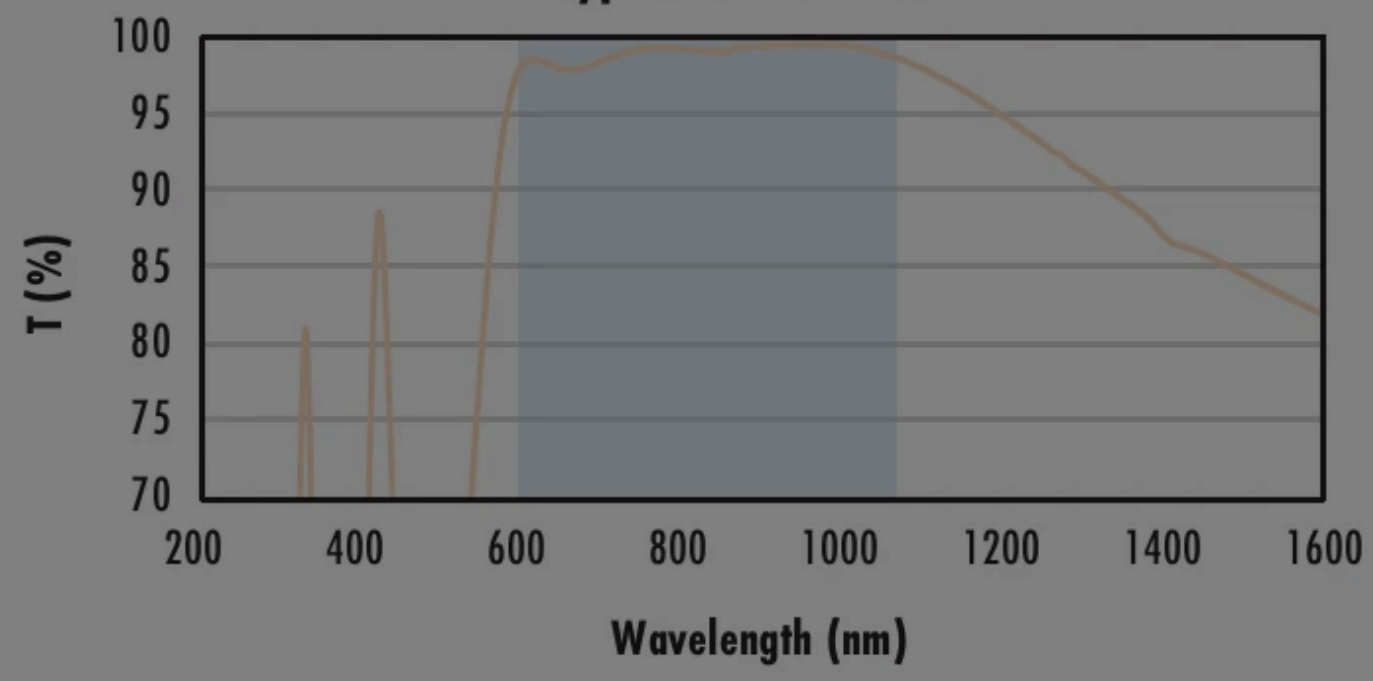
Typical transmission of a 3mm thick N-BK7 window w
YAG-BBAR (500-1100nm) coating at 0° AOI.

The blue shaded region indicates the coating desig
wavelengh 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 fo
reference only.

Click Here to Download Data



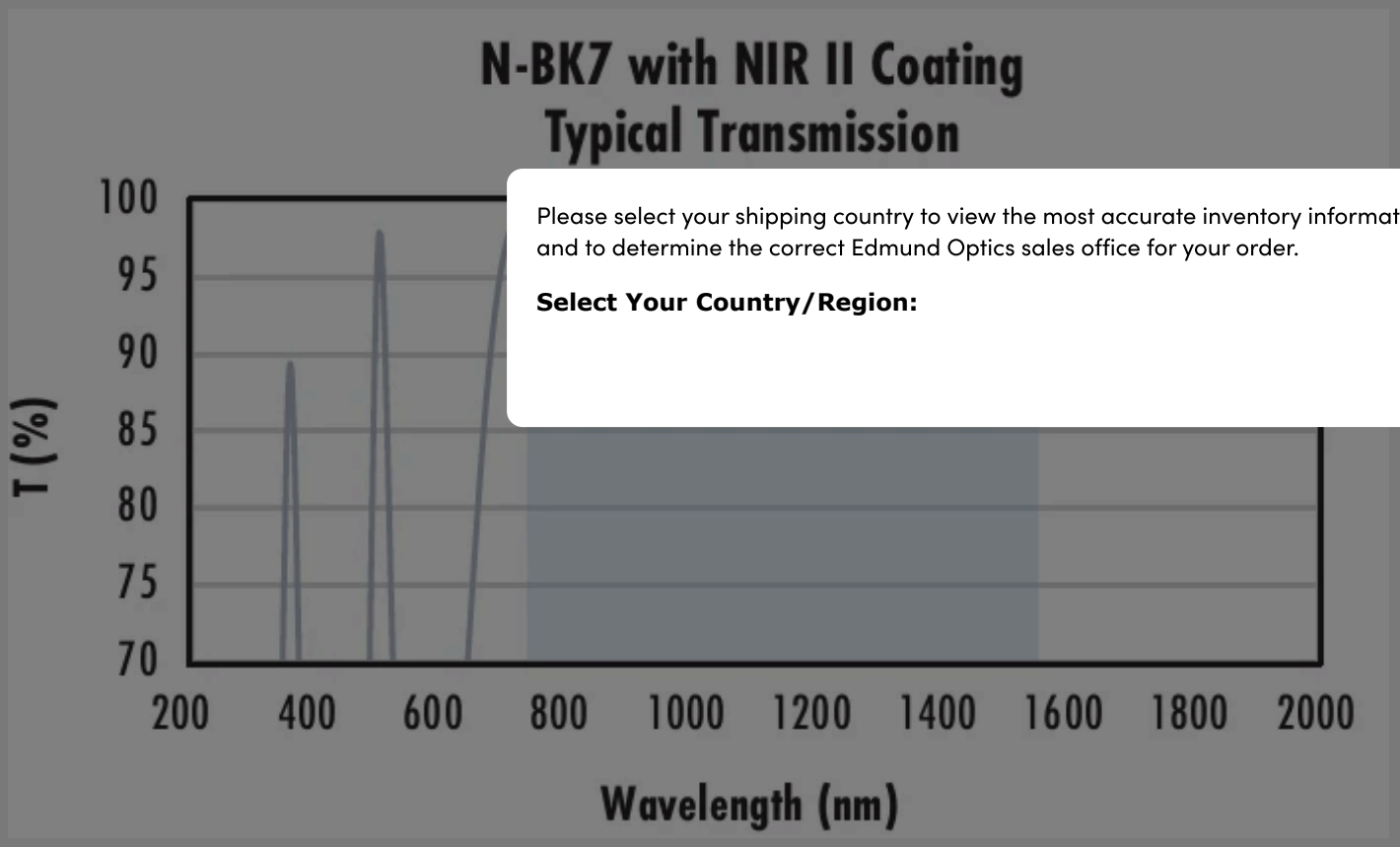
Typical transmission of a 3mm thick N-BK7 window witl
I (600 - 1050nm) coating at 0° AOI.

The blue shaded region indicates the coating desig
wavelengh range, with the following specification:

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

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

Click Here to Download Data



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:

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

he blue shaded region indicates the coating desig
wavelengh range, with the following specification:

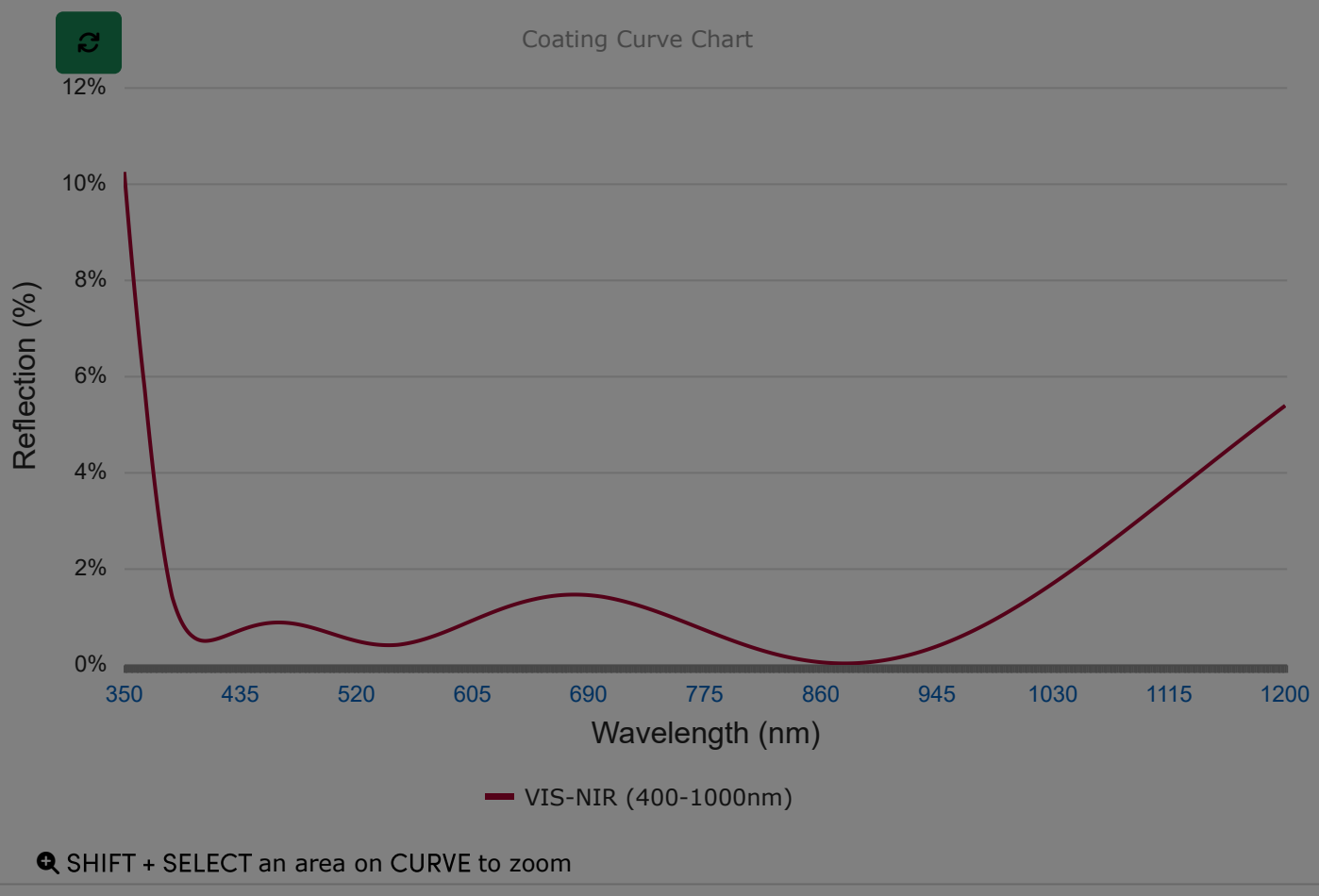
$R_{abs} \leq 1.5\%$ @ 750 - 800nm
$R_{abs} \leq 1.0\%$ @ 800 - 1550nm
$R_{avg} \leq 0.7\%$ @ 750 - 1550nm

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

Click Here to Download Data

Coating Curves

VIS-NIR (400-1000nm)



Please note that coating performance outside each product's specified design range is theoretical and may vary.

Related Products

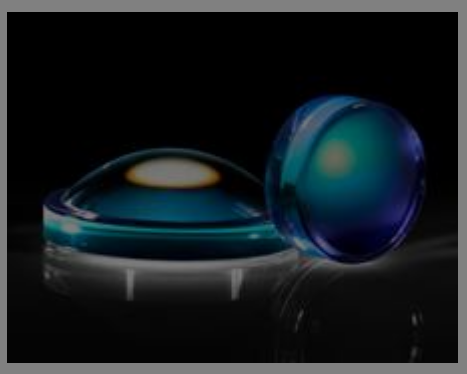
Please select your shipping country to view the most accurate inventory information, and to determine the correct Edmund Optics sales office for your order.

Select Your Country/Region:

€172,00

Qty

Frequently Purchased Together



#83-543 - LightPath 354850 | 6.33mm Dia., 0.13 NA, BBAR (350-700nm), Molded Aspheric Lens
€85,00

Qty

Compatible Mounts

	Title	Type	Compare	Stock Number	Price ☐	Buy
MORE+ 	6.0mm Optic Dia., Optic Mount	Fixed		#64-552	€32,75 Request Quote	2 In Stock 1
MORE+ 	6mm Inner Single Optic Mount	Fixed		#38-745	€41,00 Request Quote	20+ In Stock 1

Check out our full selection of mounts **here**.

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

GLOSSARY

NIR (Near Infrared)

GLOSSARY

VIS/NIR Coating

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:

View More