TECHSPEC®

25mm Dia. x 40... ...nvex Lens

Stock **#89-178-INK** CONTACT US Other Coating Options

- 1 +

€67,50

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Volume Pricing	
Qty 1-9	**€67,50** each
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Product Downloads

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

General

Type:	Double-Convex Lens

Physical & Mechanical Properties

Diameter (mm):	25.00 ±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:	VIS-EXT (350-700nm)	**Coating Specification:**	R_{avg} <0.5% @ 350 - 700nm
Substrate: ⓘ	**N-BK7**	**Surface Quality:**	40-20
Power (P-V) @ 632.8nm:	1.5λ	**Irregularity (P-V) @ 632.8nm:**	λ/4
Radius R_1=-R_2 (mm):	40.42	**f/#:**	1.6

Focal Length Specification Wavelength (nm):	587.6	**Focal Length Tolerance (%):**	±1
Numerical Aperture NA:	0.31		

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Regulatory Compliance

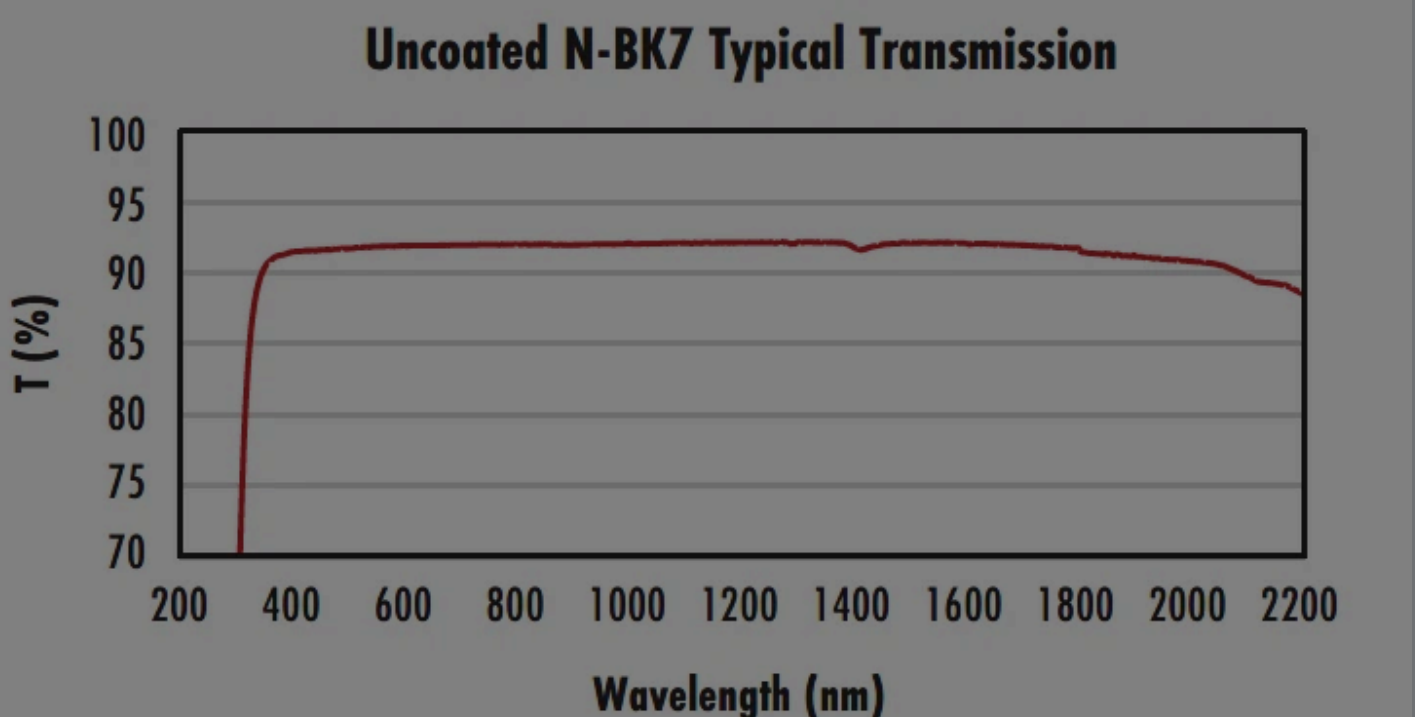
Certificate of Conformance:	**View**

Product Details

- AR Coated to Provide <0.5% Reflectance per Surface for 350 - 700nm
- 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-NIR**, and **YAG-BBAR**

TECHSPEC® VIS-EXT 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-EXT 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.

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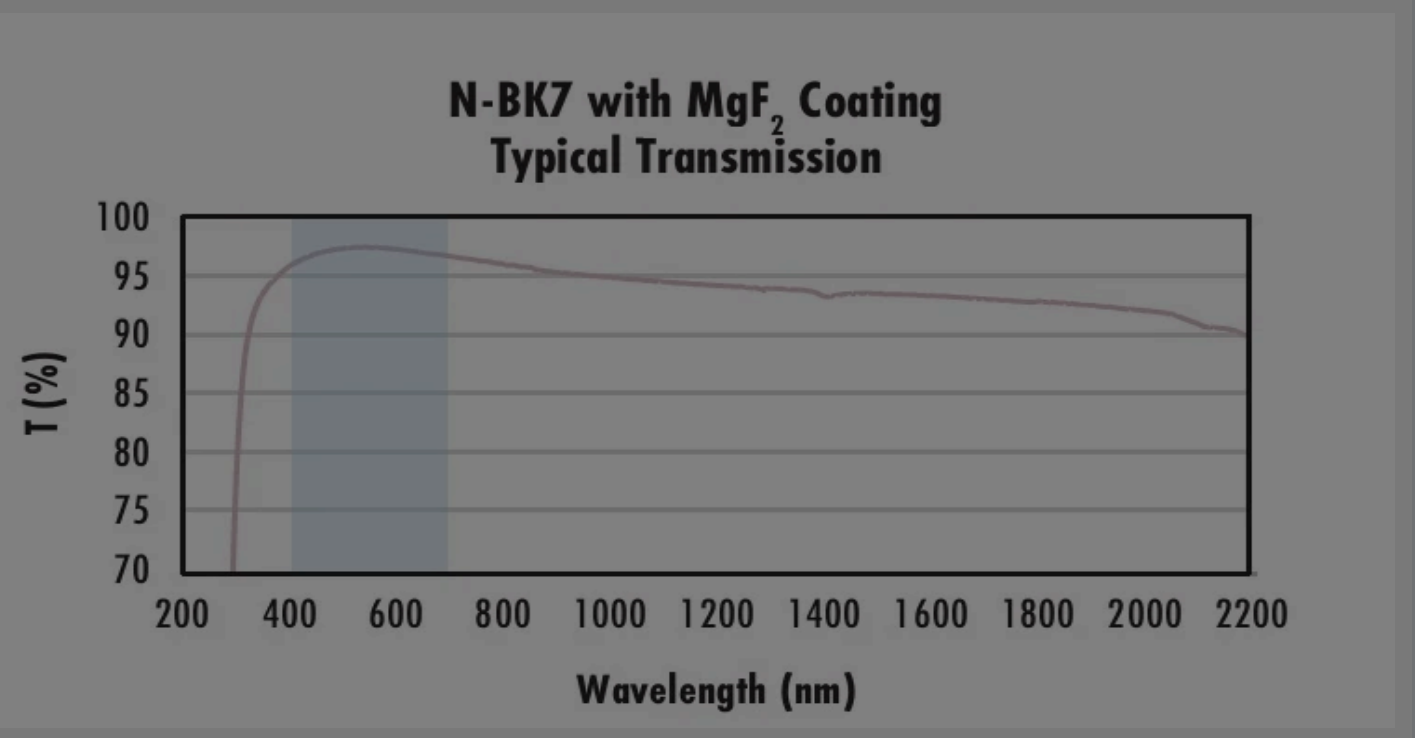

Typical transmission of a 3mm thick N-BK7 window w MgF2 (400-700nm) coating at 0° AOI.

The 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.

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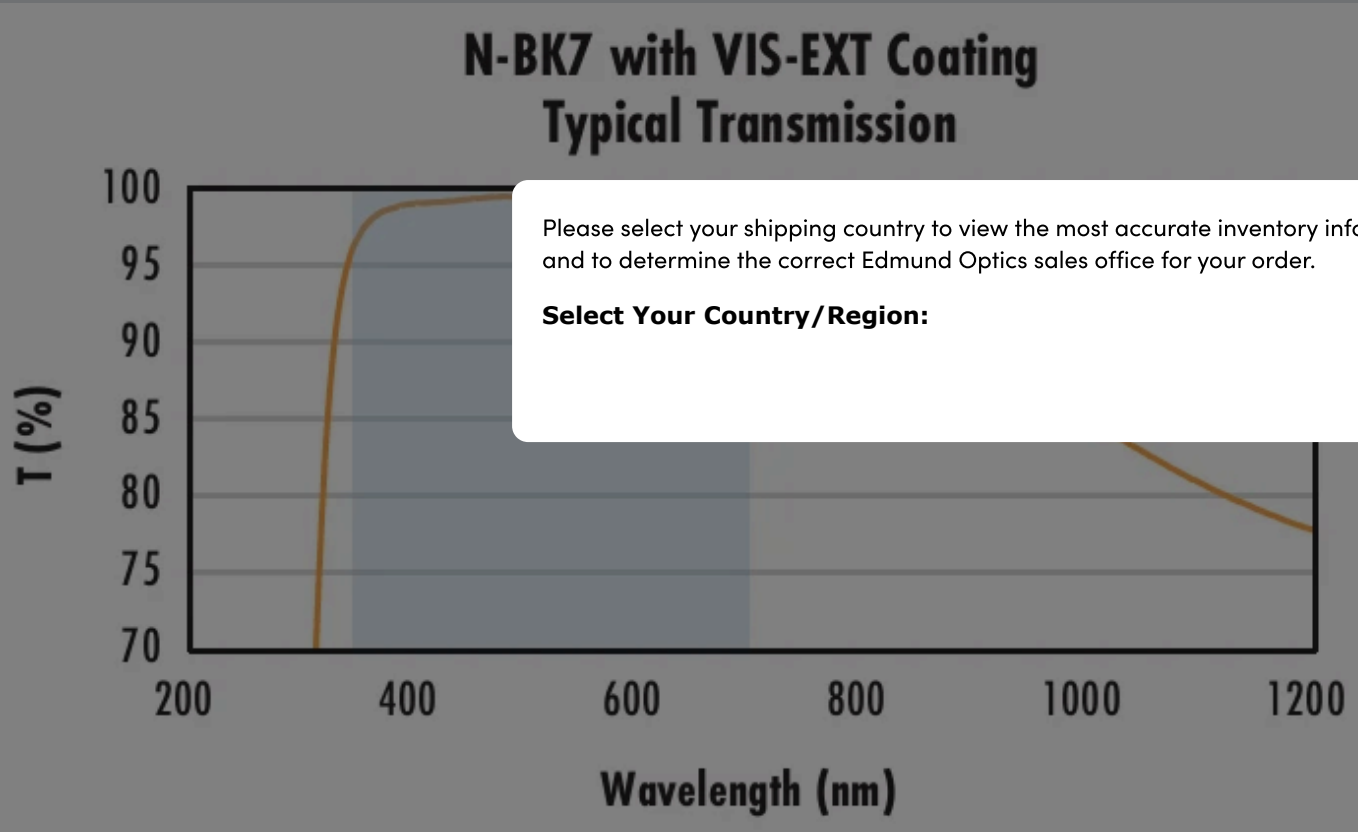

ɔical transmission of a 3mm thick N-BK7 window w
VIS-EXT (350-700nm) coating at 0° AOI.

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

R_{avg} ≤ 0.5% @ 350 - 700nm

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

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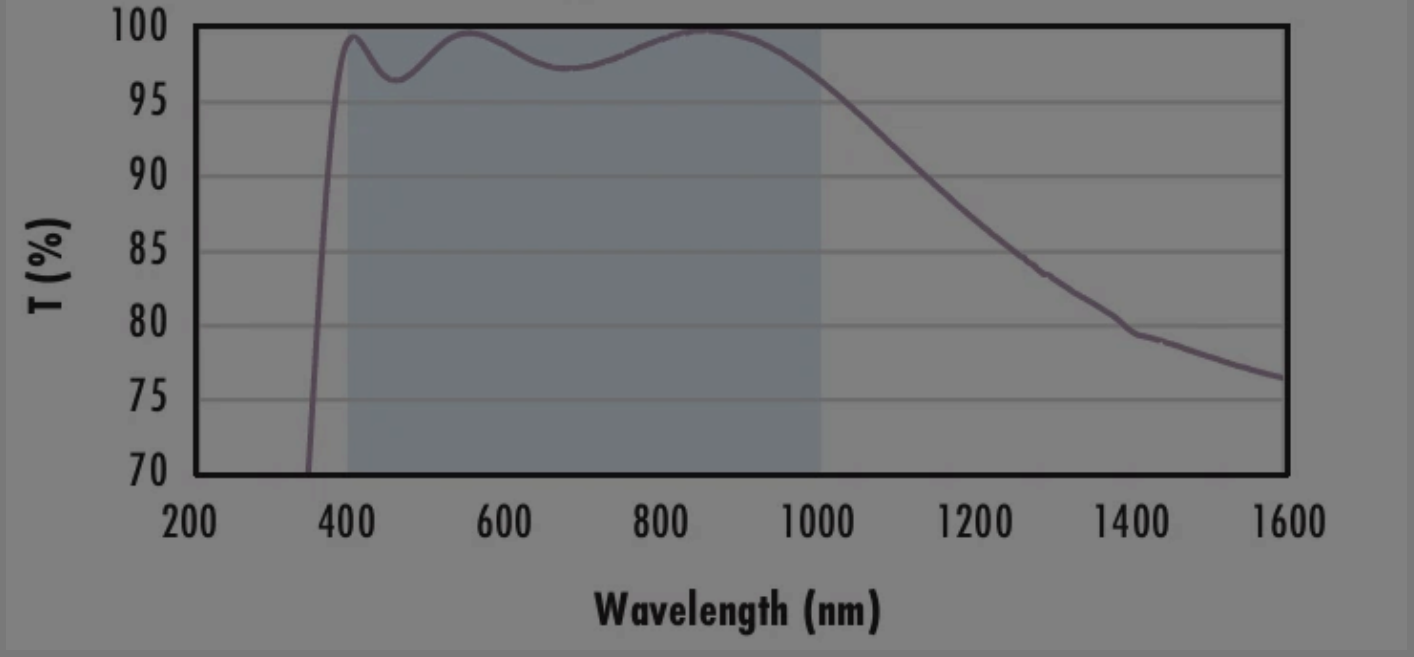

Typical transmission of a 3mm thick N-BK7 window w
VIS-NIR (400-1000nm) coating at 0° AOI.

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

R_{abs} ≤ 0.25% @ 880nm
R_{avg} ≤ 1.25% @ 400 - 870nm
R_{avg} ≤ 1.25% @ 890 - 1000nm

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reference only.

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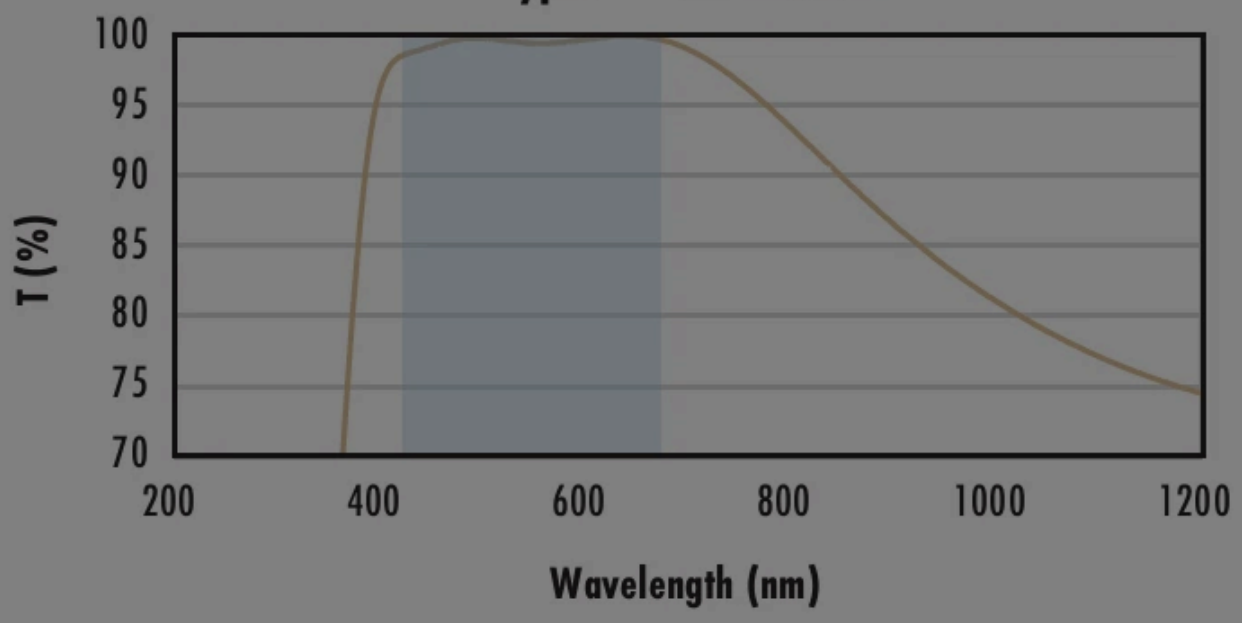

Typical transmission of a 3mm thick N-BK7 window wit
0° (425-675nm) coating at 0° AOI.

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

R_{avg} ≤ 0.4% @ 425 - 675nm

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

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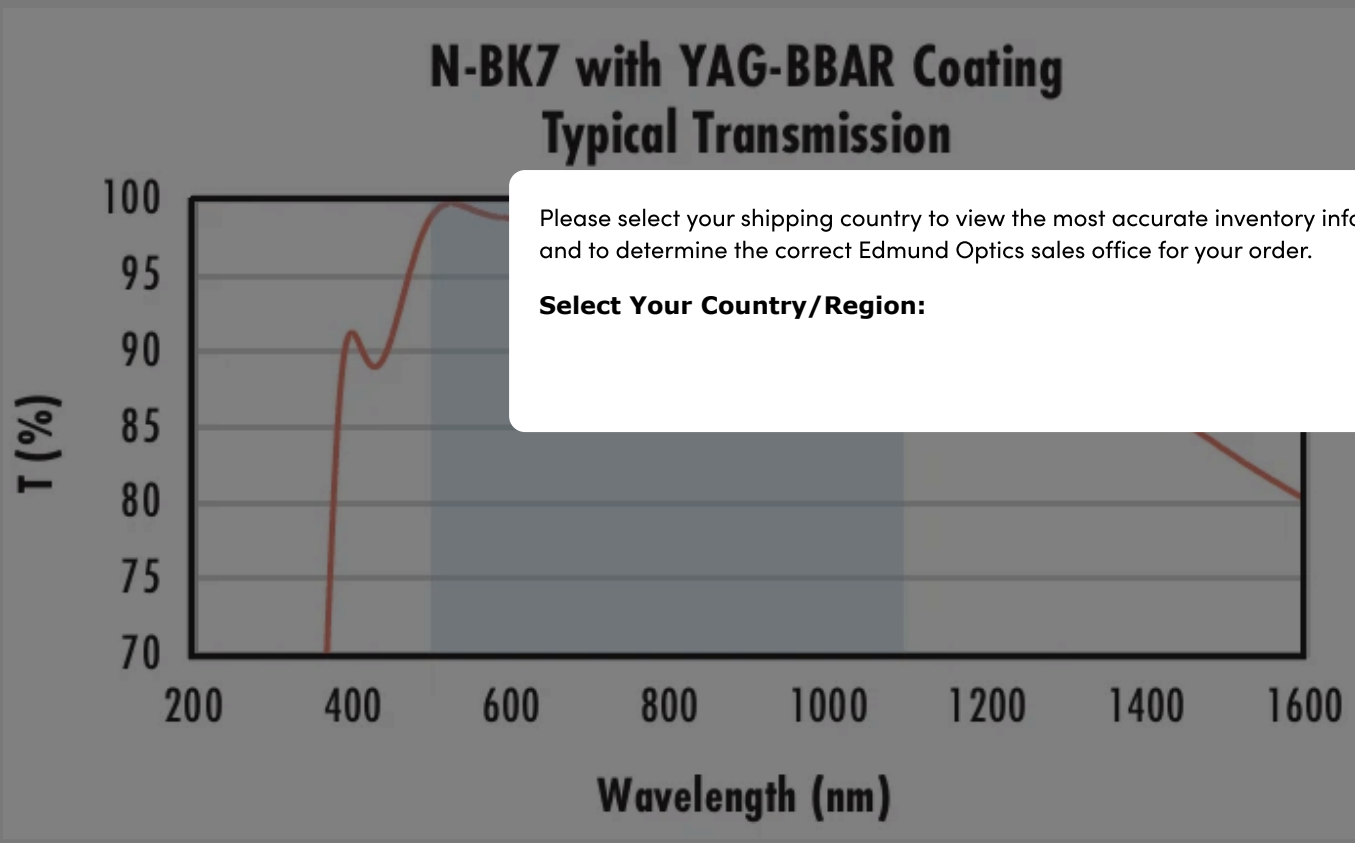

ical transmission of a 3mm thick N-BK7 window w
YAG-BBAR (500-1100nm) coating at 0° AOI.

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

R_{abs} ≤ 0.25% @ 532nm
R_{abs} ≤ 0.25% @ 1064nm
R_{avg} ≤ 1.0% @ 500 - 1100nm

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

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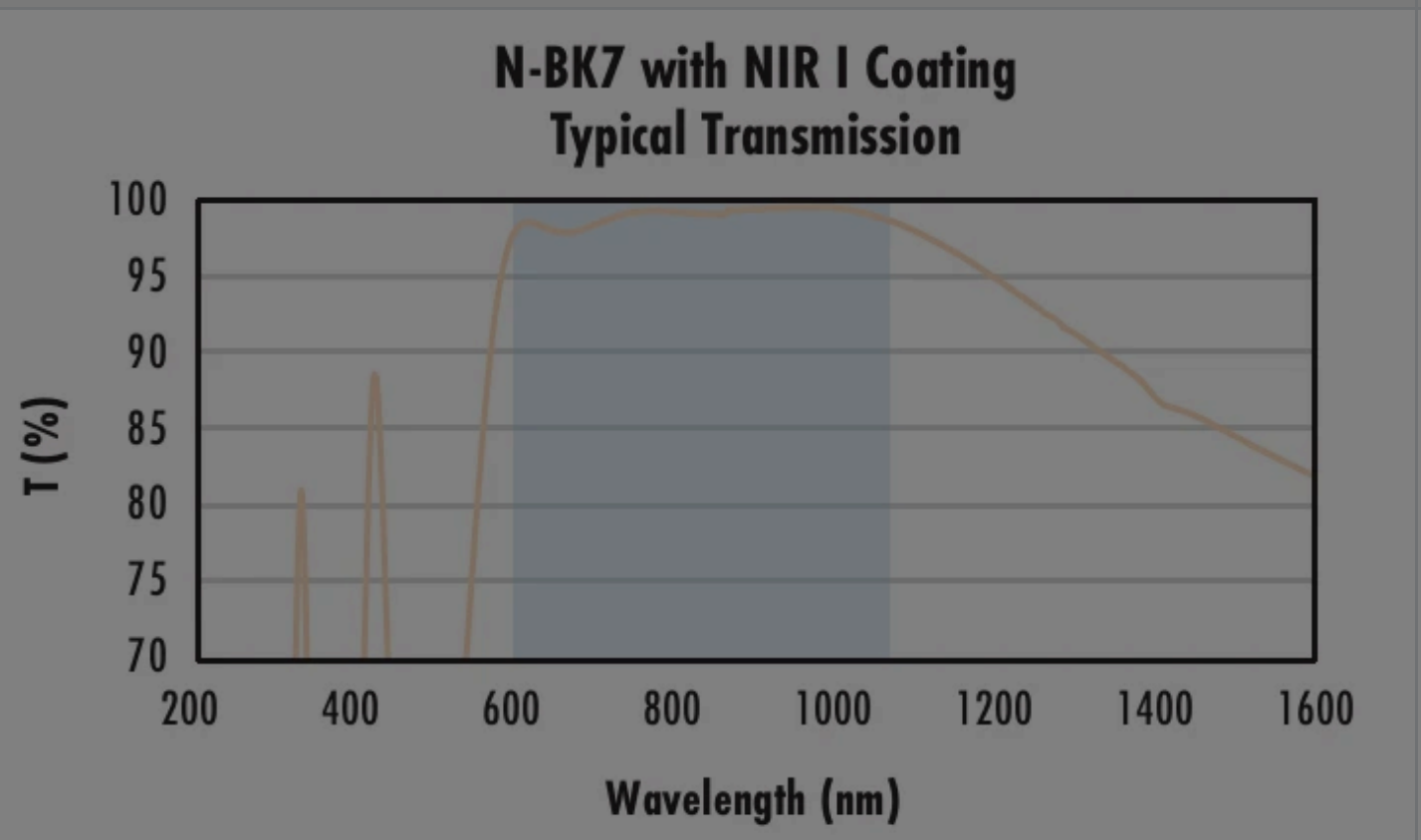

Typical transmission of a 3mm thick N-BK7 window witl
I (600 - 1050nm) coating at 0° AOI.

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

R_{avg} ≤ 0.5% @ 600 - 1050nm

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

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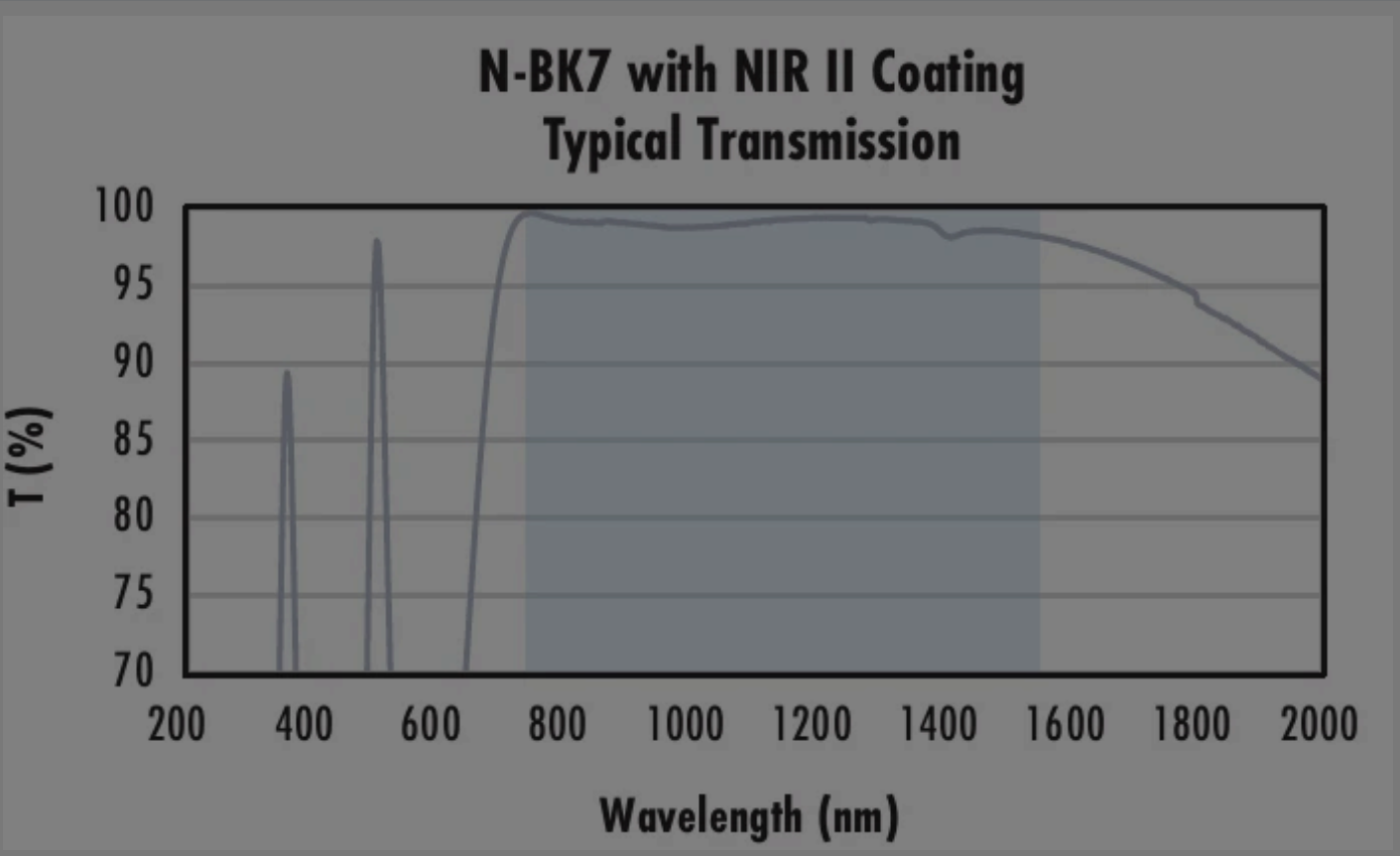

Typical transmission of a 3mm thick N-BK7 window witl
II (750 - 1550nm) coating at 0° AOI.

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

R_{abs} ≤ 1.5% @ 750 - 800nm
R_{abs} ≤ 1.0% @ 800 - 1550nm
R_{avg} ≤ 0.7% @ 750 - 1550nm

Data outside this range is not guaranteed and is fo
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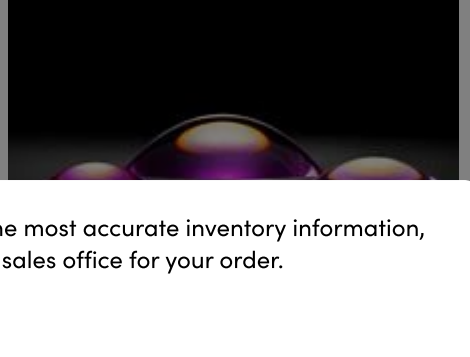
UV Fused Silica Double-Convex (DCX) Lenses



Double-Convex (DCX) Lenses

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Frequently Purchased Together

#45-888-INK - 25mm Dia. x 35mm FL, VIS-NIR, Inked, Double-Convex Lens
€67,50

Qty

#45-889-INK - 25mm Dia. x 40mm FL, VIS-NIR, Inked, Double-Convex Lens
€67,50

Qty

#63-651-INK - 25mm Dia. x 30mm FL, NIR I Inked, Double-Convex Lens
€61,00

Qty

#88-722-INK - 25.0mm Dia. x 35.0mm FL, VIS-EXT, Inked, Plano-Convex Lens
€67,00

Qty

Compatible Mounts

	Title	Type	Compare	Stock Number	Price ☐	Buy
MORE+ 	25.0mm Optic Dia., Optic Mount	Fixed		#64-560	€32,75 Request Quote	CONTACT US 1
MORE+ 	25.0/25.4mm Optic Dia., X-Y Translating Optic Mount	Adjustable - Linear (XY)		#62-956	€276,00 Request Quote	CONTACT US 1
MORE+ 	25.0/25.4mm Optic Dia., X-Y-Z Translating Optic Mount	Adjustable - Linear (XYZ)		#62-959	€540,00 Request Quote	6 In Stock 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 1

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

Resources

Media Type

- ☐ Application Note
- ☐ Technical Tool

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Anti-Reflection (AR) Coatings

APPLICATION NOTE
An Introduction to Optical Coatings

APPLICATION NOTE
Understanding Optical Specifications

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Future of Spherical Lenses

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