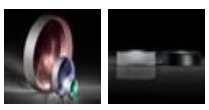
TECHSPEC®

25mm Diameter x -50 FL, VIS-NIR, Inked, Plano-Concave Lens

TECHSPEC VIS-NIR Coated Plano-Concave (PCV) Lenses



Stock #45-923-INK CONTACT US Other Coating Options

- 1 +

C$93.80

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Volume Pricing	
Qty 1-9	C$93.80 each
Qty 10-25	C$84.70 each
Qty 26-49	C$74.90 each
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General

Type:	Plano-Concave Lens		

Physical & Mechanical Properties

Diameter (mm):	25.00 ±0.025	**Bevel:**	Protective as needed
Center Thickness CT (mm):	3.50	**Center Thickness Tolerance (mm):**	±0.10
Centering (arcmin):	<1	**Clear Aperture CA (mm):**	24.00
Edge Thickness ET (mm):	6.33		

Optical Properties

Effective Focal Length EFL (mm):	-50.00	**Substrate:** ⓘ	N-BK7
f/#:	2.00	**Numerical Aperture NA:**	0.25
Coating:	VIS-NIR (400-1000nm)	**Wavelength Range (nm):**	400 - 1000
Back Focal Length BFL (mm):	-52.31	**Coating Specification:**	R_{abs} ≤0.25% @ 880nm R_{avg} ≤1.25% @ 400 - 870nm R_{avg} ≤1.25% @ 890 - 1000nm

Focal Length Specification Wavelength (nm):	587.6	**Focal Length Tolerance (%):**	±1
Radius R_1 (mm):	-25.84	**Surface Quality:**	40-20
Damage Threshold, By Design: ⓘ	5 J/cm^2 @ 532nm, 10ns	**Power (P-V) @ 632.8nm:**	1.5λ
Irregularity (P-V) @ 632.8nm:	λ/4		

Regulatory Compliance

Certificate of Conformance:	**View**

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

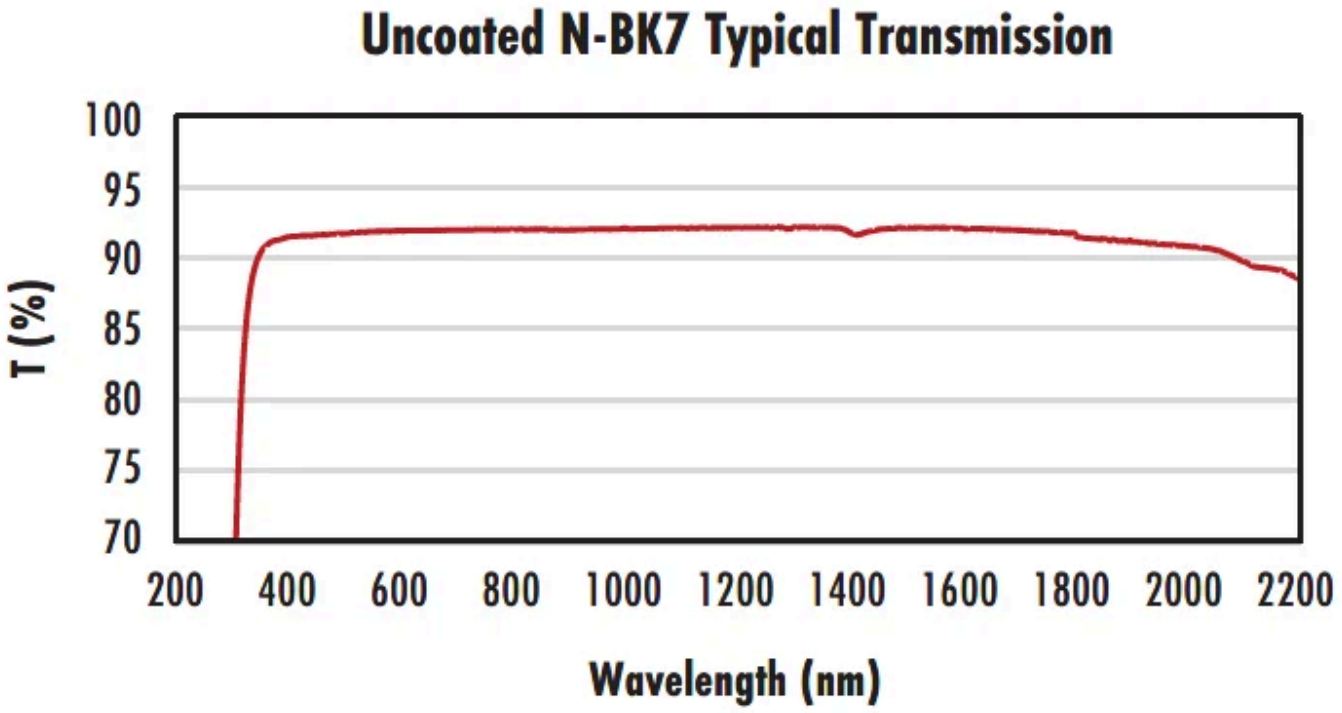
Learn more about our **custom manufacturing capabilities** or submit an inquiry **here.**

Product Details

- AR Coated to Provide <1.25% Reflectance per Surface for 400 - 1000nm
- <0.25% Reflectance @ 880nm
- Designed for 0° Angle of Incidence
- Various Coating Options: **Uncoated**, **VIS-EXT**, **MgF_2**, **VIS 0°**, **YAG-BBAR**, **NIR I**, and **NIR II**

TECHSPEC® VIS-NIR Coated Plano-Concave (PCV) Lenses are designed to bend parallel input rays to diverge from one another on the output side of the lens causing this lens to have a negative focal length. These lenses can be used for balancing aberrations created by other lenses within a system due to their negative spherical aberration. Plano-Concave (PCV) lenses are commonly used in a variety of applications including image reduction, beam expansion and telescopes. TECHSPEC® VIS-NIR Coated Plano-Concave (PCV) Lenses are optimized for transmission (>99%) in the near-infrared. These lenses are also available **Uncoated**, **VIS-EXT**, **MgF_2**, **VIS 0°**, **YAG-BBAR**, **NIR I**, or with **NIR II** AR coating options.

Technical Information



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

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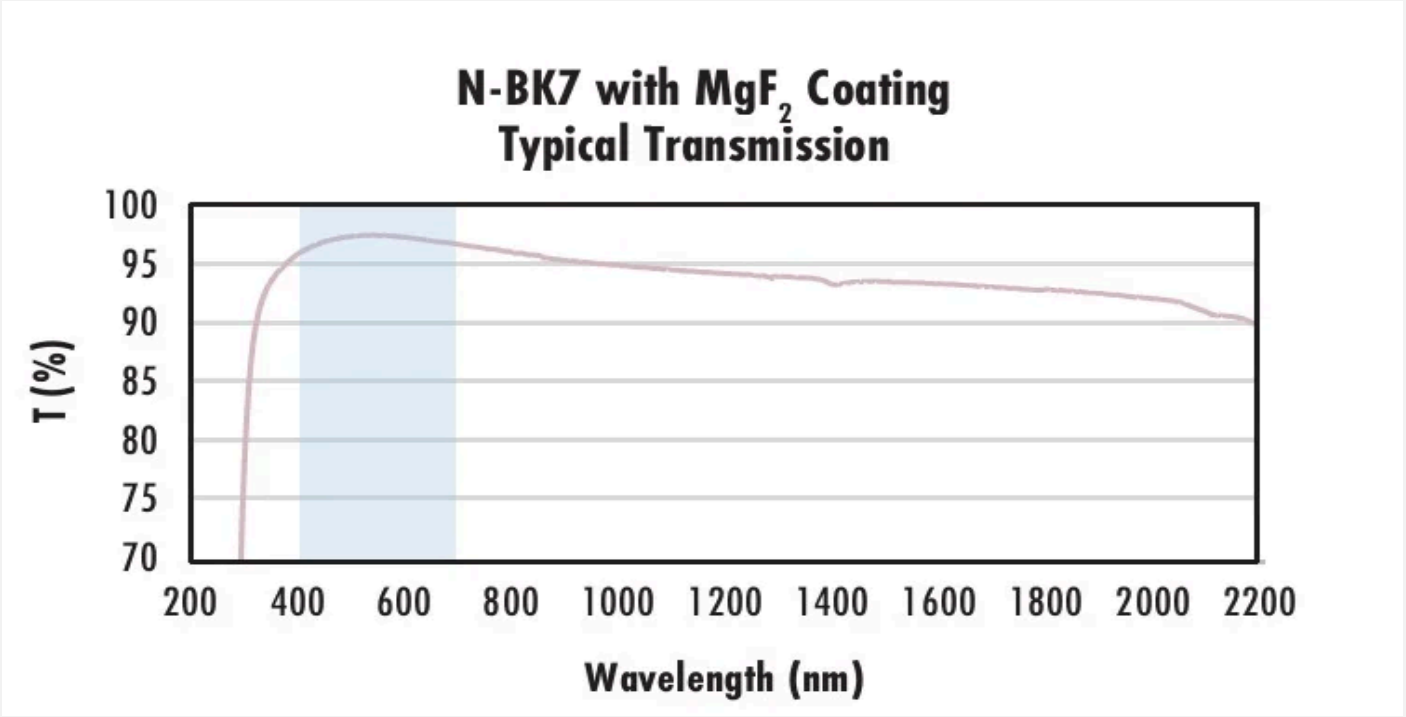

Typical transmission of a 3mm thick N-BK7 window w MgF2 (400-700nm) coating at 0° AOI.

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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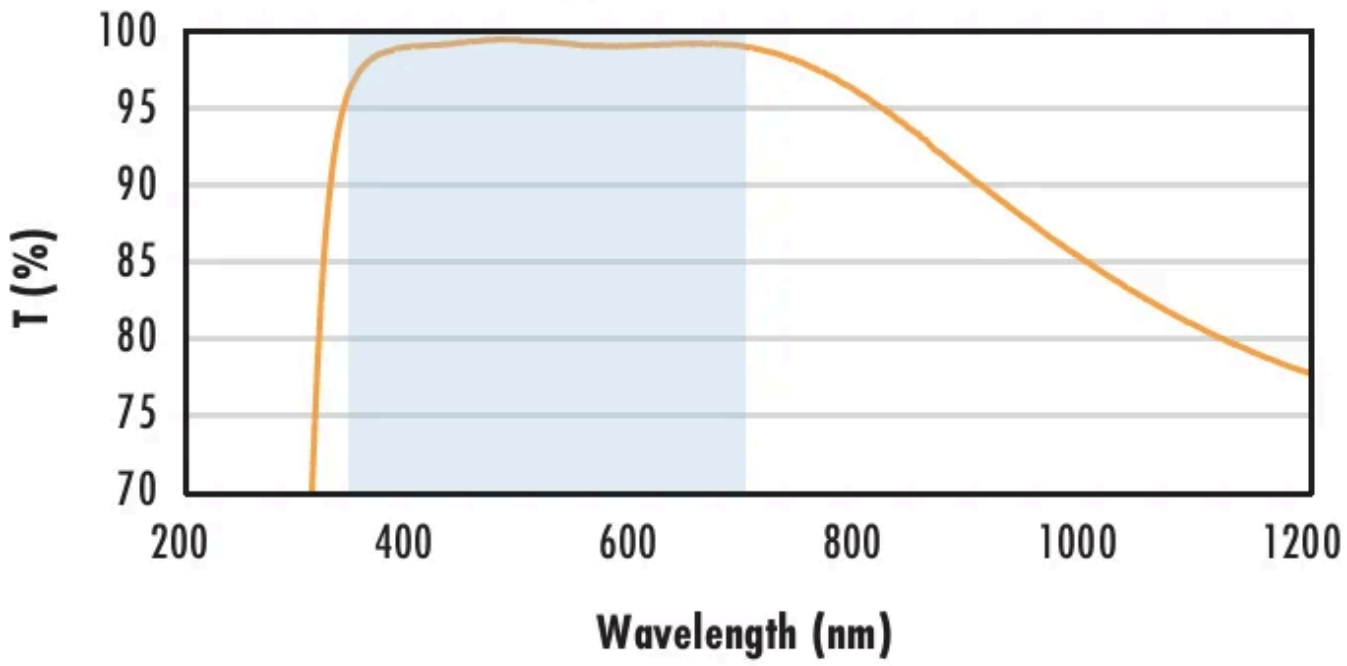

Typical transmission of a 3mm thick N-BK7 window w VIS-EXT (350-700nm) coating at 0° AOI.

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.

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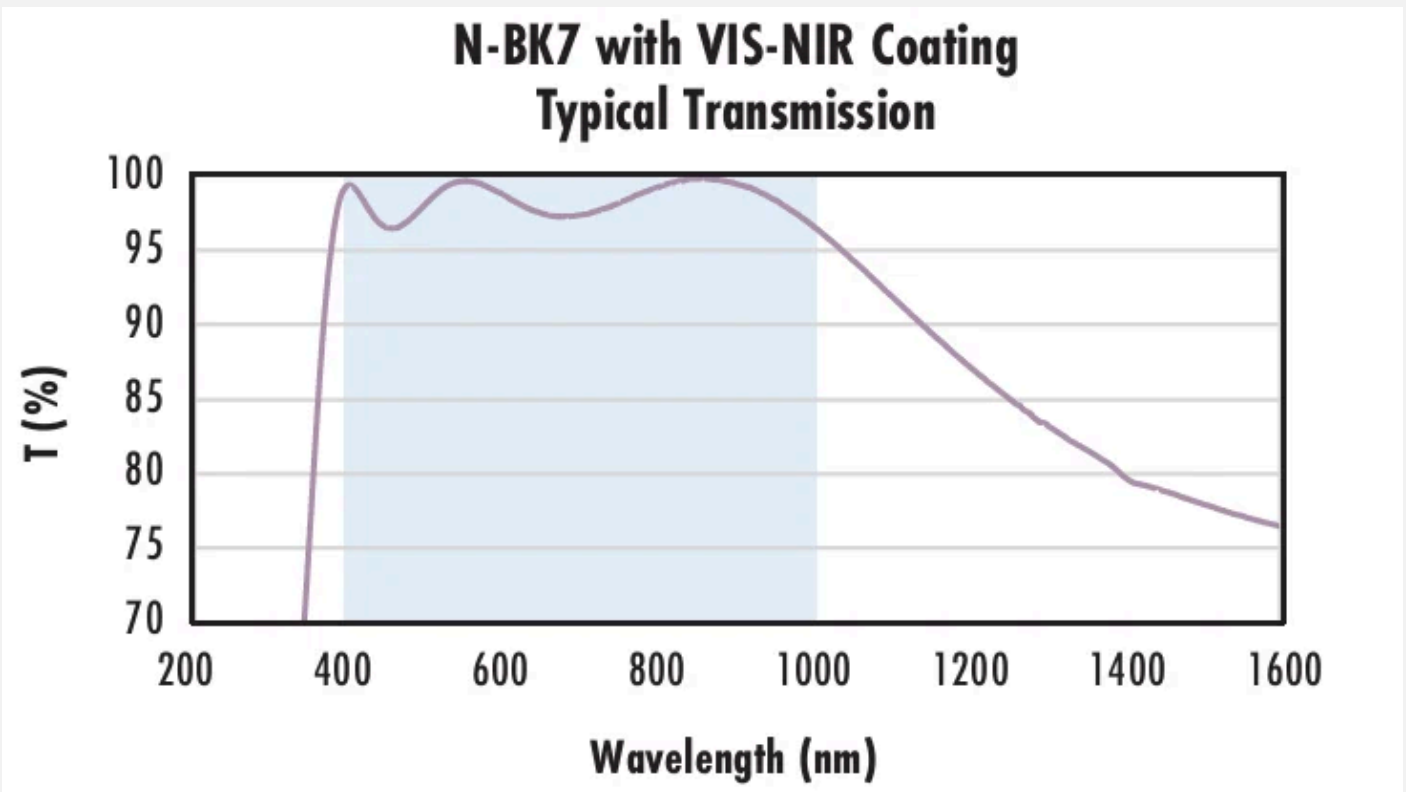

Typical transmission of a 3mm thick N-BK7 window w VIS-NIR (400-1000nm) coating at 0° AOI.

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

$R_{abs} \leq 0.25\%$ @ 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.

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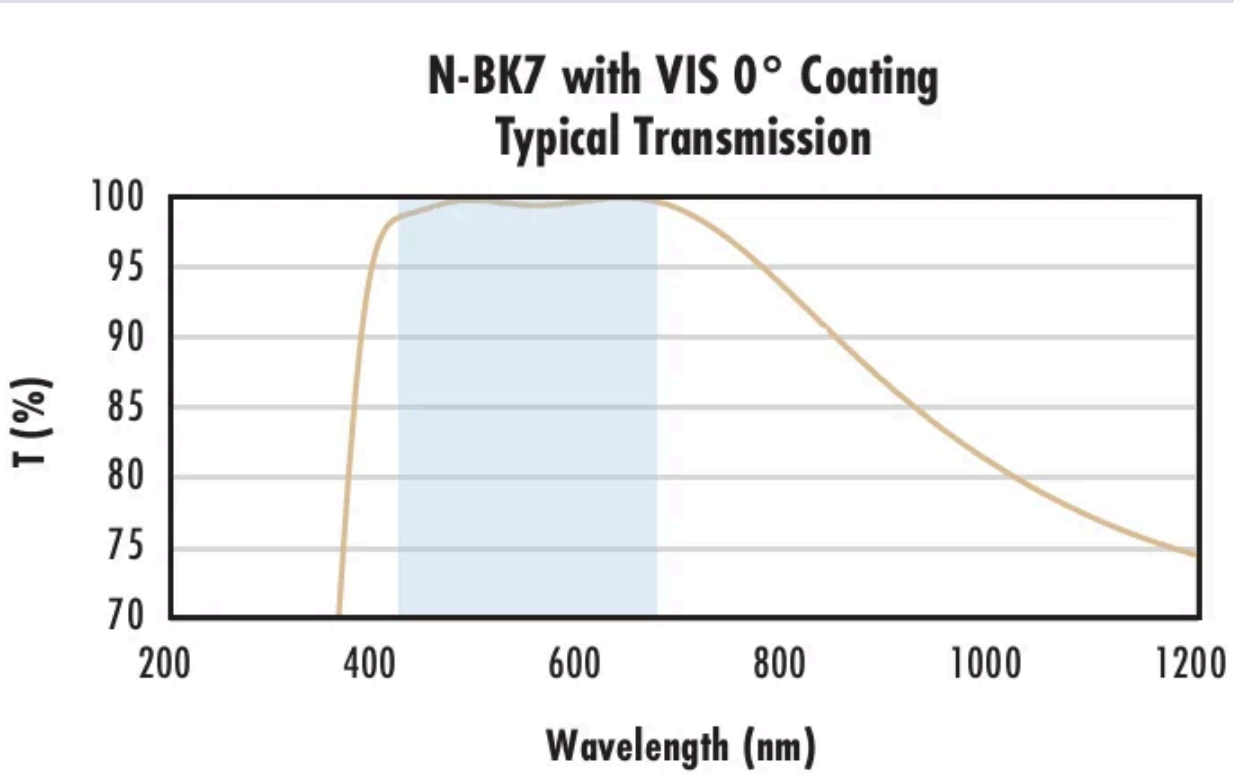

Typical transmission of a 3mm thick N-BK7 window wit 0° (425-675nm) coating at 0° AOI.

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

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

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

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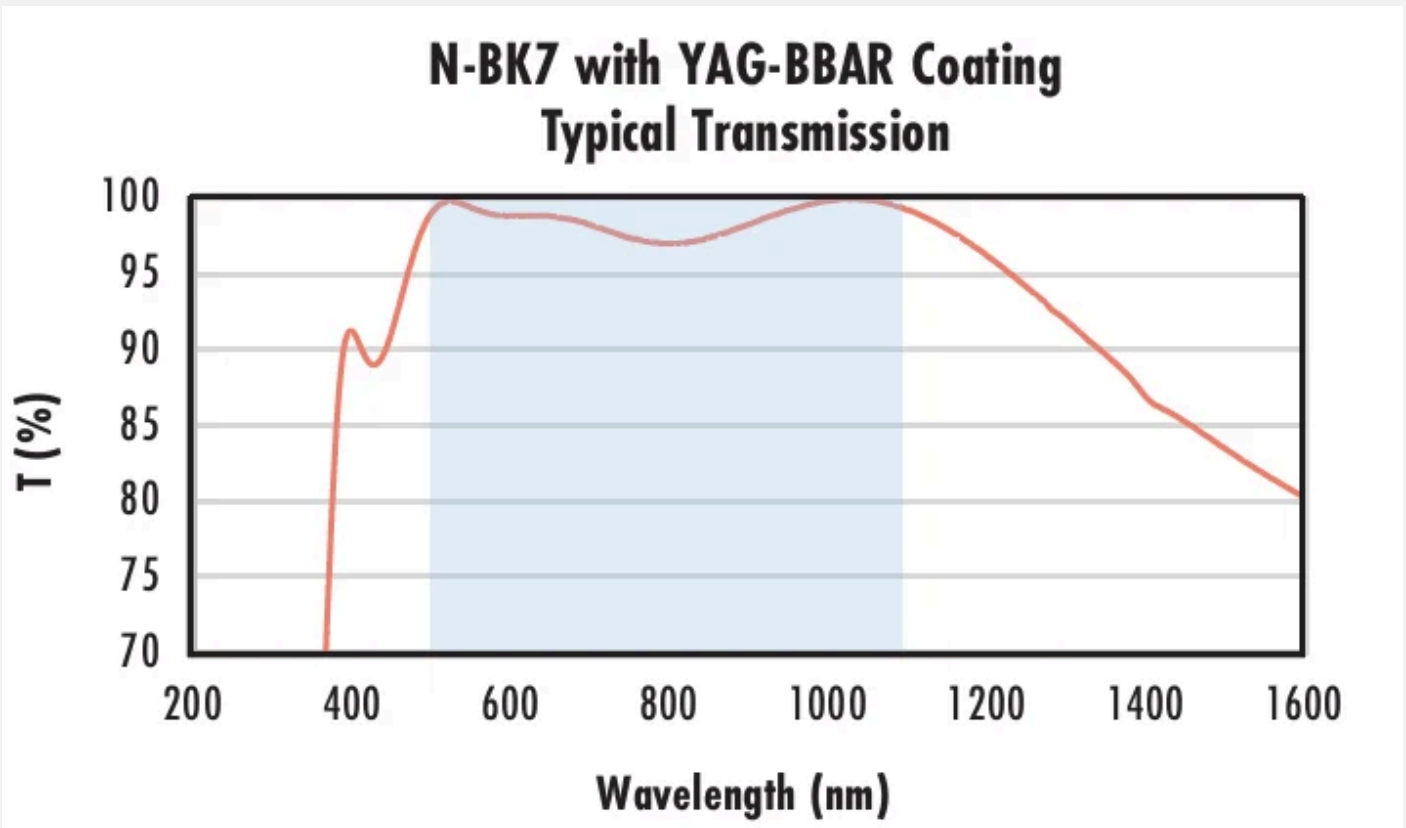

Typical transmission of a 3mm thick N-BK7 window w YAG-BBAR (500-1100nm) coating at 0° AOI.

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.

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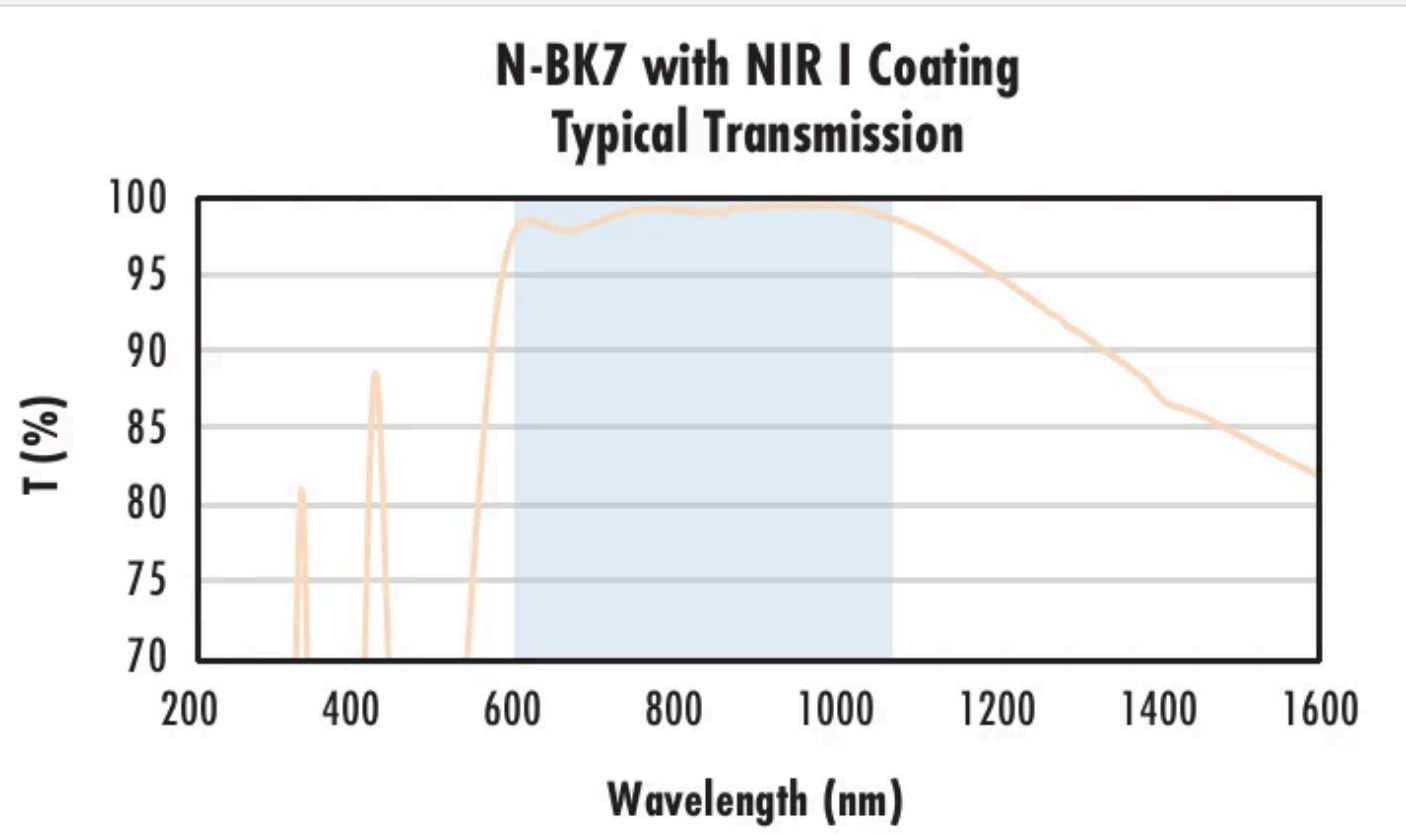

Typical transmission of a 3mm thick N-BK7 window witl I (600 - 1050nm) coating at 0° AOI.

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

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

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

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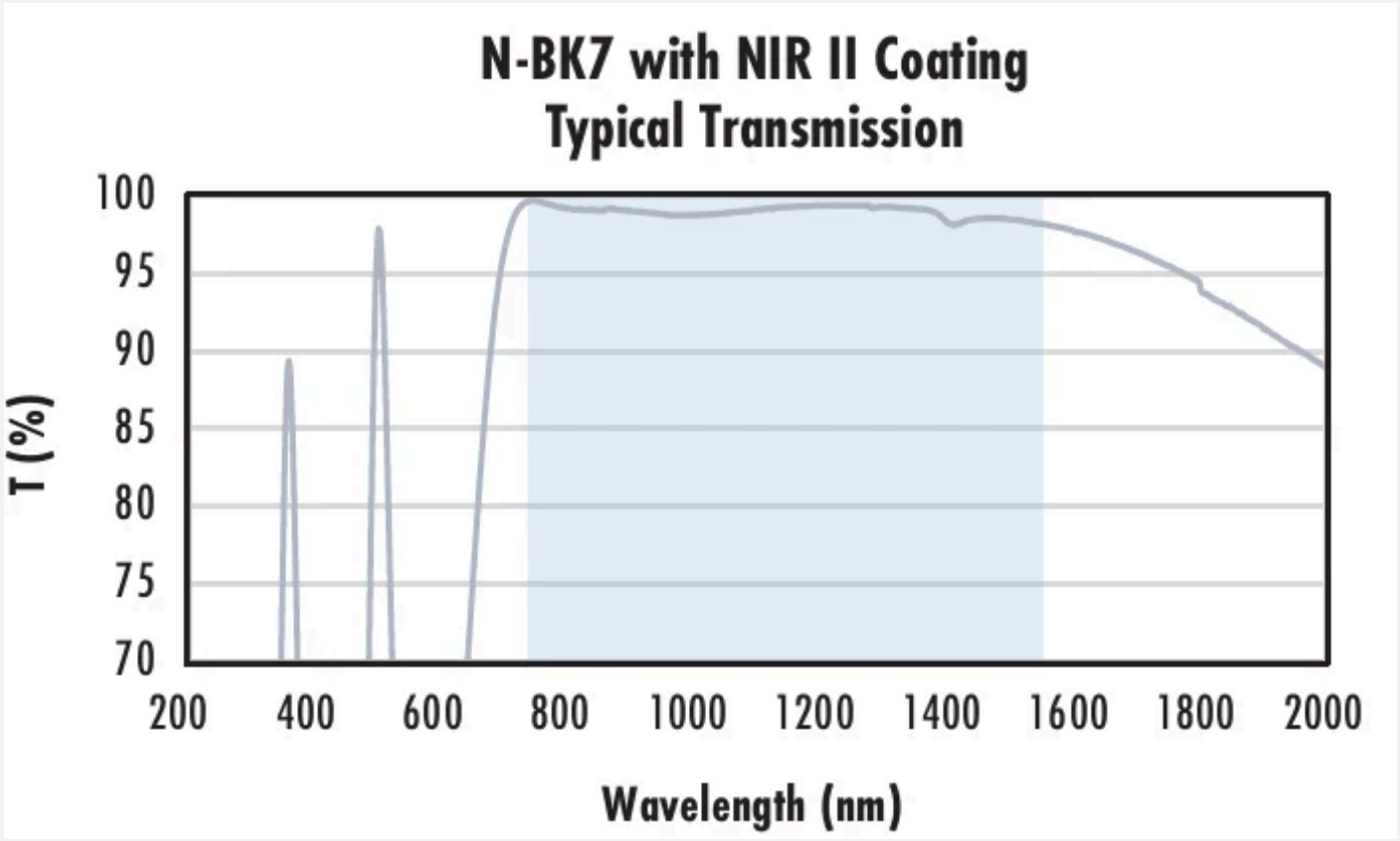

Typical transmission of a 3mm thick N-BK7 window witl
II (750 - 1550nm) coating at 0° AOI.

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

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

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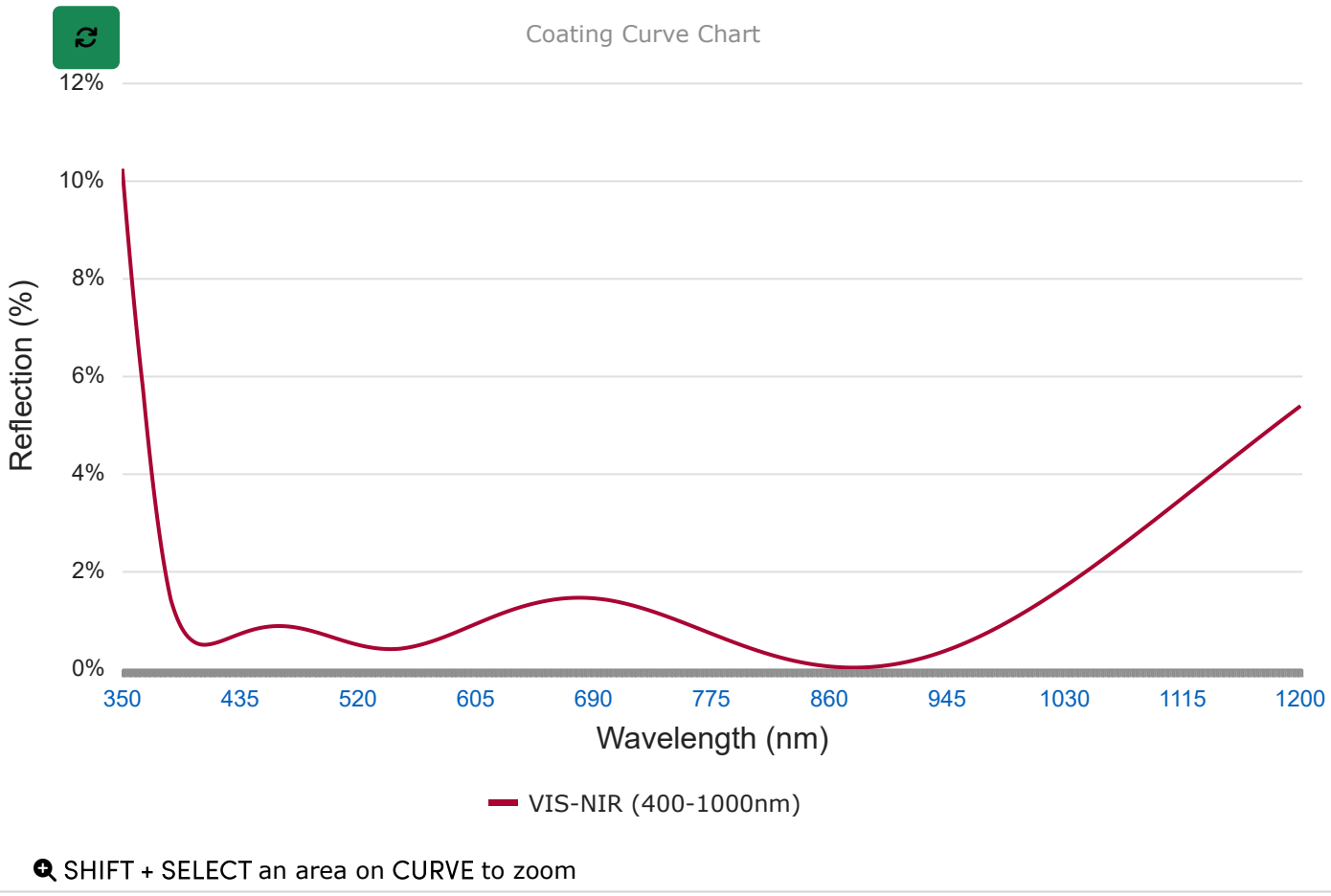
Coating Curves

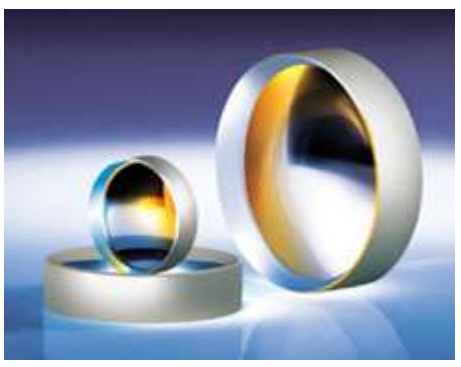
VIS-NIR (400-1000nm)



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

Related Products

Uncoated Plano-Concave (PCV) Lenses



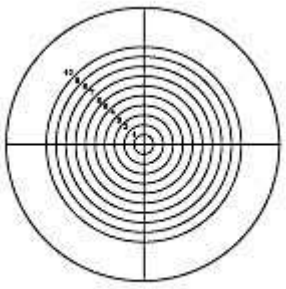
VIS-NIR Coated Double-Concave (DCV) Lenses

UV Fused Silica Plano-Concave (PCV) Lenses

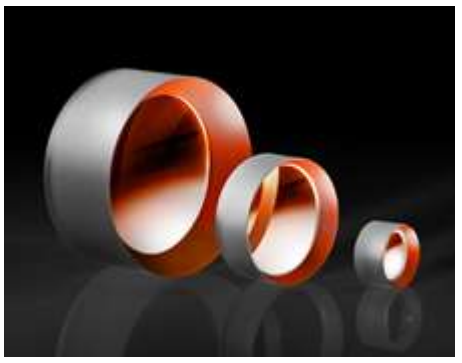
Optical Cleaning

Frequently Purchased Together

#32-317 - 12.5mm Dia. x 50mm FL, MgF_2 Coated, Achromatic Doublet Lens
C$120.40
Qty



#39-454 - 21mm Dia., Metric Circle Crosshair, Contact Reticle
C$107.80
Qty



#45-221 - 25mm Dia x -50mm FL Negative Doublet Lens MgF_2 Coated
C$175.00
Qty

#45-361 - 20.0mm Dia. x 50.0mm FL, MgF_2 Coated, Plano-Convex Lens
C$56.70
Qty

Compatible Mounts

	Title	Type	Compare	Stock Number	Price	Buy
MORE+ 	25.0/25.4mm Optic Dia., SM1 Thin Mount, M4	Fixed		#13-787	C$29.40 Request Quote	9 In Stock 1
MORE+ 	25.0/25.4mm Optic Dia., SM1 Thin Mount, 8-32	Fixed		#13-788	C$29.40 Request Quote	20+ In Stock 1
MORE+ 	25.0mm Optic Dia., Optic Mount	Fixed		#64-560	C$45.85 Request Quote	CONTACT US 1
MORE+ 	30mm Cage 25/25.4mm Diameter Thick Lens Mount	Fixed		#85-588	C$64.05 Request Quote	20+ In Stock 1
MORE+ 	25.0/25.4mm Optic Dia., L-Slot Direct Mount	Fixed		#36-410	C$95.20 Request Quote	20+ In Stock 1
MORE+ 	25.0/25.4mm Optic Dia., Side Flange Direct Mount	Fixed		#36-414	C$99.40 Request Quote	20+ In Stock 1
MORE+ 	25/25.4mm Diameter, T-Mount Thick Optic Mount	Fixed		#52-293	C$100.80 Request Quote	CONTACT US 1
MORE+ 	25mm Thick Inner Pair Optic Mounts	Fixed		#11-054	C$112.70 Request Quote	16 In Stock 1
MORE+ 	25/25.4mm Diameter, C-Mount Thick Optic Mount	Fixed		#56-354	C$138.60 Request Quote	5 In Stock 1
MORE+ 	25.0/25.4mm Optic Dia., L-Slot and Rotation Direct Mount	Adjustable - Rotary		#36-411	C$142.80 Request Quote	5 In Stock 1
MORE+ 	25.0/25.4mm Optic Dia., X-Y Translating Optic Mount	Adjustable - Linear (XY)		#62-956	C$386.40 Request Quote	CONTACT US 1
MORE+ 	25.0/25.4mm Optic Dia., X-Y-Z Translating Optic Mount	Adjustable - Linear (XYZ)		#62-959	C$756.00 Request Quote	6 In Stock 1

	Title	Type	Compare	Stock Number	Price ☐	Buy
MORE+ 	25.0/25.4mm Optic Dia., 5 Axes Optical Mount	Adjustable - Linear (XYZ) & Tip-Tilt		#13-776	C$1,057.00 Request Quote	2 In Stock 1

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- ☐ Glossary
- ☐ Technical Tool
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- ☐ 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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