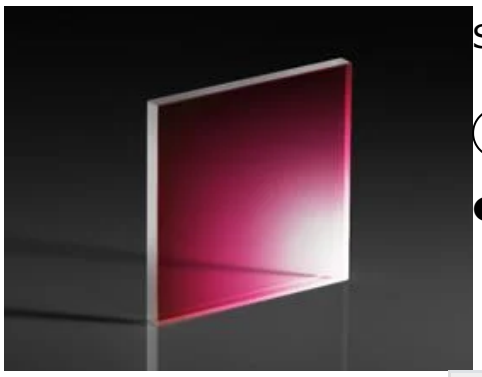
TECHSPEC® 75mm Sq., 4mm Thick, NIR I Coated λ/4 N-BK7 Window



Stock #37-074 CONTACT US

- 1 +

MRP ₹24,113

Price inclusive of all taxes

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Volume Pricing	
Qty 1-5	₹24,113 each
Qty 6-25	₹19,271 each
Qty 26-49	₹18,060 each
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Product Downloads

STEP:step | Curve:pdf | PDF Drawing:pdf | IGES:igs | Curve (xslx) | eDrawing:eprt | EO Spec Sheet | Download All

General

Type:	Protective Window	**Type of Window:**	Glass

Physical & Mechanical Properties

Clear Aperture CA (mm):	67.50 x 67.50	**Dimensions (mm):**	75.00 x 75.00
Thickness (mm):	4.00 ±0.20	**Length (mm):**	75.00
Width (mm):	75.00	**Parallelism (arcmin):**	<1
Bevel:	Protective as needed	**Clear Aperture (%):**	90
Edges:	Fine Ground	**Poisson's Ratio:**	0.21
Young's Modulus (GPa):	82	**Knoop Hardness (kg/mm²):**	610.00

Optical Properties

Coating:	NIR I (600-1050nm)	**Substrate:** ⓘ	N-BK7
Index of Refraction (n_d):	1.516	**Surface Quality:**	60-40
Abbe Number (v_d):	64.17	**Coating Specification:**	R_{avg} ≤0.5% @ 600 - 1050nm
Wavelength Range (nm):	600 - 1050	**Surface Flatness (P-V):**	λ/4
Damage Threshold, By Design: ⓘ	7 J/cm² @ 1064nm, 10ns		

Material Properties

Density (g/cm^3):	2.51	**Coefficient of Thermal Expansion CTE ($10^{-6}/°C$):**	7.1 (-30 to +70°C) 8.3 (+20 to +300°C)

Regulatory Compliance

RoHS 2015:	**Compliant**	**Certificate of Conformance:**	**View**
Reach 253:	**Compliant**		
Country of Origin:	United States	**Imported By:**	Edmund Optics India Private Limited 267, Greystone Building, Second Floor, 6th Cross Rd, Binnamangala, Stage 1, Indiranagar, Bengaluru, Karnataka, India 560038 Phone: +91-80-6845 0000

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.**

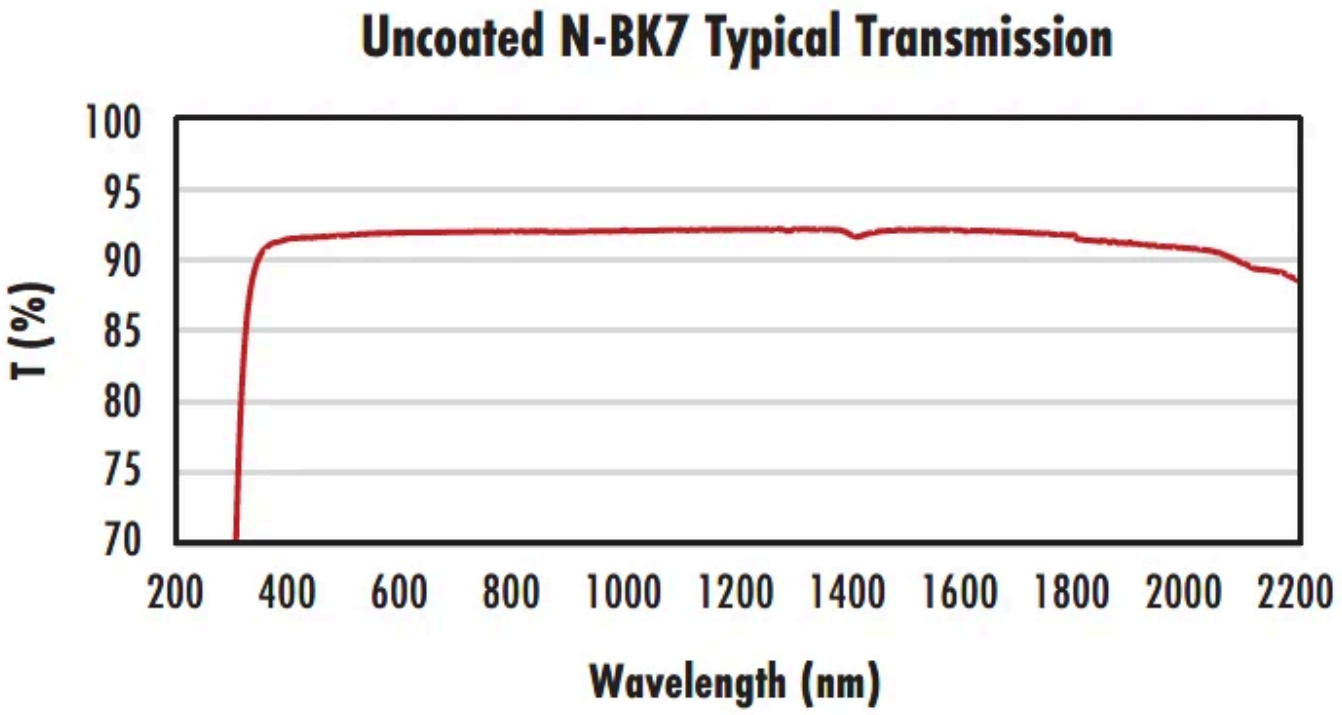
Product Details

- Circular and Rectangular Sizes from 2mm to 200mm
- 8 Broadband Anti-Reflection Coating Options Available
- World's Largest Selection of Standard N-BK7 Windows
- Also Available with **Ultra-Thin N-BK7 Windows**

TECHSPEC® λ/4 N-BK7 Precision Windows are ideally suited for industrial and low-power laser applications. The high tolerance design yields minimal beam distortion and scatter. Broadband coating options extend the range of these precision windows through the visible and near-infrared spectra. TECHSPEC® λ/4 N-BK7 Precision Windows are offered in circular and rectangular sizes ranging from 2mm to 200mm.

Note: New additions to this product family may be specified with a transmitted wavefront distortion (TWD) specification instead of a surface flatness. For more information on the difference between these two specifications, see our application note on **Understanding Optical Windows**.

Technical Information



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

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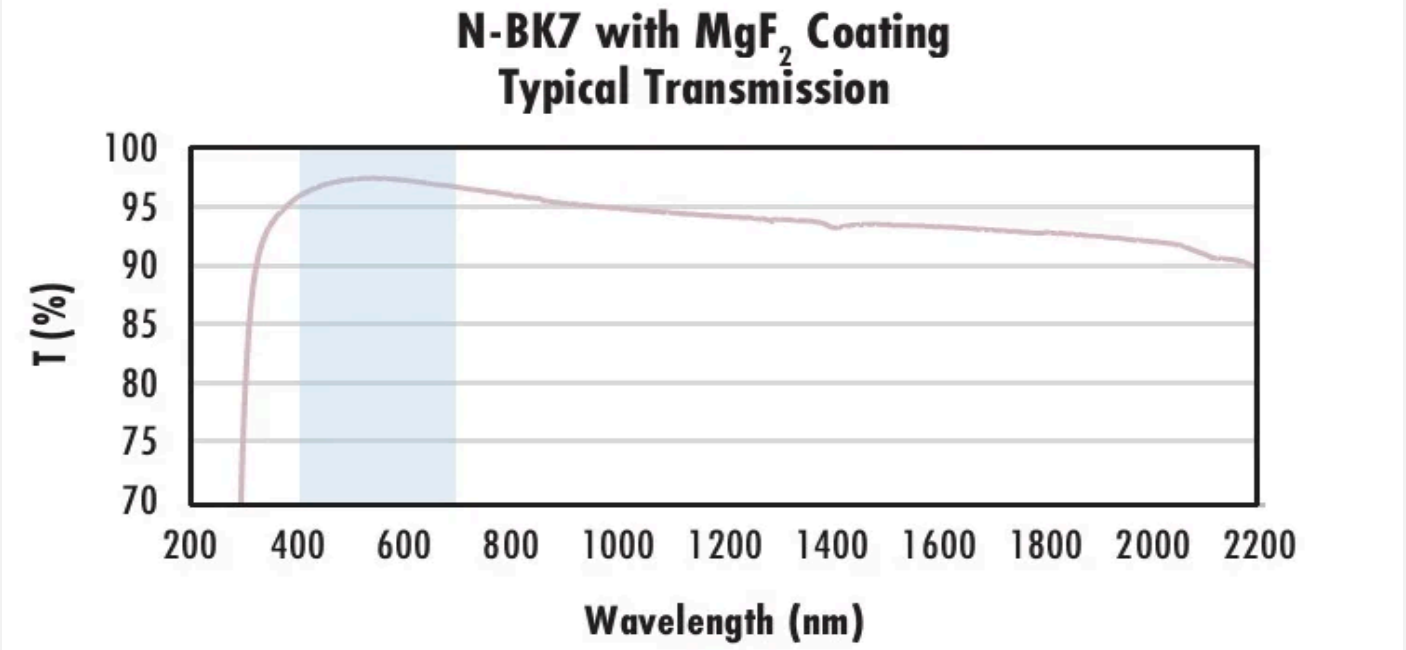

Typical transmission of a 3mm thick N-BK7 window w MgF2 (400-700nm) coating at 0° AOI.

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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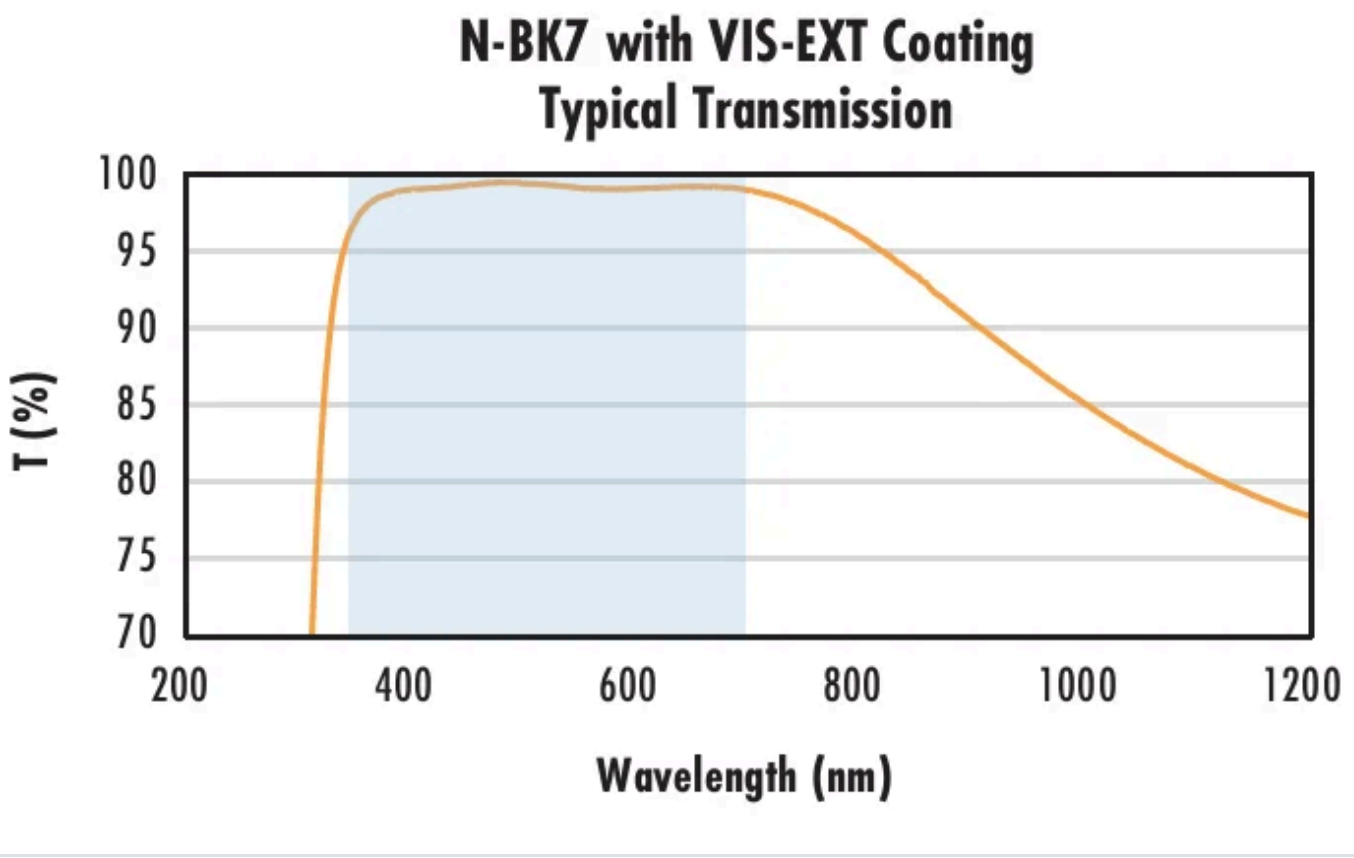

Typical transmission of a 3mm thick N-BK7 window w VIS-EXT (350-700nm) coating at 0° AOI.

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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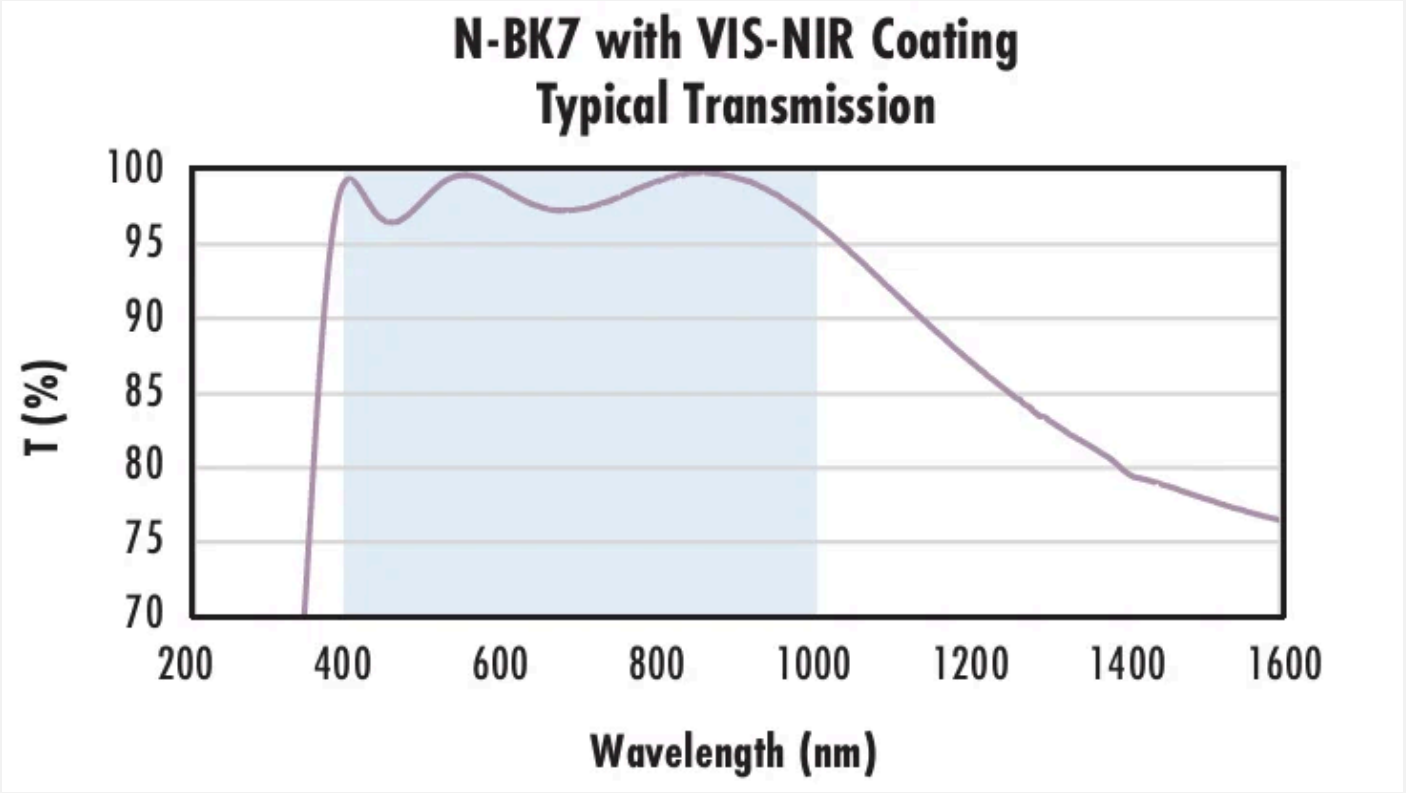

Typical transmission of a 3mm thick N-BK7 window w
VIS-NIR (400-1000nm) coating at 0° AOI.

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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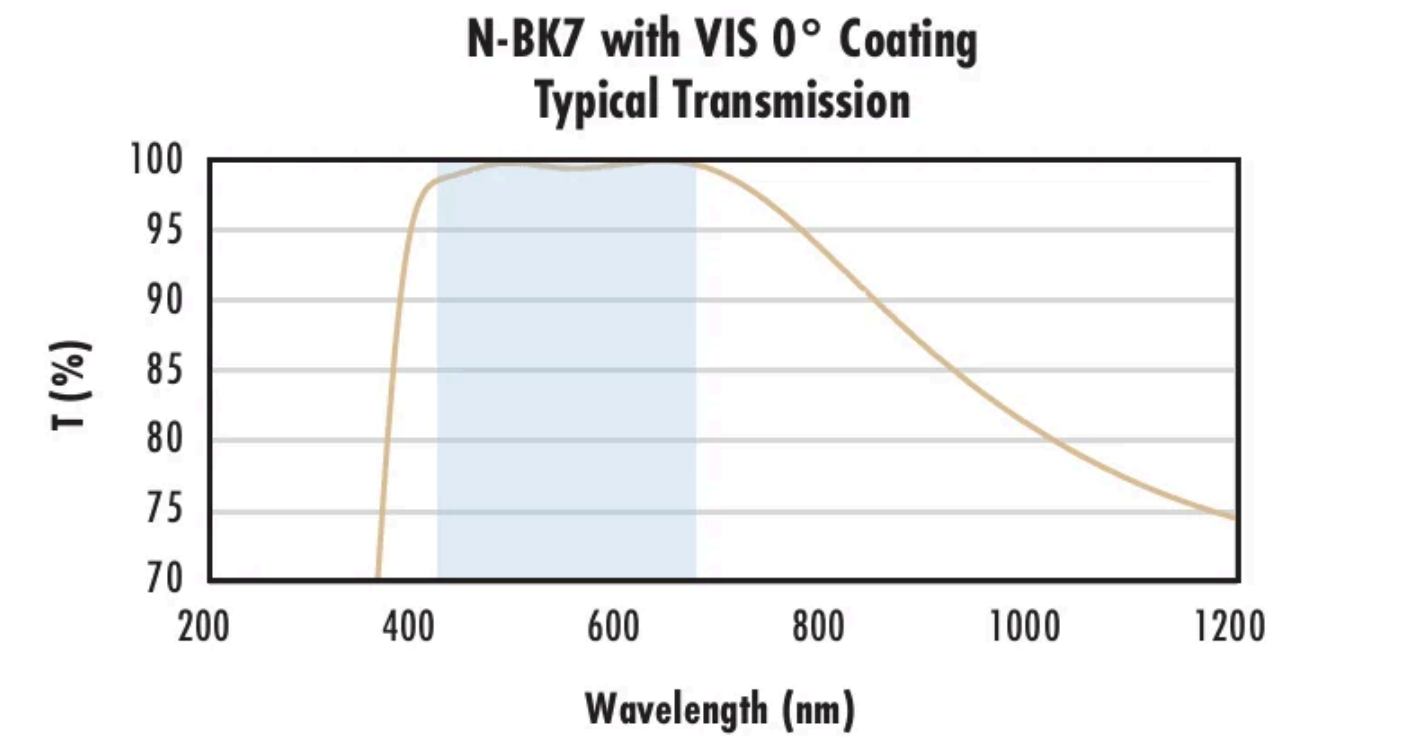

Typical transmission of a 3mm thick N-BK7 window wit
0° (425-675nm) coating at 0° AOI.

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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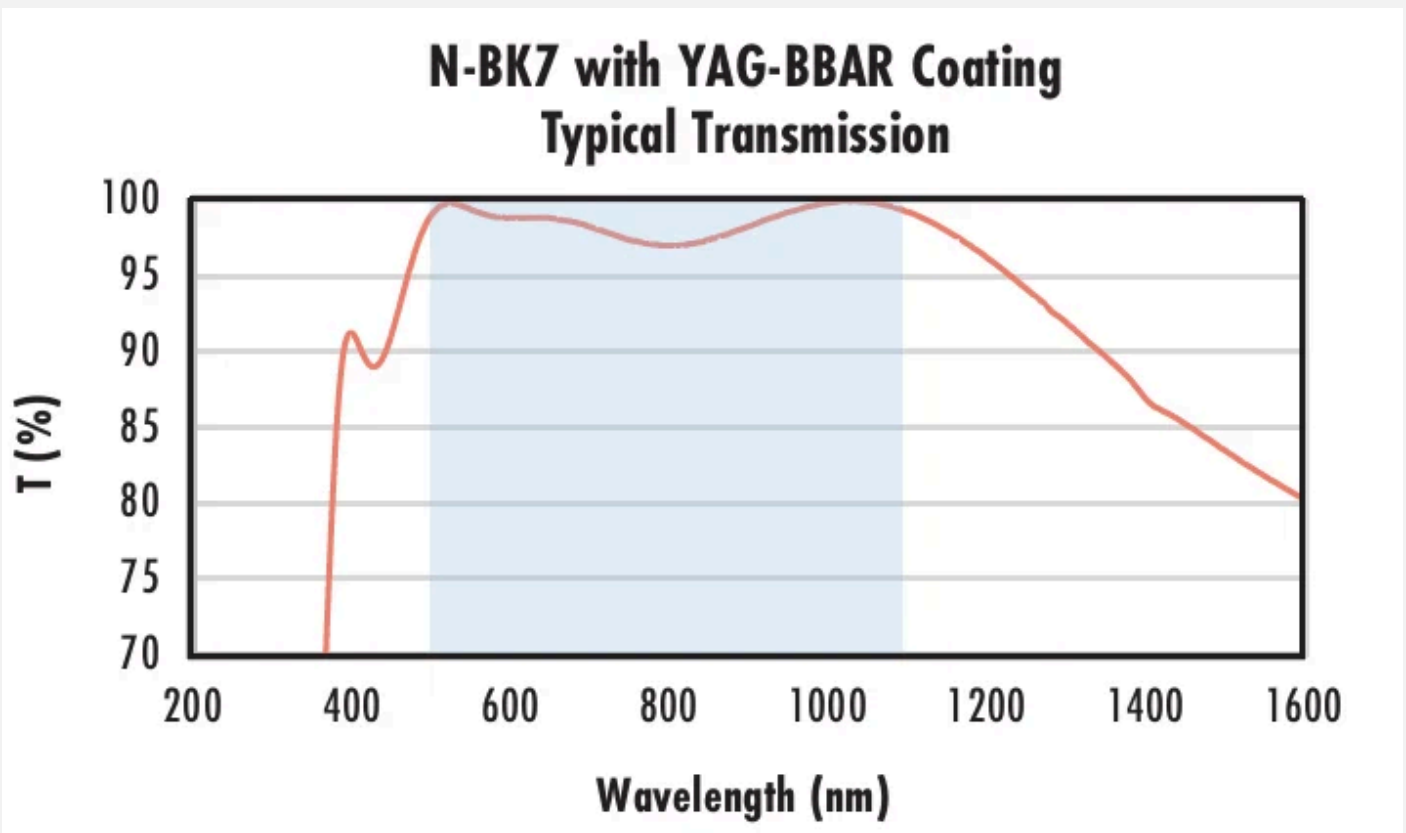

Typical transmission of a 3mm thick N-BK7 window w
YAG-BBAR (500-1100nm) coating at 0° AOI.

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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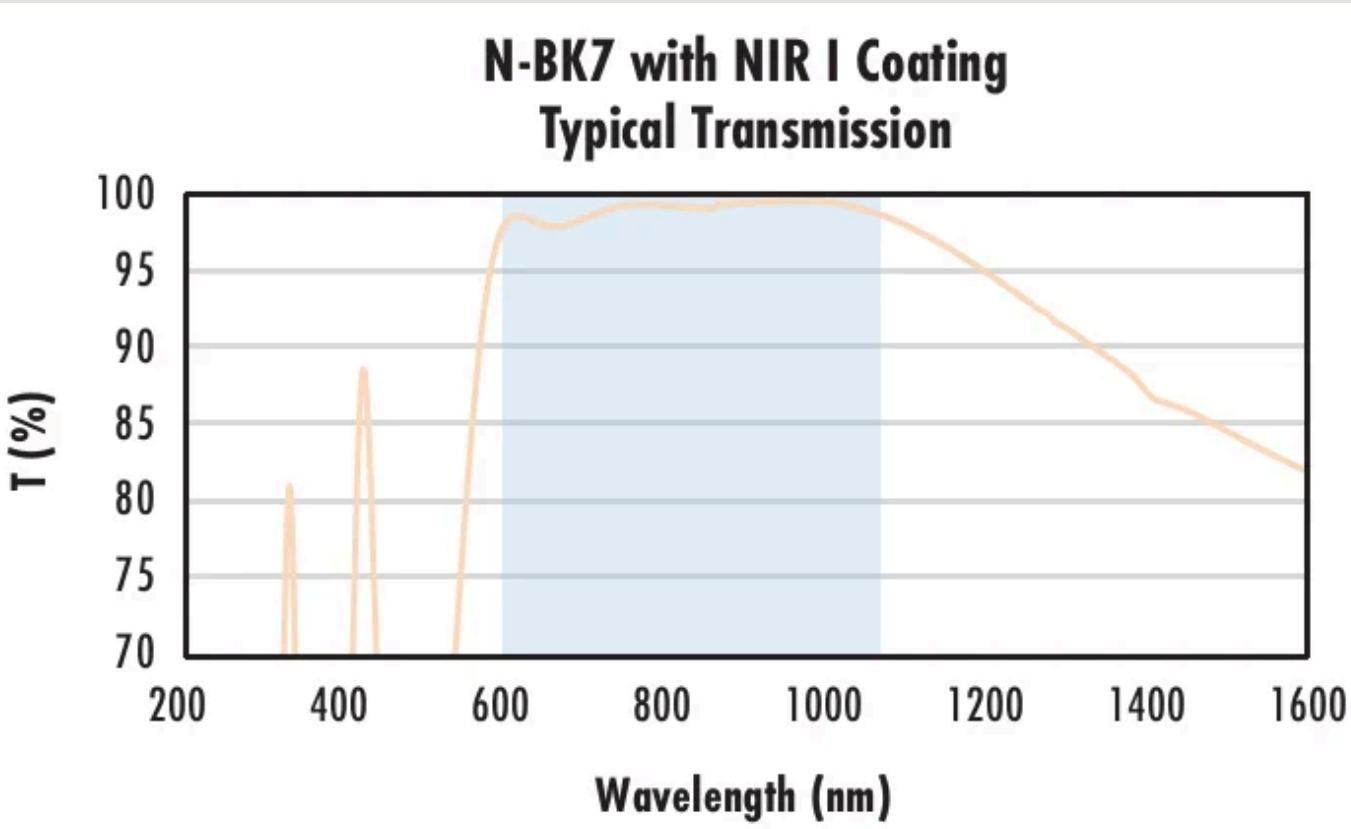

Typical transmission of a 3mm thick N-BK7 window witl I (600 - 1050nm) coating at 0° AOI.

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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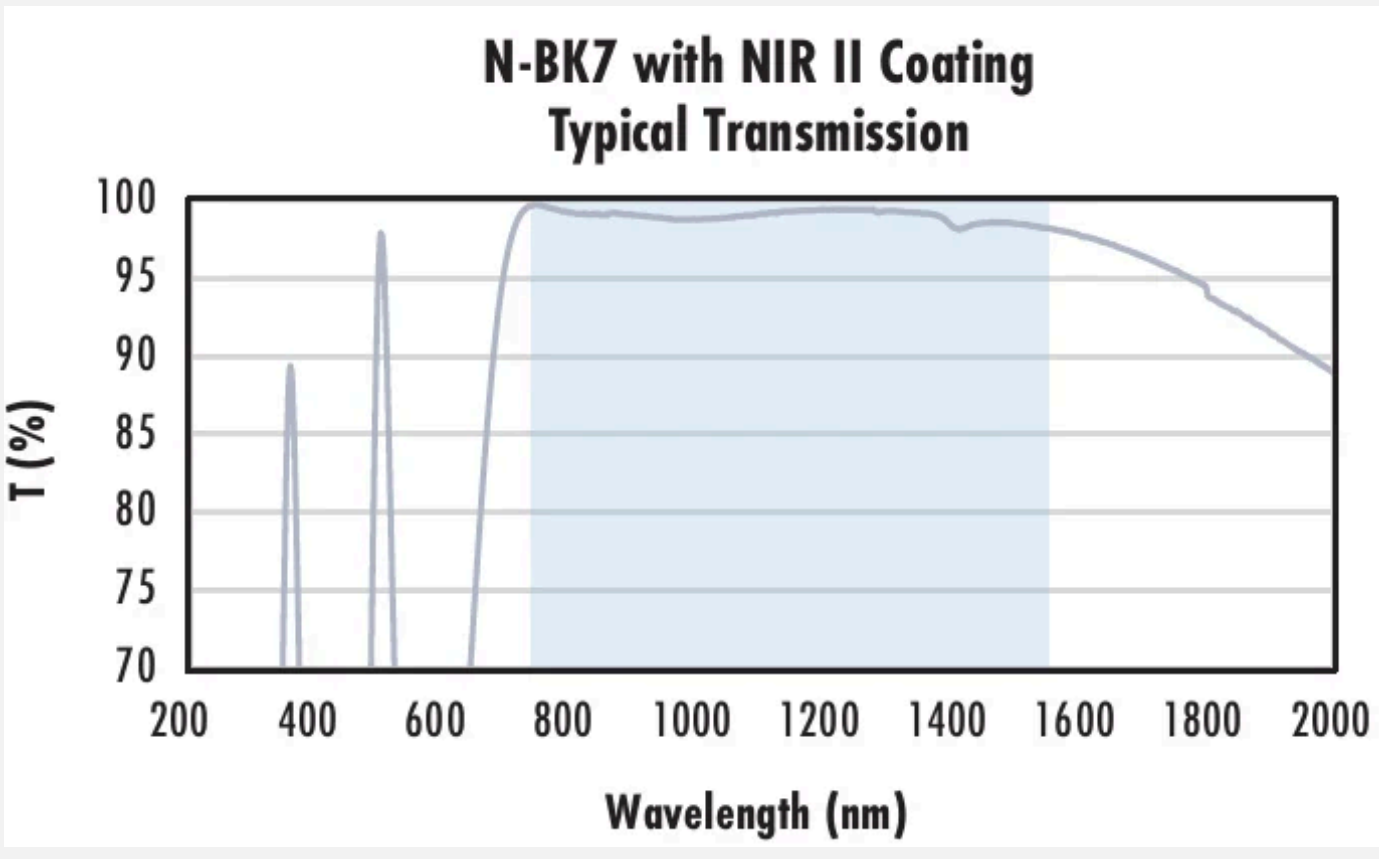

Typical transmission of a 3mm thick N-BK7 window witl II (750 - 1550nm) coating at 0° AOI.

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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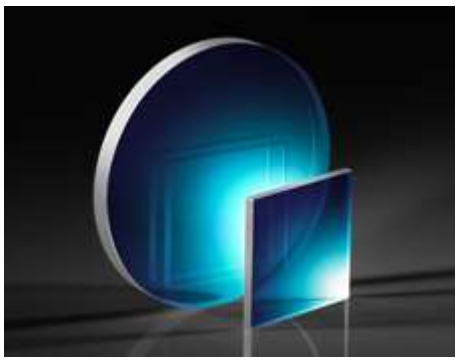
Cage System Optical Lens Mounts

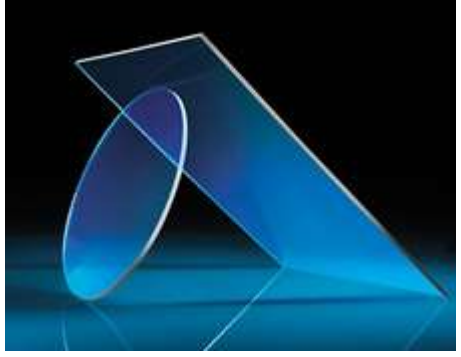
C, S, and T-Mount Circular Optic Mounts

PUROSOL™ Optical Cleaner



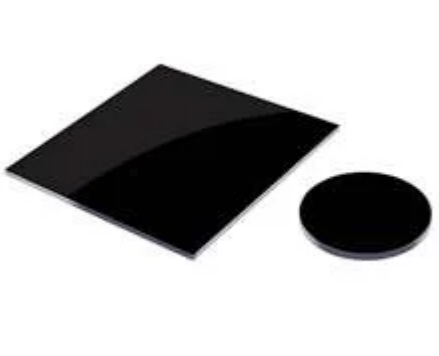
λ/10 UV Fused Silica Windows

Frequently Purchased Together



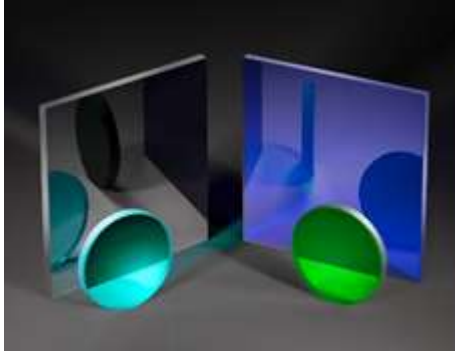
#43-929 - 8" x 10" Size, Plastic Optical Window
₹11,098

Qty



#43-954 - 4" x 5", Optical Cast Plastic IR Longpass Filter
₹4,893

Qty



#46-444 - Hoya RT830 (IR) 50.8mm Square, Colored Glass Bandpass Filter
₹12,712

Qty

#48-901 - 75 x 75mm 30R/70T, NIR Plate Beamsplitter
₹38,944

Qty

Compatible Mounts

	Title	Type	Compare	Stock Number	Price ☐	Buy
MORE+	40mm Sq., Fixed Filter Holder	Fixed		#54-997	₹9,433 Request Quote	16 In Stock 1

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

Resources

Media Type

- ☐ Application Note
- ☐ Technical Tool
- ☐ Video
- ☐ Glossary
- ☐ FAQ

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Anti-Reflection (AR) Coatings

APPLICATION NOTE
An Introduction to Optical Coatings

TECHNICAL TOOL
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Optical Glass

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