

TECHSPEC® 75mm Dia. x 400mm FL, MgF₂ Coated, Plano-Convex Lens



Stock #71-844 **2 In Stock**

[Other Coating Options](#)

1 **A\$174⁰⁰**

ADD TO CART

Volume Pricing	
Qty 1-9	A\$174.40 each
Qty 10-24	A\$157.60 each
Qty 25-49	A\$139.20 each
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Product Downloads

SPECIFICATIONS

General

Type:

Physical & Mechanical Properties

75.00 +0.0/-0.025 **Diameter (mm):**

<1 **Centering (arcmin):**

8.50 **Center Thickness CT (mm):**

5.07 **Edge Thickness ET (mm):**

73.5 **Clear Aperture CA (mm):**

Protective as needed **Bevel:**

Optical Properties

400.00 **Effective Focal Length EFL (mm):**

394.4 **Back Focal Length BFL (mm):**

MgF2 (400-700nm) **Coating:**

$R_{avg} \leq 1.75\%$ @ 400 - 700nm **Coating Specification:**

N-BK7 **Substrate:**

40-20 **Surface Quality:**

3 λ **Power (P-V) @ 632.8nm:**

$\lambda/2$ **Irregularity (P-V) @ 632.8nm:**

± 1 **Focal Length Tolerance (%):**

206.72 **Radius R₁ (mm):**

5.34 **f#:**

0.09 **Numerical Aperture NA:**

400 - 700 **Wavelength Range (nm):**

10 J/cm² @ 532nm, 10ns **Damage Threshold, By Design:**

Regulatory Compliance

[View](#) **Certificate of Conformance:**

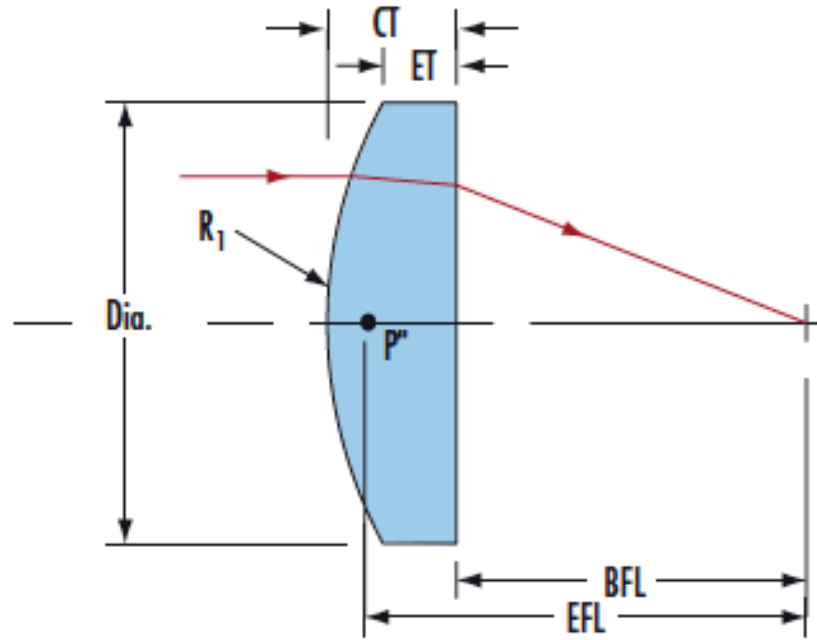
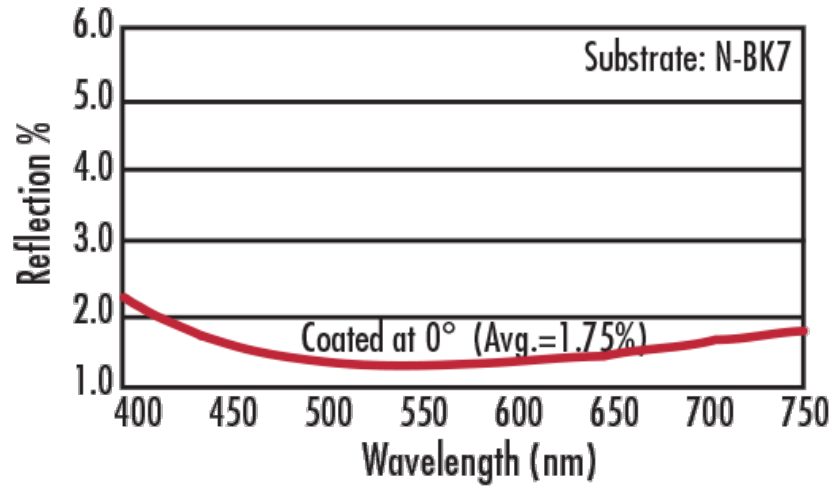
PRODUCT DETAILS

- AR Coated to Provide <1.75% Reflectance per Surface for 400 - 700nm
- Designed for 0° Angle of Incidence
- Various PCX Coating Options: [Uncoated](#), [VIS 0°](#), [VIS-NIR](#), [NIR I](#), [NIR II](#), [VIS-EXT](#), and [YAG-BBAR](#)
- Also Available [Pre-Mounted in Engraved C-Mount Housings](#)

TECHSPEC® MgF2 Coated Plano-Convex (PCX) Lenses have a positive focal length, making them ideal for collecting and focusing light in imaging applications. They are also useful in a variety of applications involving emitters, detectors, lasers, and fiber optics. TECHSPEC® MgF2 Coated Plano-Convex (PCX) Lenses are available in a wide variety of diameters and focal lengths. Identical designs of these PCX lenses are also offered [uncoated](#) or with broadband anti-reflective (BBAR) coatings, which include [VIS 0°](#), [VIS-NIR](#), [NIR I](#), [NIR II](#), [VIS-EXT](#), and [YAG-BBAR](#).

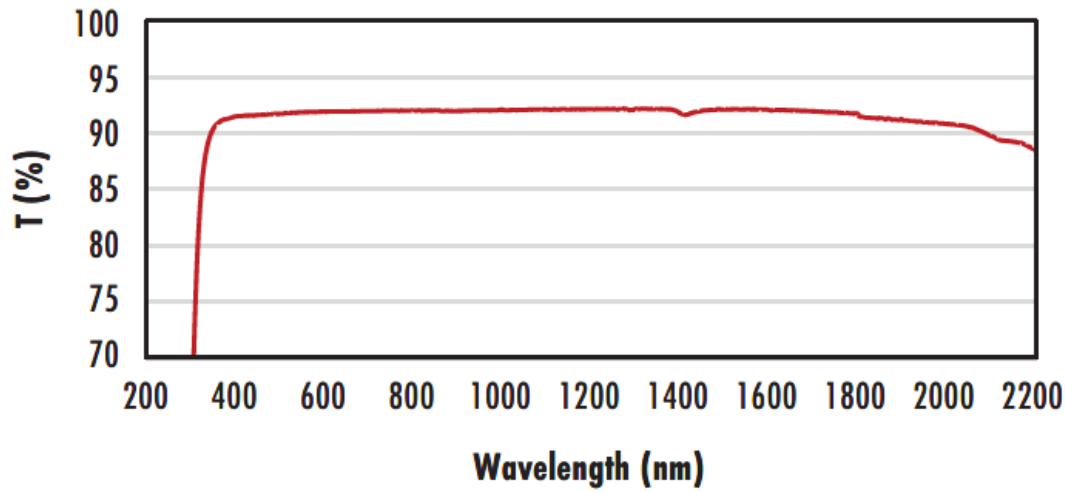
TECHNICAL INFORMATION

MgF₂ Coating
 $R_{avg} \leq 1.75\% @ 400 - 700nm$
 Typ. Energy Density Limit: 10 J/cm² @ 532nm, 10ns



N-BK7

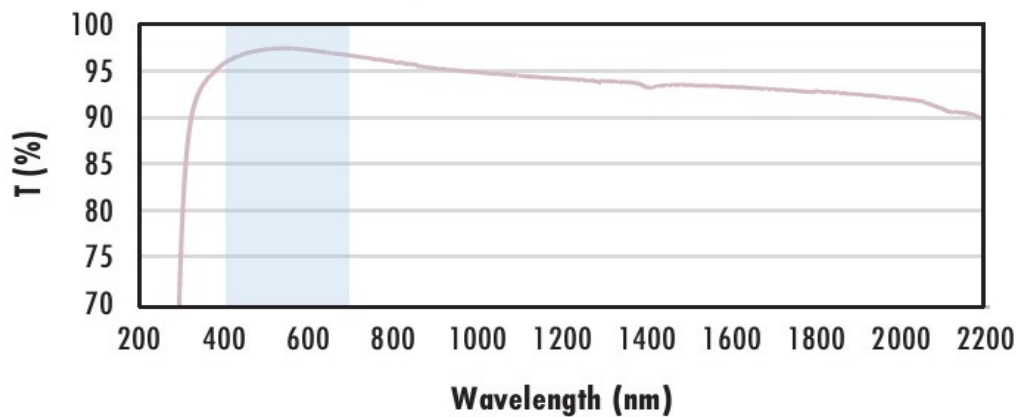
Uncoated N-BK7 Typical Transmission



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.

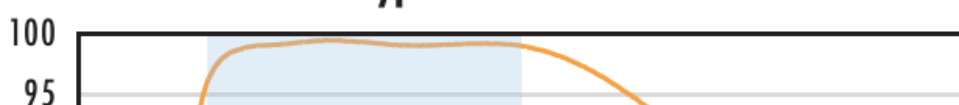
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

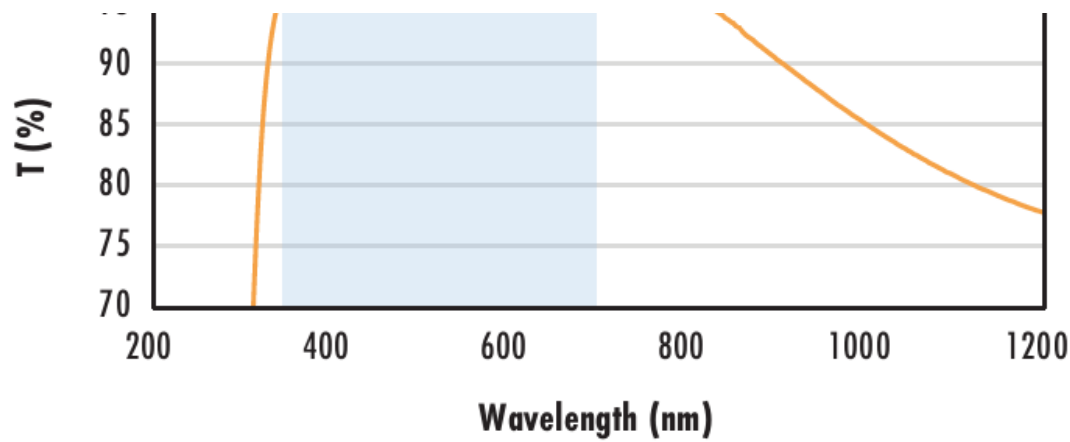
Data outside this range is not guaranteed and is for reference only.

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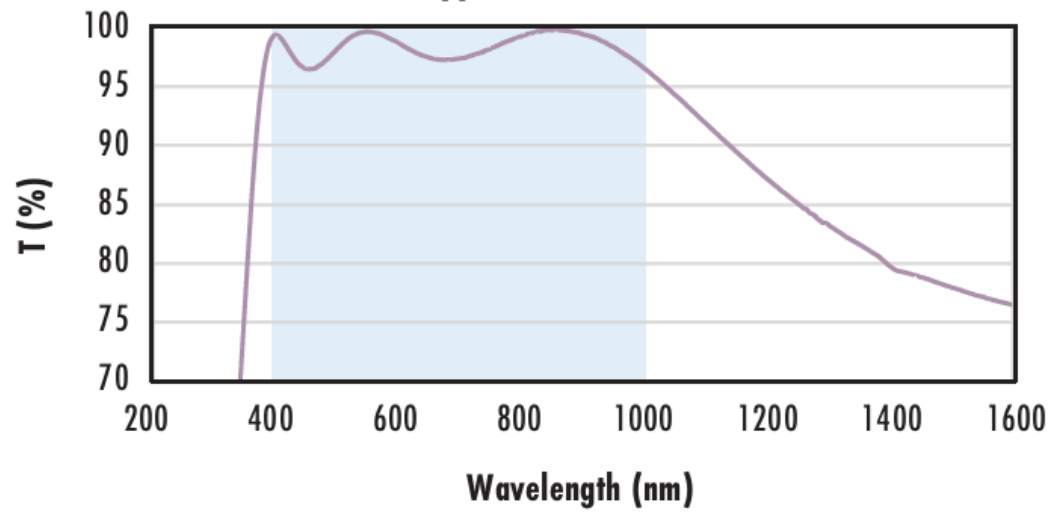
N-BK7 with VIS-EXT Coating Typical Transmission



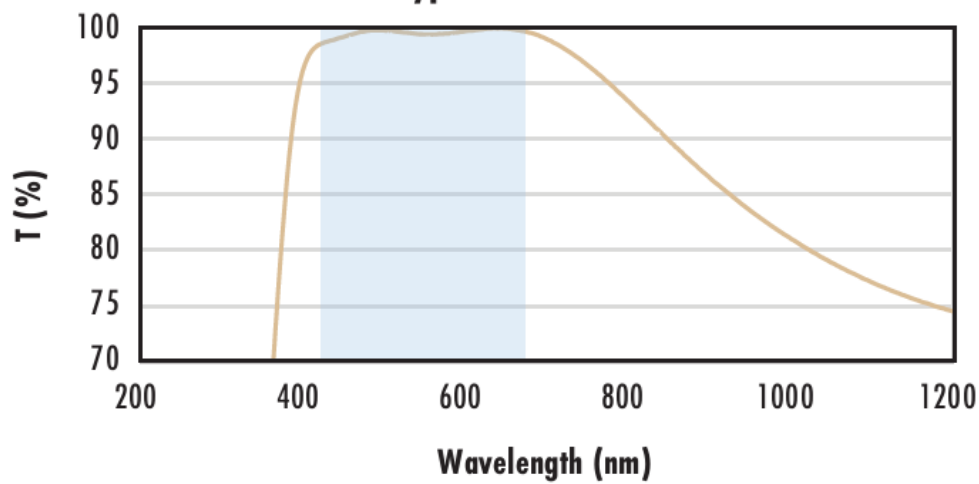
Typical transmission of a 3mm thick N-BK7 window with VIS-EXT



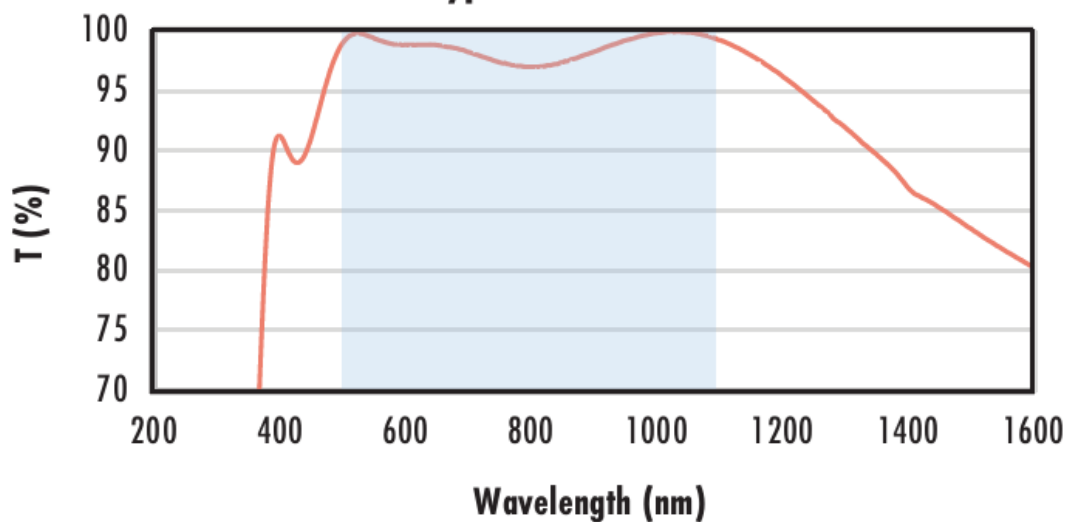
**N-BK7 with VIS-NIR Coating
Typical Transmission**



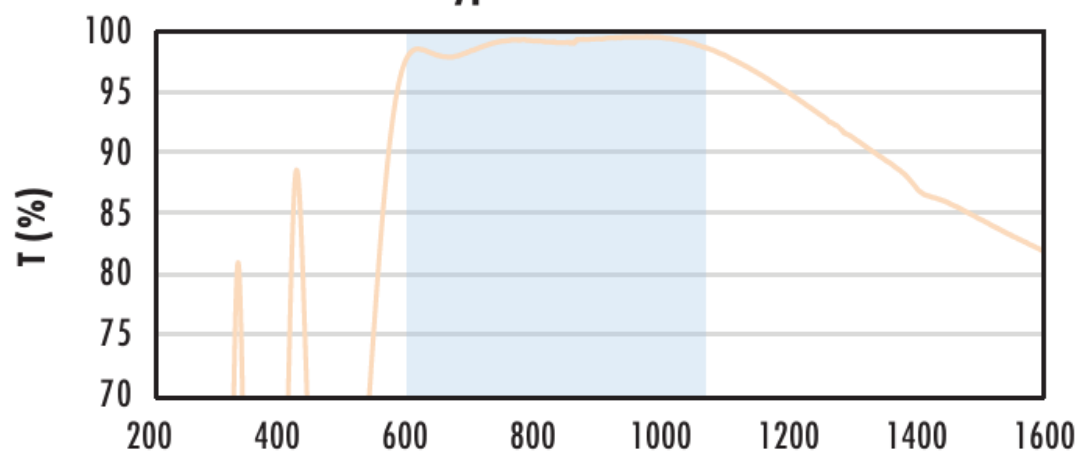
**N-BK7 with VIS 0° Coating
Typical Transmission**

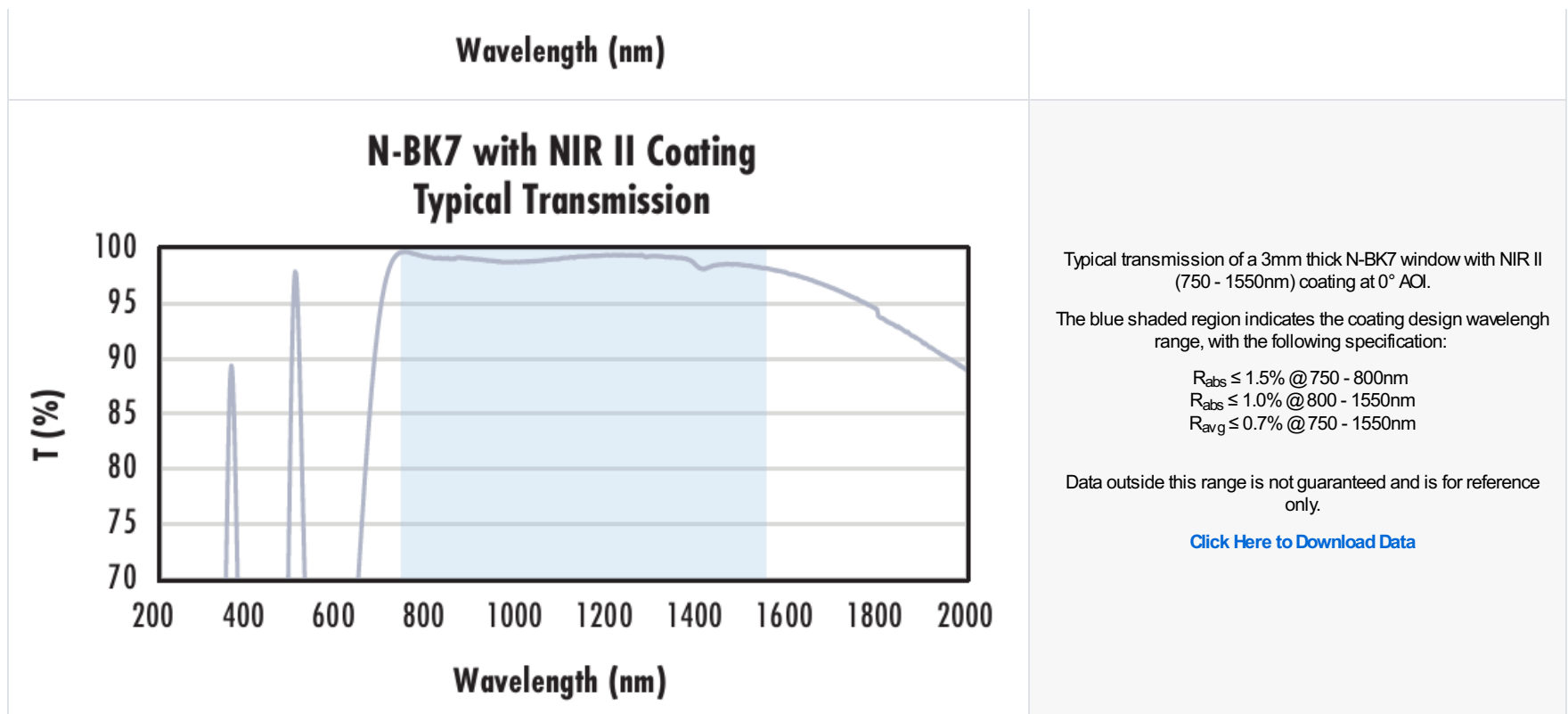


**N-BK7 with YAG-BBAR Coating
Typical Transmission**



**N-BK7 with NIR I Coating
Typical Transmission**





COATING CURVES

CUSTOM

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](#).