

TECHSPEC<sup>®</sup> 5mm Dia. x 20mm FL, VIS 0° Inked, Double-Convex Lens



Stock **#63-597-INK** [CONTACT US](#)

☐ [Other Coating Options](#)

-

1

+

S\$91<sup>.85</sup>

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| Volume Pricing |                               |
|----------------|-------------------------------|
| Qty 1-9        | <b>S\$91.85</b> each          |
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| Qty 25-99      | <b>S\$73.18</b> each          |
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SPECIFICATIONS

General

Type:

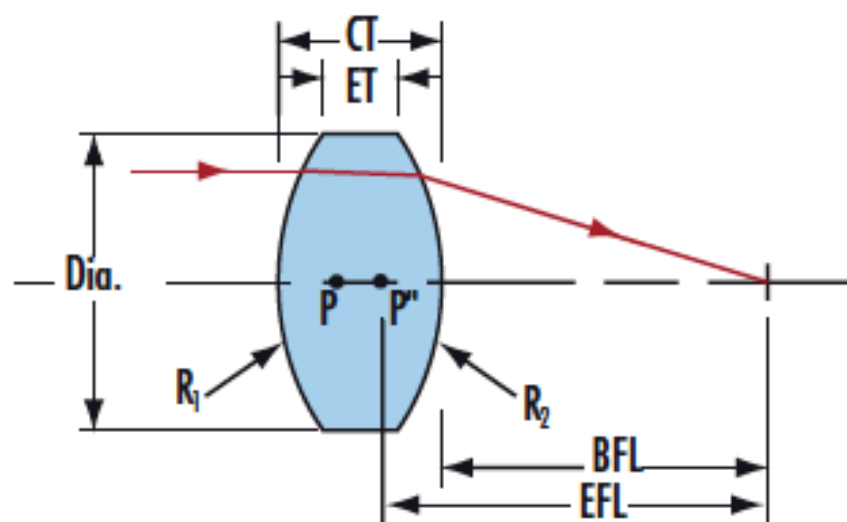
|                                      |                                                       |
|--------------------------------------|-------------------------------------------------------|
| Double-Convex Lens                   |                                                       |
| Physical & Mechanical Properties     |                                                       |
| 5.00 ±0.025                          | Diameter (mm):                                        |
| <1                                   | Centering (arcmin):                                   |
| Protective as needed                 | Bevel:                                                |
| 1.50                                 | Center Thickness CT (mm):                             |
| ±0.05                                | Center Thickness Tolerance (mm):                      |
| 1.19                                 | Edge Thickness ET (mm):                               |
| 4.5                                  | Clear Aperture CA (mm):                               |
| Optical Properties                   |                                                       |
| 19.50                                | Back Focal Length BFL (mm):                           |
| 20.00                                | Effective Focal Length EFL (mm):                      |
| VIS 0° (425-675nm)                   | Coating:                                              |
| R <sub>avg</sub> ≤0.4% @ 425 - 675nm | Coating Specification:                                |
| N-BK7                                | Substrate: <input type="checkbox"/>                   |
| 40-20                                | Surface Quality:                                      |
| 1.5λ                                 | Power (P-V) @ 632.8nm:                                |
| λ/4                                  | Irregularity (P-V) @ 632.8nm:                         |
| 20.41                                | Radius R <sub>1</sub> =R <sub>2</sub> (mm):           |
| 4.00                                 | f/#:                                                  |
| 587.6                                | Focal Length Specification Wavelength (nm):           |
| ±1                                   | Focal Length Tolerance (%):                           |
| 0.13                                 | Numerical Aperture NA:                                |
| 425 - 675                            | Wavelength Range (nm):                                |
| 5 J/cm <sup>2</sup> @ 532nm, 10ns    | Damage Threshold, By Design: <input type="checkbox"/> |
| Regulatory Compliance                |                                                       |
| View                                 | Certificate of Conformance:                           |

## PRODUCT DETAILS

- AR Coated to Provide <0.4% Reflectance per Surface for 425 - 675nm
- Minimize Aberrations Including Spherical and Coma
- [UV Fused Silica DCX Lenses](#) Available
- Other Coating Options Available: [Uncoated](#), [MgF<sub>2</sub>](#), [NIR I](#), [NIR II](#), [VIS-EXT](#), [VIS-NIR](#), and [YAG-BBAR](#)

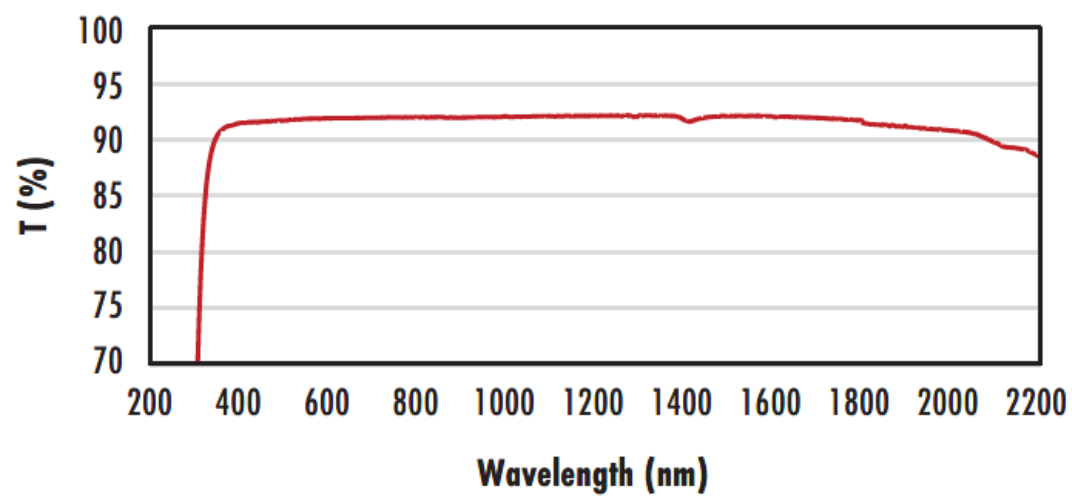
TECHSPEC® VIS 0° Coated Double-Convex (DCX) Lenses, also referred to as bi-convex lenses, have two positive, symmetrical faces with equal radii on both sides. These lenses are generally recommended for finite imaging applications with a conjugate ratio (ratio between object distance and image distance) 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 0° Coated Double-Convex Lenses are available in a variety of substrates and coating options for the visible and NIR spectra.

## TECHNICAL INFORMATION



## N-BK7

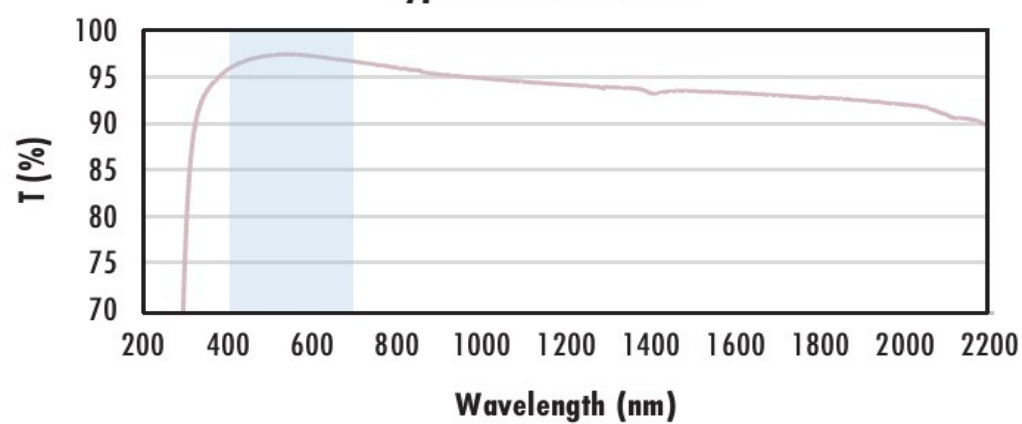
### Uncoated N-BK7 Typical Transmission



Typical transmission of a 3mm thick, uncoated N-BK7 window across the UV - NIR spectra.

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### N-BK7 with MgF<sub>2</sub> Coating Typical Transmission



Typical transmission of a 3mm thick N-BK7 window with MgF<sub>2</sub> (400-700nm) coating at 0° AOI.

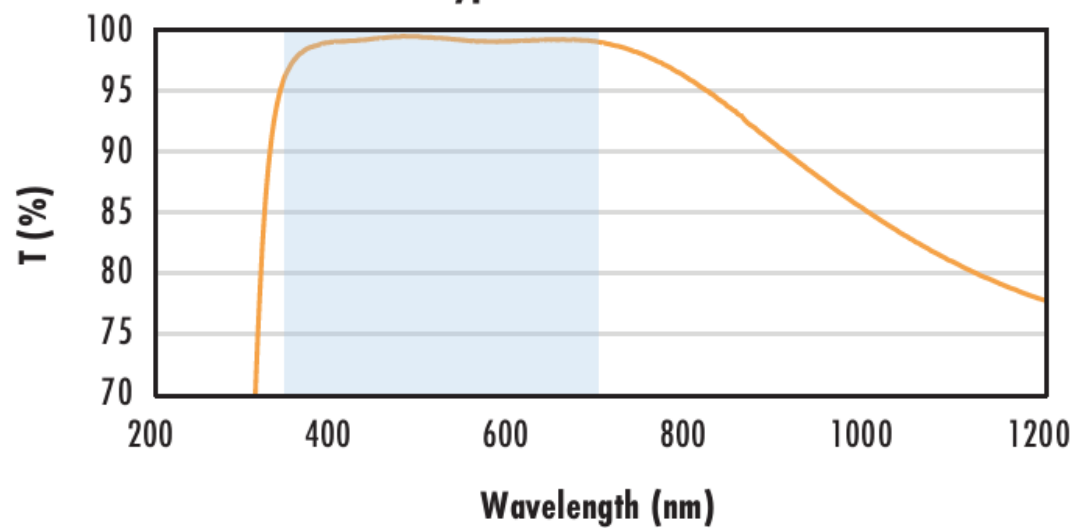
The blue shaded region indicates the coating design wavelength range, with the following specification:

$R_{avg} \leq 1.75\% @ 400 - 700\text{nm}$  (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 (350-700nm) coating at 0° AOI.

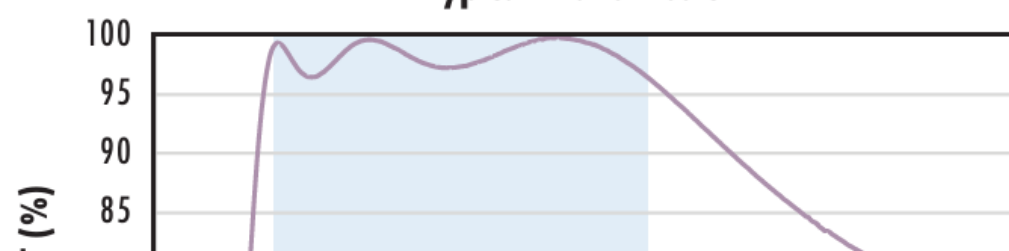
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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

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



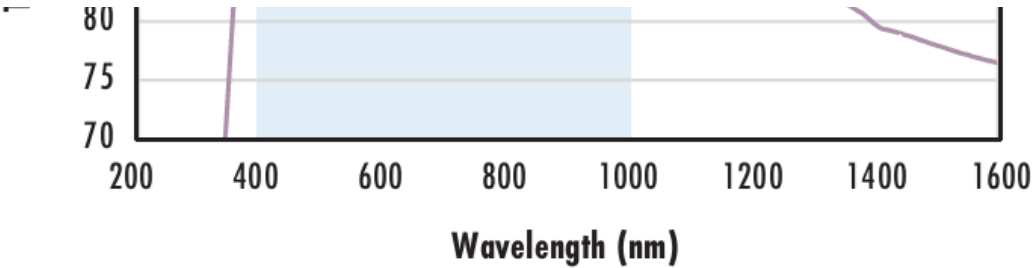
Typical transmission of a 3mm thick N-BK7 window with VIS-NIR (400-1000nm) coating at 0° AOI.

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

$R_{abs} \leq 0.25\% @ 880\text{nm}$

$R_{avg} \leq 1.25\% @ 400 - 870\text{nm}$

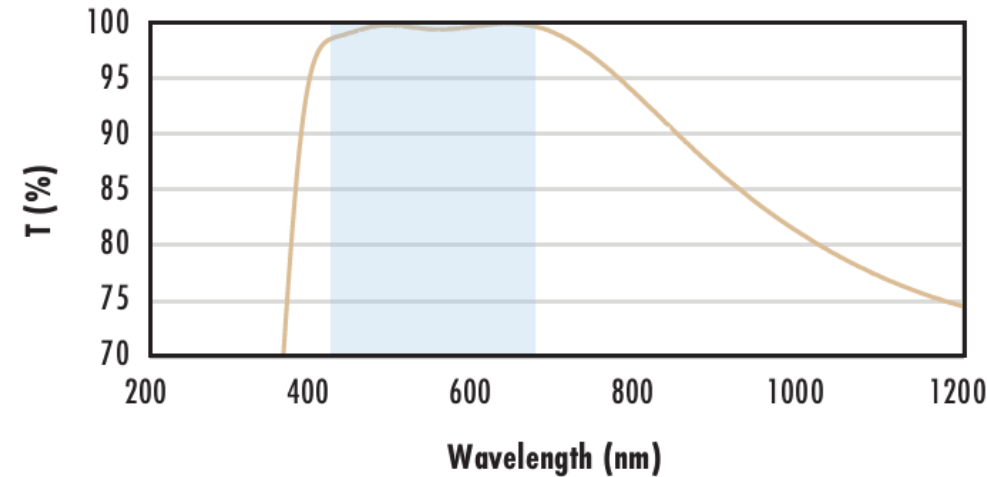
$R_{avg} \leq 1.25\% @ 890 - 1000\text{nm}$



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

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



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

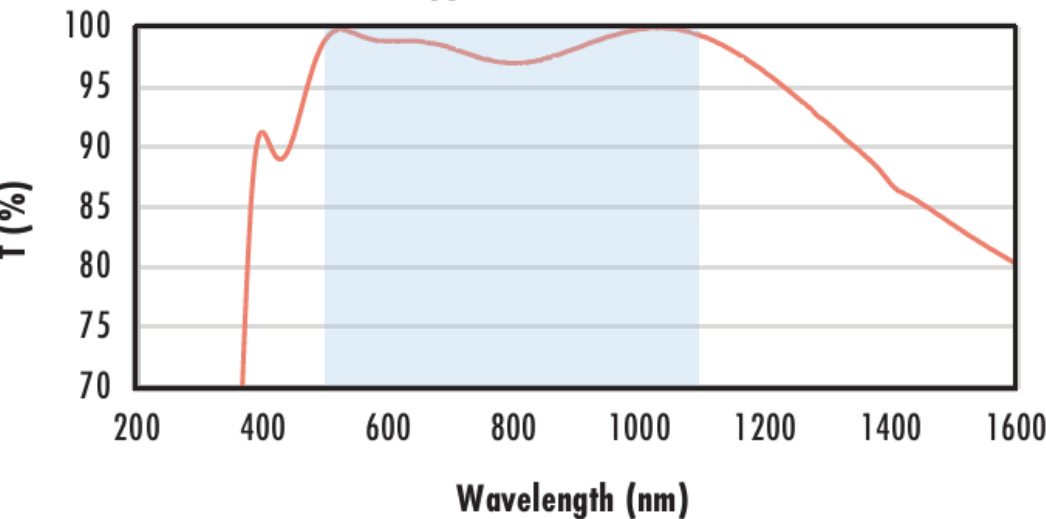
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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

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



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

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

$R_{abs} \leq 0.25\%$  @ 532nm

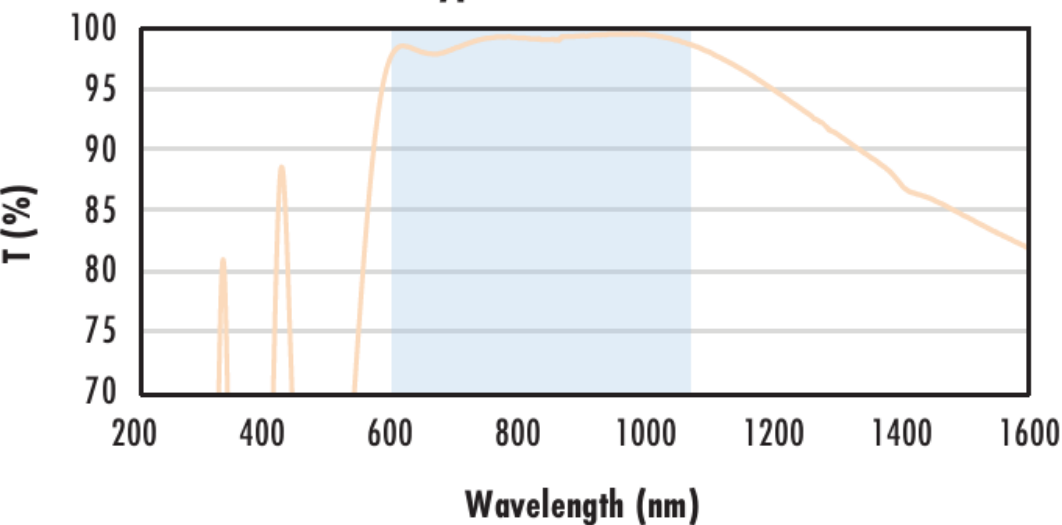
$R_{abs} \leq 0.25\%$  @ 1064nm

$R_{avg} \leq 1.0\%$  @ 500 - 1100nm

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

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



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

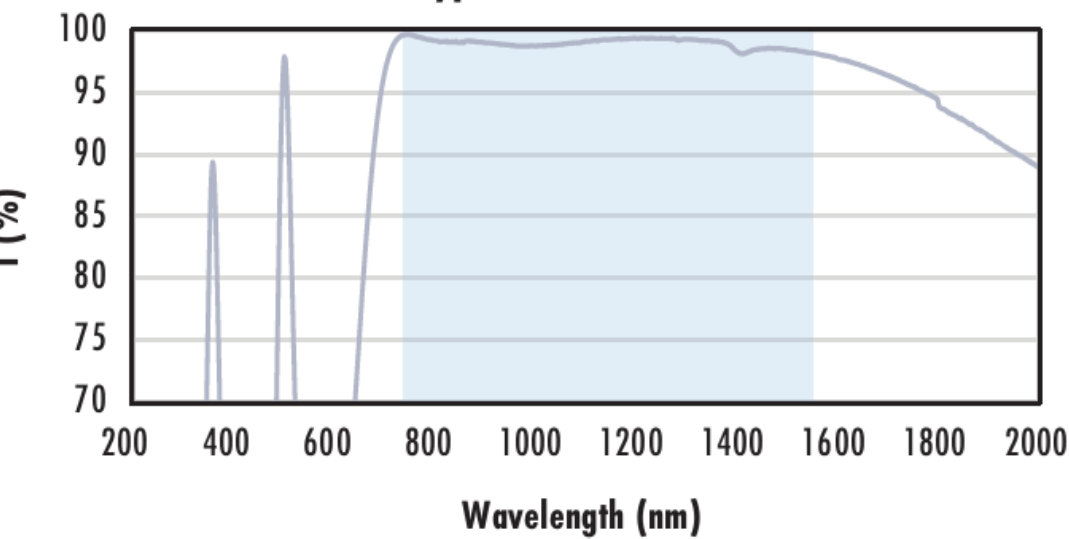
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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

[Click Here to Download Data](#)

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



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

The blue shaded region indicates the coating design wavelength 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 for reference only.

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## 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](#).

## COMPATIBLE MOUNTS

