Edmund
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TECHSPEC® **5mm Dia. x 10mm FL, VIS 0° Coated, Double-Convex Lens**

Stock **#63-595**   **6 In Stock**

☐ Other Coating Options

⊖ 1 ⊕   £45⁶⁰

ADD TO CART

Volume Pricing	
Qty 1-9	**£45.60** each
Qty 10-24	**£40.80** each
Qty 25-99	**£36.40** each
Need More?	**Request Quote**

❶ Prices shown are exclusive of VAT/local taxes

Product Downloads

General

Type:
Double-Convex Lens

Physical & Mechanical Properties

Diameter (mm):	
5.00 +0.0/-0.025	
Centering (arcmin):	
<3	
Bevel:	
Protective as needed	
Center Thickness CT (mm):	
2.00	
Center Thickness Tolerance (mm):	
±0.05	
Edge Thickness ET (mm):	
1.36	
Clear Aperture CA (mm):	
4.5	

Optical Properties

Back Focal Length BFL (mm):	
9.31	
Effective Focal Length EFL (mm):	
10.00	
Coating:	
VIS 0° (425-675nm)	
Coating Specification:	
R_{avg} ≤0.4% @ 425 - 675nm	
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):	
9.98	
f/#:	
2.00	
Focal Length Specification Wavelength (nm):	
587.6	
Focal Length Tolerance (%):	
±1	
Numerical Aperture NA:	
0.25	
Wavelength Range (nm):	
425 - 675	
Damage Threshold, Reference:	
5 J/cm^2 @ 532nm, 10ns	

Regulatory Compliance

RoHS 2015:	
Compliant	
Certificate of Conformance:	
View	
Reach 235:	
Compliant	

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$_2$, 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.
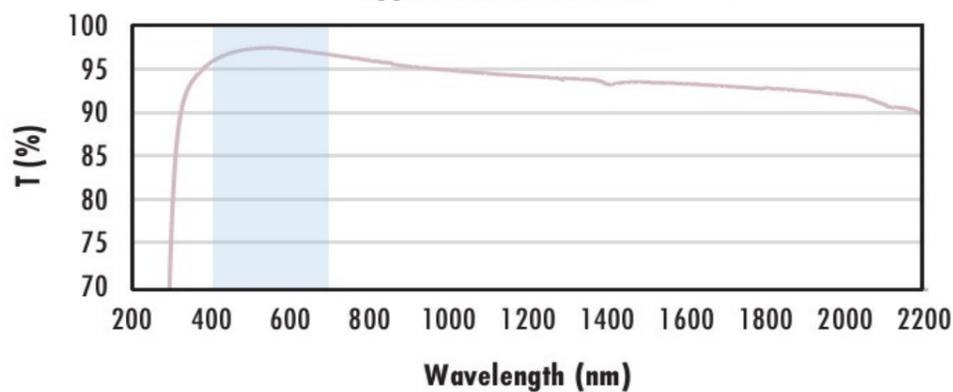
Technical Information
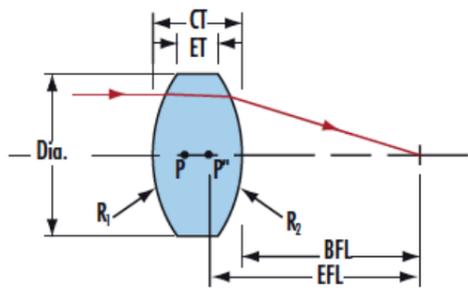
Uncoated N-BK7 Typical Transmission
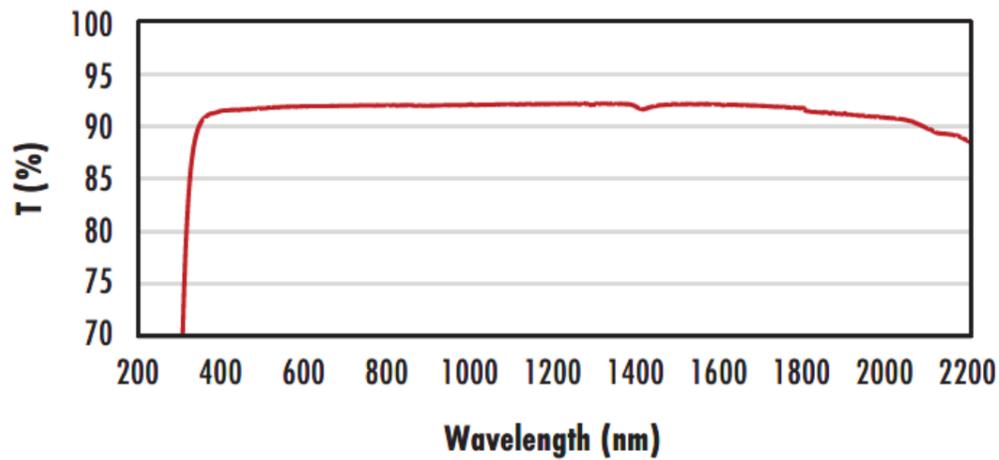
Typical transmission of a 3mm thick, uncoated N-BK7 window across the UV - NIR spectra.

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N-BK7 with MgF₂ Coating Typical Transmission

Typical transmission of a 3mm thick N-BK7 window with MgF2 (400-700nm) coating at 0° AOI.
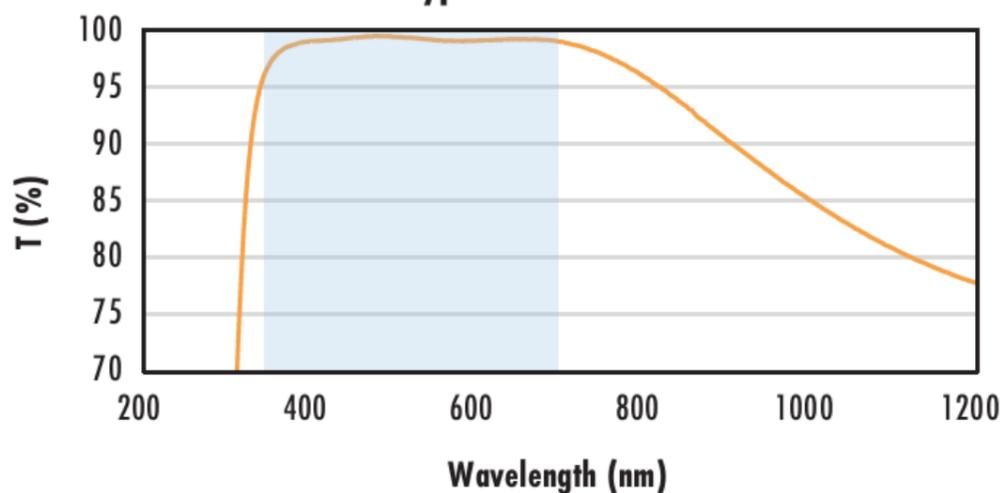
The blue shaded region indicates the coating design wavelengh range, with the following specification:

$R_{avg} \leq 1.75\%$ @ 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

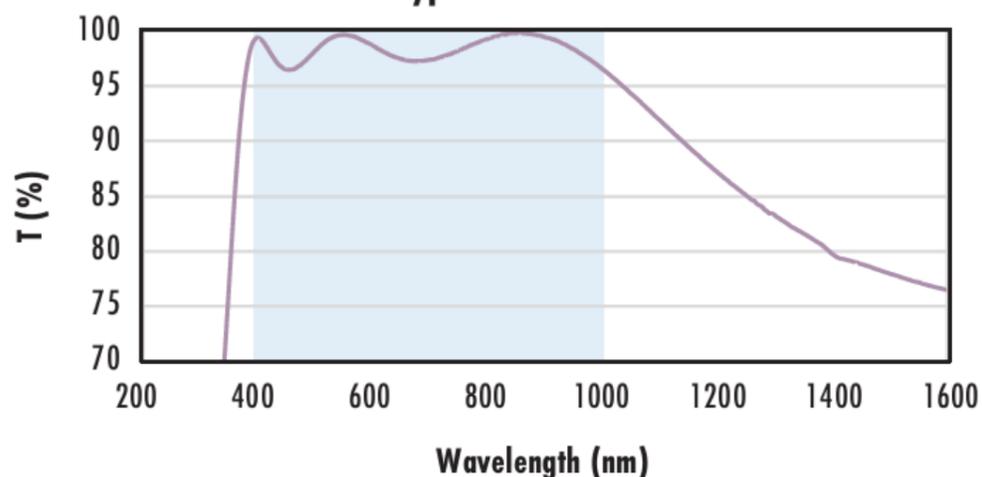Typical transmission of a 3mm thick N-BK7 window with VIS-EXT (350-700nm) coating at 0° AOI.

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

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

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.

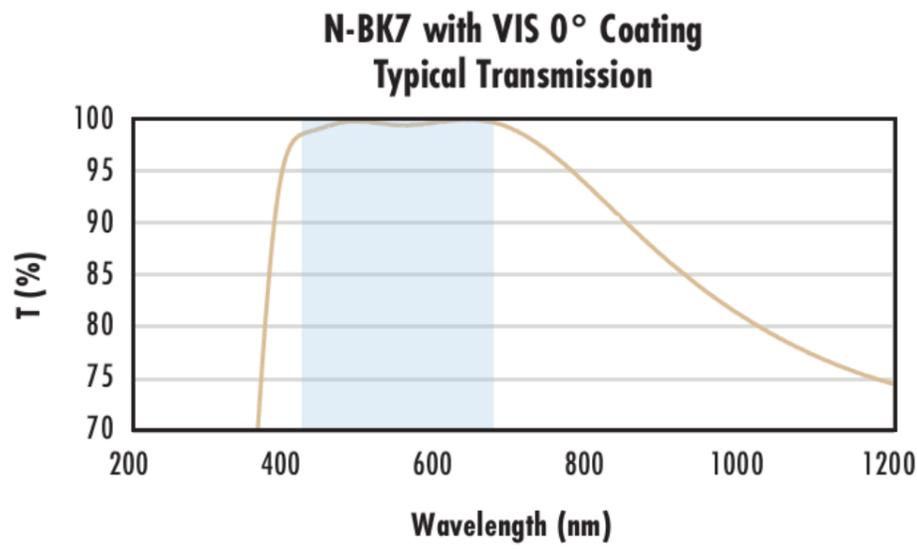The blue shaded region indicates the coating design wavelengh range, with the following specification:

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

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

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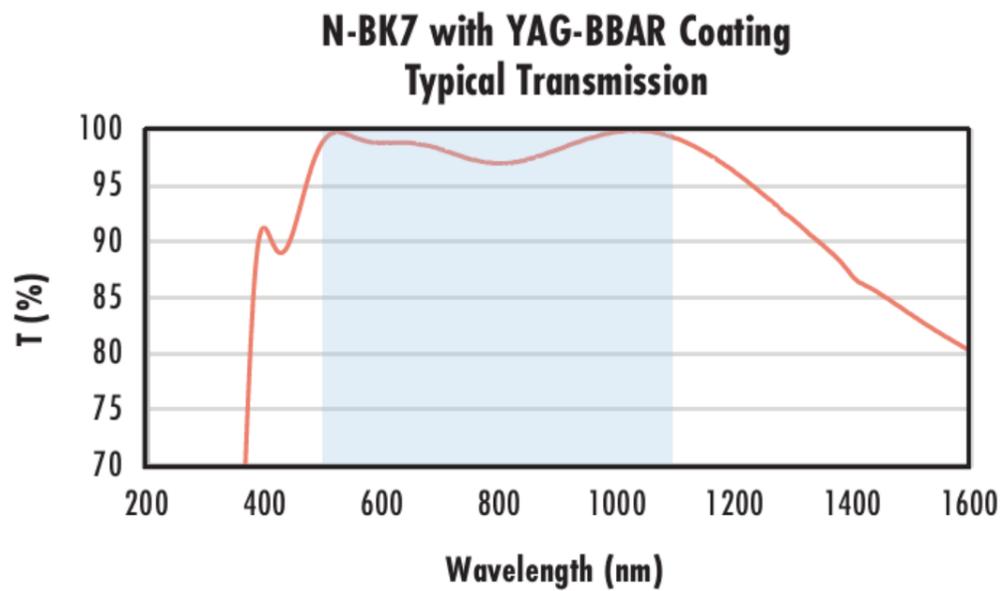### Typical Transmission

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 wavelengh 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.

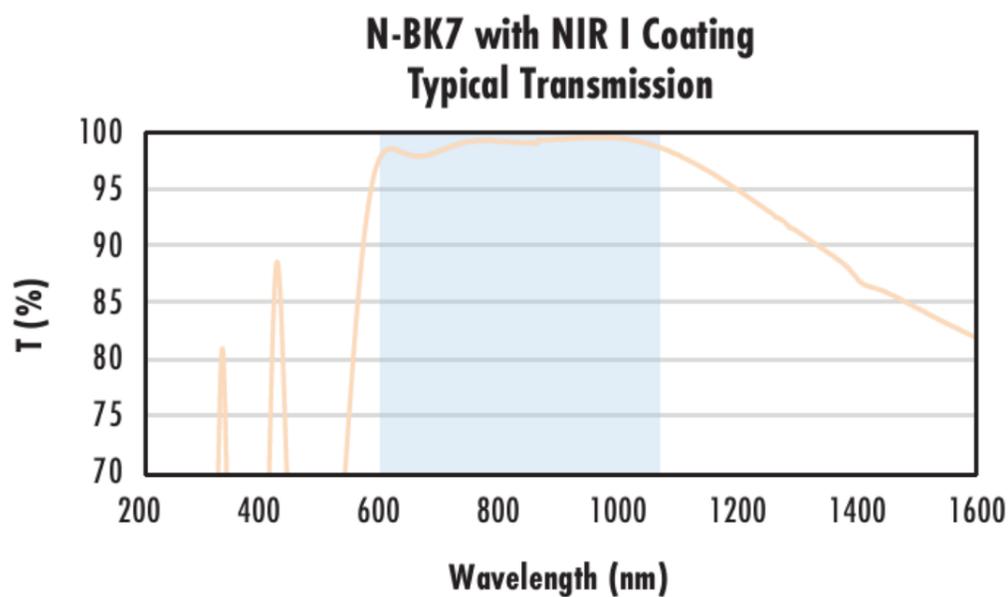The blue shaded region indicates the coating design wavelengh range, with the following specification:

$R_{abs} \leq 0.25\%$ @ 532nm
$R_{abs} \leq 0.25\%$ @ 1064nm
$R_{avg} \leq 1.0\%$ @ 500 - 1100nm

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

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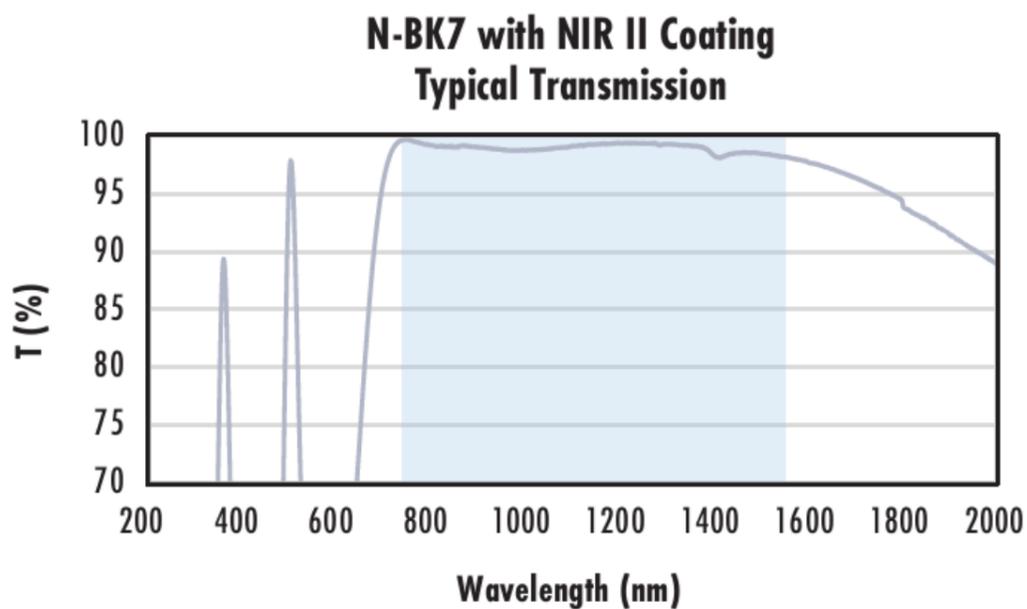## N-BK7 with NIR I Coating
Typical Transmission

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 wavelengh range, with the following specification:

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

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

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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 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 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